



## USER MANUAL

### MAIN FEATURES

- Utilizes the 4-axis structure, enabling the drone to be even more flexible, speedy it can fly both in large indoor spaces and outdoors.
- Built-in 6-axis gyro stabilizer to ensure accurate positioning in-flight.
- The structure uses a modular design which makes it easy to install and repair.
- Headless function making it easy for directional control.
- Pressure-fixed-position hovering function for Auto Hover Mode.
- 360° stunt flip.
- Auto take-off and landing.
- HD wifi real-time transmission aerial for getting the fun of different photography.

### Safety Guide

- Please store the smaller-sized drone accessories in places that are out of reach of children.
- This drone is very powerful. For all first-time flights, the left joystick must be slowly pushed up in order to prevent the drone from ascending too fast to avoid unnecessary collision and possible damage or injury.
- When the flight is ended, first turn off the power of the remote control. Then turn off the power of the drone.
- Avoid placing the batteries in places with high temperatures and exposure to heat.
- Take extra precaution to ensure that the drone is at a minimum distance of 10 feet from the pilot, other people, and animals in order to prevent bodily injury during flight operation. A minimum separation distance of 20 cm must be maintained between the user's body and the device under normal use condition.
- This drone is for people ages 14+. It must be flown always within the line of sight of the pilot (or instructor) and flown safely.
- Non-rechargeable batteries are not to be recharged. Batteries are to be inserted with the correct polarity. Different types of batteries or new and used batteries are not to be mixed.
- When the drone is not in use, please remove the batteries in the remote control.
- The supply terminals are not to be short-circuited.
- Attention: Drone assembly under adult supervision.
- The pilot is responsible for the safe operation and safe distance from uninvolved persons and property on the ground and from other airspace users and shall never fly the drone above crowds (> 12 persons).
- Discharge the battery to 40%-50% (On a full charge, fly for half of the total flight time). If it will be used for 10 days or more, this can greatly extend the battery life.
- Open the battery cover of the toy with screwdriver.
- The packing tag is to be kept since it contains important information.

### Repair and maintenance

- Use dry and soft cloth to clean this product.
- Avoid exposing this product to heat.
- Do not immerse this product in water, otherwise, the electronic parts will be damaged.
- Transformers used with the toy are to be regularly examined for damage to the cord, plug enclosure and other parts and that in the event of such damage the toys must be used with the transformer until the damage has been repaired.

### Package Description

The following items can be found in this product package:

- Drone
- Instruction Manual
- Screwdriver
- Main Blades
- USB Cable

### Blade replacement method

- Use the screwdriver to remove the screws on the blades, then pull out the blades that need to be replaced.
- As shown on left the blade A is mounted to the arm "A" position, and the blade B is mounted to the arm "B" position.
- Lock the screw with a screwdriver.

### Phone Clip Attachment/Removal Method

#### Phone clip holder installation:

- Insert the phone clip holder into the connector at the top of the remote control.
- Press the spring clip to adjust for size.

#### Phone clip holder removal:

- Push the phone clip holder upwards from behind the remote control.

### Battery Changing And Charging Methods For Drone

#### Battery changing methods for drone

- Press the power button on the top of the drone to "2S" make sure the drone is turned "OFF".
- Open the battery cover of drone backwards.
- Pull out the battery plug from the battery socket.
- After battery replacement, fasten the battery cover again.

#### Battery charging methods for drone

Connect the battery power cord to the USB, then connect the USB interface to the computer. (The indicator light of the drone will turn on while charging, and turn off when charging is completed. It takes about 100 minutes to completely charge the battery.)

The charging time is about 100 minutes; hover flight time is approximately 7.5 minutes.

#### Precautions as follows during charging of battery:

- Avoid placing the active batteries in places with direct exposure, sunlight and high temperatures. For example, naked light or electrical equipment installations; otherwise it may cause damages or explosions.
- Avoid immersing the batteries in the water. The batteries shall be stored in a cool and dry place.

- Avoid dismantling the batteries.
- During the charging of battery, avoid leaving the charging place.
- Rechargeable batteries are to be removed from the toy before being charged.
- Rechargeable batteries are only to be charged under adult supervision.
- Exhausted batteries are to be removed from the toy.
- Caution: Risk of explosion in battery replaced by an incorrect type, dispose of used batteries according to the instructions.

### Understanding Your Remote Control

#### Remote control's button function description:

Power ON/OFF: Press the power button on the remote control to turn the drone on or off.

Left joystick: Keep pushing for steering. To enter the trimming settings, keep pushing and push the power button at the same time.

Right joystick: Push in over 3 seconds to enter headless mode then push in again to exit. Quickly push and release to change high/low speed, push and release low speed and to bypass high speed when high speed.

360° Stunt Flip button: Pushing for auto take-off and landing.

#### Battery installation for remote control:

- Remove the battery cover.
- Insert the 4 AA Alkaline Batteries.

- Battery Installation Method:** Open up the battery cover at the back of the remote control. Correctly place 4 x AA Alkaline batteries in the battery box in strict accordance to the polarity instructions (the AA alkaline batteries are not included).
- During the battery installation, 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.
- Do not use new and old batteries together.
- Do not use different types of batteries in the same mode.
- Do not use rechargeable batteries.

### Product features

- Low-voltage Protection:** When the two indicator lights at the rear of the drone start flashing, it means that the drone's battery power is low. At this time, please control the drone return. The drone will automatically slow down when it is short of power.
- Over-current Protection:** If the drone encounters a direct impact from a foreign object or is obstructed, or if the blades are not rotating, the drone will go into over-current protection mode.
- Level Calibration Function:** Place the drone on a level surface and at the same time, push both left and right joysticks to the lower right corner for 2 to 3 seconds; the led light indicator on the drone will blink rapidly, and it will return back to the normal status after about 2 to 3 seconds. The level calibration is successful.

- Fast/Slow Speed Function:** Slow speed by default when first powered-on. Possible to switch the function mode of fast/slow speed by pressing in on the right joystick for a short time. It is switched into fast speed mode when two "beep" sounds come from the remote control pressing in on the right joystick for a short time under fast speed mode and then one "beep" sound would come from the remote control, then it is then switched back into slow speed mode.
- 360° Stunt Flip Function:** When you are familiar with the basic actions, you can proceed to explore even more exciting stunt actions. Fly the drone to a height of 3M above the ground, push the upper right corner button (Stunt Flip Button) on the remote control and simultaneously push the right joystick to the farthest position of Front/Back/Left/Right, the drone will now execute the Front/Back/Left/Right stunt flip action.

- Auto Hover Function:** After using the left joystick (throttle) to control the secondary/descending flight of the drone, release the left joystick (accelerator) and the drone will hover at that height when the joystick is released.
- Headless function:** 1. Defining forward direction: Push on the power button of the remote control.

- Press the power button on the top of the drone to "2S" make sure the drone is turned "ON", and adjust the specified direction of the drone's head up or to headless mode as the new forward direction.
- Push the left joystick (throttle) on the remote control up to the farthest position and then pull down both the left and right joysticks to the bottom left corner simultaneously after playing the flying direction of the drone in the correction position. When the led light indicator of the drone is in a long "ON" mode after slowly flashing for 3 seconds, it indicates the calibration is successful.

- Calibration for the definition of the front:**
  - When the drone encounters a direct impact with foreign objects in the headless mode, if there is an occurrence of deviation of the defined direction, it is only required to push both the left and right joysticks to the bottom left corner simultaneously after playing the flying direction of the drone in the correction position. When the led light indicator of the drone is in a long "ON" mode after slowly flashing for 3 seconds, it indicates the calibration is successful.
- Toggle between headless function and normal function:**
  - After the drone is matched with the corresponding frequency, the drone would be in normal pattern by default. At this time the indicator light on the drone would be in a state of on for a long time. After pressing in on the right joystick of the remote control for 2 seconds, the remote control would make a sound of "beep, beep, beep" to show that it has entered into a state of headless mode. Pressing in the left joystick for 2 seconds then a long sound of "beep" would be heard to show an exit status. When under the state of headless mode, four indicator lights on the drone are led lights which flicker once every four seconds.

- Under the headless mode, the operator does not need to differentiate the head position of the drone, and only needs to control the drone's direction front/back/left/right by using the right joystick direction on the remote control.

### 8. Wifi real-time transmission function

- Downloading the installation software
- For Android phones, download and install the SYMA GO APP by visiting [www.symatoys.com](http://www.symatoys.com) or by scanning the QR code.
- For IOS Apple phones, download and install the SYMA GO APP by visiting the QR code or by scanning the QR code.

- Connect the model to its power source, the camera indicator light should turn green. Within 10 seconds, the light will flash slowly and the camera will be waiting for a connection with a smartphone.
- At this time, enter the "Settings" option on your phone, and turn on WiFi. In the WiFi search list, look for a network called "FPV-WiFi", "\*\*\*\*" and connect to it. Once connection has been established, exit the "Settings" option.
- Open the SYMA GO App, click the "START" icon to enter the control interface. A full bar in the WiFi signal icon indicates the strongest possible signal.

### 3. Interface icon instructions

#### Mobile APP control interface

WIFI signal, One key Start/Stop, Record, Thrust Right Joystick, Training A, Training B, Training C, Check for updates, Return, Flight-back, Headless mode, Check the remote control battery status (connect power supply and check the battery level), Check the phone battery level.

#### Flight-track operation interface

Press the flight-track button to enter into the flight-track interface, and the aircraft will fly in accordance with recorded course.

#### 4. Real-time aerial photography uploading:

Photo/Record: When the WiFi camera is operating normally, press the photo/record icon in the real-time upload interface to take photos/videos. (Photos/recordings that were taken can be viewed in the "New Photo and Video" folder)

Note: When using the real-time upload operation in the app, the range for the operating distance of the aircraft will reduce by half. The WiFi remains upload function is optimal in spacious.

- WiFi camera storage function:** When take pictures or record videos by mobile phone, the photos/videos will be stored in the folder on the APP control interface of the mobile phone.

### Flight Preparation And Switching The Drone On And Off

- Flight Preparation**
  - Push the power button of the remote control.
  - Open the battery cover of the drone backwards.
  - After battery replacement, fasten the battery cover again.
  - Press the power button on the top of the drone to "2S" make sure the drone is turned "ON".
  - Push the left joystick (accelerator) up to the highest point and then push down to the lowest point. When the led indicator lights in the drone change from quick flashing to continuous light, it means that the drone goes into the flight standby mode.

- Turning on the drone**
  - Method 1: push the left joystick (accelerator) to the highest point and then back to the center, the blades of the drone start rotating slowly.
  - Method 2: Move the left and right joysticks inward in an internal loop of "8" for 1 second, the drone will automatically take off and hovers at a certain height.
  - Method 3: When the drone is stationary, press the 3 button, the drone will automatically take off and hovers at a certain height.
- Turning off the drone**
  - Method 1: Push the left joystick (Accelerator) to the lowest level and hold there for 2 to 3 seconds, the drone can then be landed off.
  - Method 2: Move the left and right joysticks inward in an internal loop of "8" for 1 second, and the drone can be turned off.
  - Method 3: When the drone is in flight, press the 3 button, the drone will descend to the ground and lands.

If the drone is out of the range of the flight, the indicator light will flash slowly, and then slow down.

When the remote control is switched off or the power is cut off, the drone will automatically slow down to stop. In this process, open the remote control to control again.

### Drone Controlling Diagram

#### Operating direction

Ascending and descending control: When the left joystick (Accelerator) is pushed upwards or downwards, the drone will ascend or descend correspondingly.

Forward and backward control: When the right joystick (Direction) is pushed upwards or downwards, the drone will advance forward or backward correspondingly.

Left turning and right turning control: When the left joystick (Accelerator) is pushed towards the left or right, the drone will turn left or right correspondingly.

Left side flying and right side flying control: When the right joystick (Direction) is pushed towards the left or right, the drone will fly sideways to the left or right correspondingly.

#### Trimming operation

Forward and backward trim control: While the drone is hovering in the air, it automatically flies forward/backwards, press in on the left joystick and at the same time push the right joystick forward/backward slightly to fine tune the direction. Don't release the left joystick until the drone is flying in a stable state.

#### Left/Right stick trim control

While the drone is hovering in the air and automatically flies left/right, press in on the left joystick and at the same time push the right joystick left/right slightly to fine tune the direction. Don't release the left joystick until the drone is flying in a stable state.

While the drone is hovering in the air, when the drone automatically rotates and flies towards the left/right, press in on the left joystick and at the same time move joystick to the right or left to adjust the direction. Don't release the left joystick until the drone is flying in a stable state.

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: "Heretby, 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"

A copy of the full DoC is attached.

### Accessories/Parts List

- Body (Black)
- Motor Frame Component
- Camera
- Protective Gear (White)
- Rotor Blade (White)
- Motor A Red and Blue Line
- Motor 3 Black and White Line
- Light Bar
- Receiver Board

### Product descriptions

- Plating Object
- LiPo Battery
- Lamp Cover
- USB Cable
- Mobile Phone Retaining Clip
- Remote Control

NO.	Product Name	Qty.	NO.	Product Name	Qty.
01	Plating Object	4	08	Motor/Outer-protective shell	2
02	Blade/Protective Device	2	10	Camera	1
03	Blade/Outer-protective Device	16	11	Motor Frame Component	4
04	Switch	1	12	Front Lens Cover	2
05	Top Mem. Body	1	13	Back Lens Cover	2
06	Battery	1	14	LiPo Light Bar	1
07	Receiver Board	1	15	Remote Receiver	1
08	Motor/Protective Device	2	16	Protective Gear	4

### Main Specifications

Drone's Length: 220mm | Drone's Height: 50mm | Drone's Weight: 50g | Battery: 3.7V 300mAh LiPo battery

Problem	Reason	Solution
The drone is flying towards the side or one direction during hovering	1. The drone is not calibrated level to the ground.	1. Re-adjust the calibration until the drone is level to the ground. For further details, see No.3 on Page 5 for details. (Function of horizontal adjustment).
In the headless state, it is biased towards the front direction	1. Many collisions may cause head business.	1. Re-define the front direction. For further details, see No.4 on Page 6 for details (Headless Function).
Fixed high instability up/down movement	1. The drone is not calibrated level to the ground. 2. Unstable air pressure under the severe weather condition. 3. Violent collision resulting in data disorder of gyroscope.	1. Re-adjust the calibration until the drone is level to the ground. For further details, see No.3 on Page 5 for details. (Function of horizontal adjustment). 2. Avoid to fly under the severe weather condition. 3. Make horizontal adjustment again, see No.3 on Page 5 for details (function of horizontal adjustment).

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.

### FCC RF exposure statements

This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body or nearby persons.