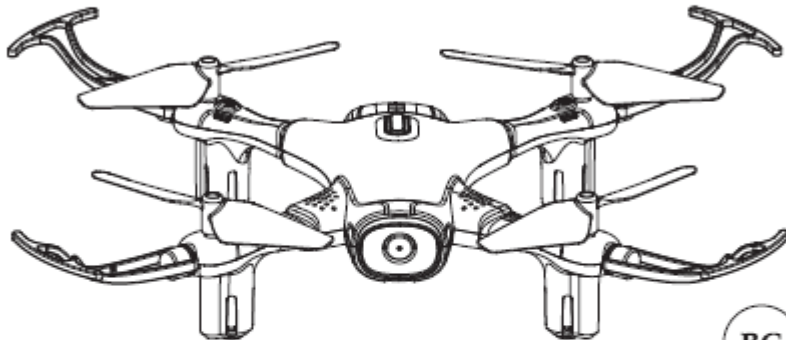


D1650WH

**4-CHANNEL PRESSURE FIXED POSITION HOVERING
REMOTE CONTROL DRONE**



BC

1 USER MANUAL

MAIN FEATURES

- 4-axis structure enabling the drone to be flexible and stable.
- Built-in 6-axis gyro stabilizer to ensure accurate flight positioning.
- Modular design for easier installation and repair.
- Headless function for easier directional control.
- Auto-hovering function for stable and automatic height control.
- 360° flip stunt.
- Auto take-off and landing.
- WIFI camera for real-time transmission of images and video.

Safety Guide

1. Please keep all small drone accessories out of the reach of children.
2. This drone is 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 or possible damage and injury.
3. When you finish flying, please turn off the power of the remote control first, then turn off the power of the drone.
4. Please keep the batteries away from high temperature or hot areas.
5. When flying the drone, please make sure to keep the safe distance between the drone and the pilot, animals, the crowd and any objects in order to avoid any injury caused by the flight. A minimum distance of 8-10 feet must be maintained between the pilot and the device under any conditions.
6. This drone is intended for users' age of 14+. It should always be operated within the visual range of the pilot (or instructor) to ensure its flying safety.
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. When the drone is not in use, please remove the batteries from the remote control.
9. The battery terminals should not be short-circuited.
10. To maximize the battery life, if the drone will not be used for longer than 10 days, discharge the battery level 40-50% (upon fully charged, use the drone to fly for half of the total estimated flying time).
11. Please keep a safe distance from the spinning propellers to avoid injury.
12. All users must strictly follow the drone flying laws and regulations set by the government of the territory.
13. Use only the transformer provided in the package for the drone and disconnect the transformer from the aircraft before cleaning. Check the cord, plug, enclosure and other parts of the transformer regularly. If any damages are found, please stop using it immediately until it is repaired.
14. Never look steadily at the laser beam due to the laser radiation.
15. Please assemble the aircraft under the guidance of adults.
16. Pilots should be responsible for the safety of operation: keep the safe distance from the crowds, property, other aircrafts users, and shall never fly the drone on top of the crowds.
17. Open the battery cover of the toy with a screwdriver.
18. When recharging, the battery must be placed on a non-inflammable surface away from any inflammable materials to prevent it from overheating, and must be monitored periodically. Never leave the battery charging unattended.
19. Please keep the package because it contains important information.

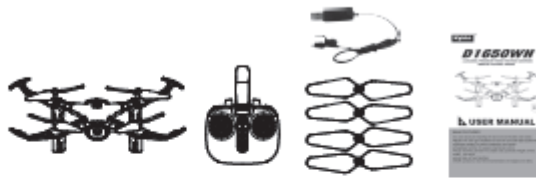
Repair and Maintenance

1. Use dry and soft cloth to clean this product.
2. Avoid exposing this product to heat.
3. Do not immerse this product into water, otherwise, the electronic parts will be damaged.

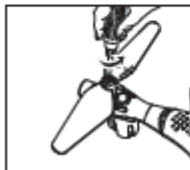
Package Description

The following items can be found inside this product package:

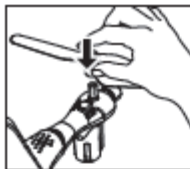
- Drone
- Cellphone holder clip
- User Manual
- 4 Replacement Blades
- Remote Control
- USB Charging Cable
- 2 LiPo batteries



Blade Replacement Method



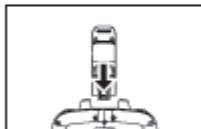
1. Loosen the screws out of the blade that needs to be replaced.



2. As shown in the figure, the blade A is mounted to the arm "A" position, and the blade B is mounted to the arm "B" position, then tighten the screws.

Installation and Dismantling of Mobile Phone Retaining Clip

Phone clip holder installation:

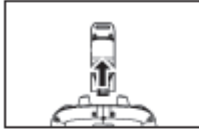


1. Insert the phone clip holder into the connector at the top of the remote control.



2. Press the handles to adjust the jaws.

Phone clip holder dismantling:

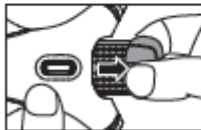


Push the phone clip holder upwards from behind the remote control.

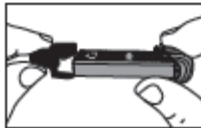
Battery Changing and Charging Methods for Drone



1. Press the power button on the top of the drone for 1 to 2 seconds to make sure the drone is "OFF".



2. Press down the battery cover and pull backward.



3. Connect the charger clip of the original USB cable to the battery properly.



4. Insert the USB plug to the computer. (The indicator light of the drone will turn on while charging, and turn off when charging completed. It takes about 90 min for a full charge)

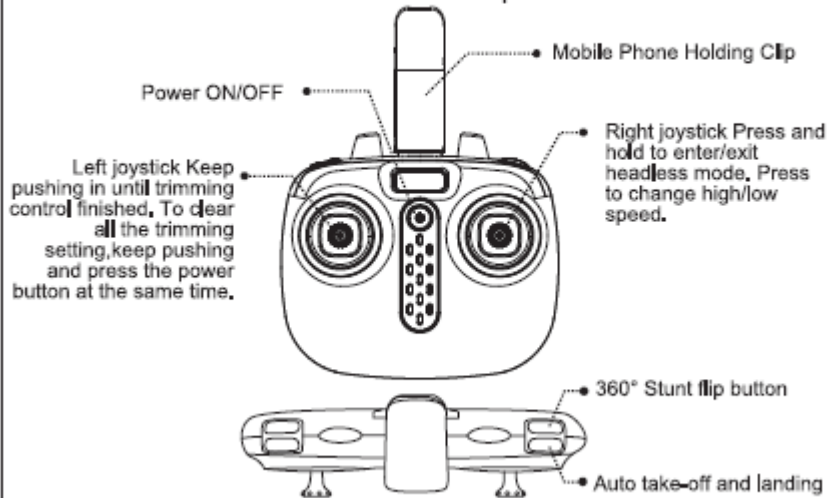
The charging time is about 90 minutes, hover flight time is approximately 7 minutes.

Precautions while charging of battery:

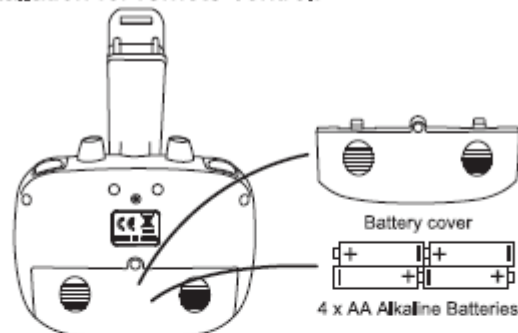
- Avoid placing the active batteries in places with direct exposure, sunlight and high temperatures. For example, naked light or electrical equipment installations; otherwise it may cause damages or explosions.
- Avoid immersing the batteries in the water. The batteries shall be stored in a cool and dry place.
- Do not charge or use the battery if it has been damaged.
- When recharging, the battery must be placed on a non-inflammable surface away from any inflammable materials to prevent it from overheating
- Do not charge the battery unattended.
- 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 Your Remote Control

Remote control's button function description:



Battery installation for remote control:



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 adherence to the polarity instructions (batteries are not included).

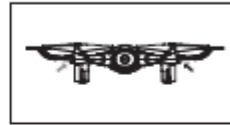


1. During the battery installation, please be assured that the polarities of the batteries are matched with that of the battery box. No battery shall be installed with the opposite polarity.
2. Please do not use new and old batteries together.
3. Please do not use different types of batteries together.
4. Do not use rechargeable batteries.

Product Features

1. Low-voltage Protection:

When the four indicator lights on 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.



2. Over-current Protection:

When the drone encounters direct impact from a foreign object, or is obstructed, or the blades are not rotating, the drone will go into the over-current protection mode.



3. 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 corners for 2 to 3 seconds; the indicator lights on the drone will blink rapidly, and they will return to solid status after about 2 to 3 seconds. The level calibration is successful.



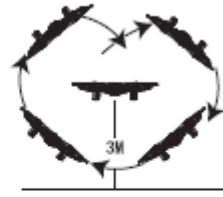
4. High/Low Speed Function:

Low speed is set by default when first powered-on. To switch to high/low speed, press the right joystick fast. It is switched into high speed mode when you hear two "beep" sounds from the remote control; press the right joystick fast again while on high speed mode and then you hear one "beep" sound from the remote control, then it is switched back into low speed mode.



5. 360° Stunt Flip Function:

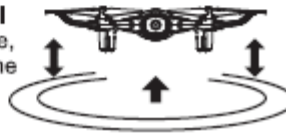
When you are familiar with the basic actions, you can proceed to explore even more exciting stunt actions. Fly the drone to a height of 3M above the ground, press the upper right corner button (Stunt Flip Button) on the remote control and simultaneously push the right joystick to the farthest position of Front/Back/Left/Right, the drone will operate the Front/Back/Left/Right stunt flip action.



Note: Drone will have the best stunt flip action when the batteries are fully charged.

6. Auto Hover Function:

After using the left joystick (throttle) to control the ascending / descending flight of the drone, release the left joystick (throttle) and the drone will hover at that height when the joystick is released.



7. Headless Function:

① Defining forward direction:



● Press on the power button of the remote control.



● Press the power button on the top of the drone for 1-2 seconds make sure the drone is turned "ON", and adjust the specified direction of the drone's head under the 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 to the farthest position. When the remote control issues a **long beep** sound, it means the frequency and defining forward direction functions are completed.

2. Calibration for the definition of the front:

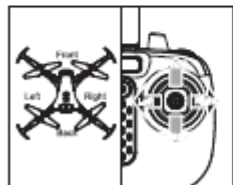


When the drone encounters a direct impact with an object in the headless mode, if **only** the set direction has been changed, it is **only** required to push both the **left and right joysticks** to the bottom **left** corners **simultaneously** after placing the flying direction of the drone in the correct position. When the indicator of the drone turns to **solid** after **slowly flashing** for 3 seconds, it indicates the **calibration** is complete.

3. Toggling 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 on. 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 the headless mode. Pressing in on right joystick for 2 seconds then a long sound of "beep" would be heard to show an exit of such mode. (When under the headless mode, four indicator lights on the drone flash slowly 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.

Flight Preparation and Turning the Drone ON and OFF

1. Flight preparation



Step 1: Press the power button of the remote control.



Step 2: Press and hold the power button on the top of the drone for 1 to 2 seconds to make sure the drone is turned "ON".



Step 3: Push the left joystick (throttle) up to the highest point and then pull down to the lowest point. When the indicator lights on the drone change from quick flashing to steady, it means that the drone is now on the flight standby mode.

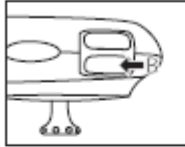
Turning on the drone



Method 1: Push the left joystick (throttle) to the highest point and then back to the center, the blades of the drone start rotating slowly.



Method 2: Push the left and right joysticks to the bottom inner corners for 1 second, the blades of the drone start rotating slowly.



Method 3: When the drone is stationary, press the button B, the drone automatically takes off and hovers at a certain height.

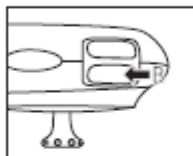
3. Turning off the drone



Method 1: Push the left joystick (throttle) to the lowest level and hold for 2 to 3 seconds, the drone will be turned off.



Method 2: Push the left and right joysticks to the bottom inner corners for 1 second, and the drone will be turned off.



Method 3: When the drone is in flight, press the button B, the drone will descend to the ground and land.

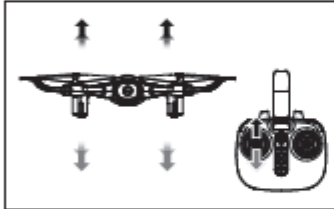
Note:

- 1.If the drone is out of the range of the flight, the indicator light will flash slowly, and then the drone will slow down.
- 2.When the remote control is switched off or the power is cut off, the drone will automatically slow down to stop. In the process, reboot the remote control to relink to the drone.

Drone Controlling Diagram

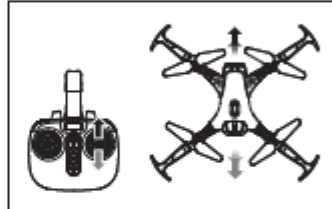
Operating direction

Ascending and descending control



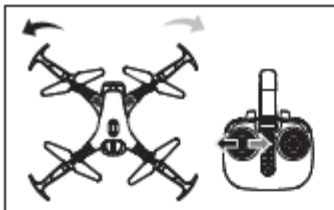
When the left joystick (throttle) is pushed upwards or downwards, the drone will ascend or descend correspondingly.

Forward and backward control



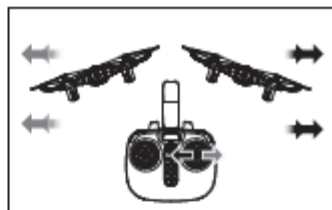
When the right joystick (rudder) is pushed upwards or downwards, the drone will fly forward or backward correspondingly.

Left turning and right turning control



When the left joystick (throttle) is pushed towards the left or right, the drone will turn left or right correspondingly.

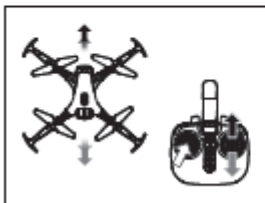
Left side flying and right side flying control



When the right joystick (rudder) is pushed towards the left or right, the drone will fly sideways to the left or right correspondingly.

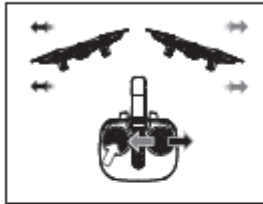
Trimming operation

Forward and backward trim control



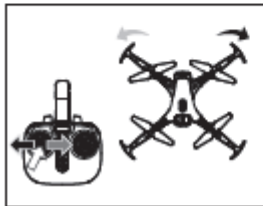
If the drone automatically flies forward/backward while hovering, press in the left joystick and at the same time push the right joystick backward/forward slightly to fine tune the direction. Don't release the left joystick until the drone is flying in a stable state.

Left/right side flight trim control



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

Left/right side turning trim control



If the drone automatically rotates and flies towards the left/right side while hovering, press in the left joystick and at the same time move it to the right/left slightly to fine tune the direction. Don't release the left joystick until the drone is flying in a stable state.

Download and Install the APP

1. Downloading the installation software

For Android phones or tablets, download and install the SYMA FLY APP by visiting the www.symatoys.com or by scanning the QR code.

For IOS Apple phones or tablets, download and install the SYMA FLY APP by visiting the App Store or by scanning the QR code.

Tips: QR codes are provided on the packaging box and at the bottom of the user manual. Please visit website www.symatoys.com or the App Store/Google Play to obtain the newest SYMA FLY App.

2. For more connection information, refer to the APP instructions.

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 co-located 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 /Parts List (Optional)

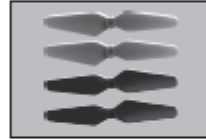
In order to make it easier for the customers to choose and purchase the needed parts, we have the following accessories available. The accessories can be purchased through the local distributors. Please kindly specify the colors during your purchase.



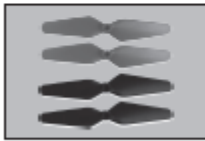
Body (Green)



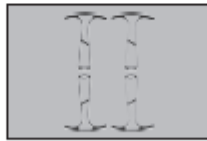
Body (Red)



Blade (Green)



Blade (Red)



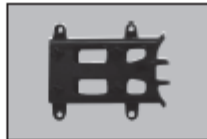
Protective Gear



Lamp Cover



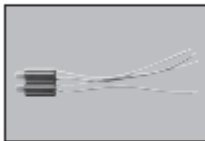
Light Board



Battery Fastener



Gearbox Assembly



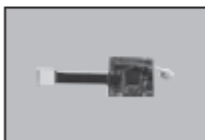
Motor(Clockwise
Direction)



Motor(Counterclockwise
Direction)



Camera Cover



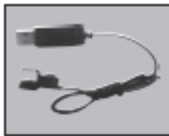
Camera Board Assembly



Receiver Board



Battery



USB Charging Cable



Mobile Phone Retaining Clip (Black)

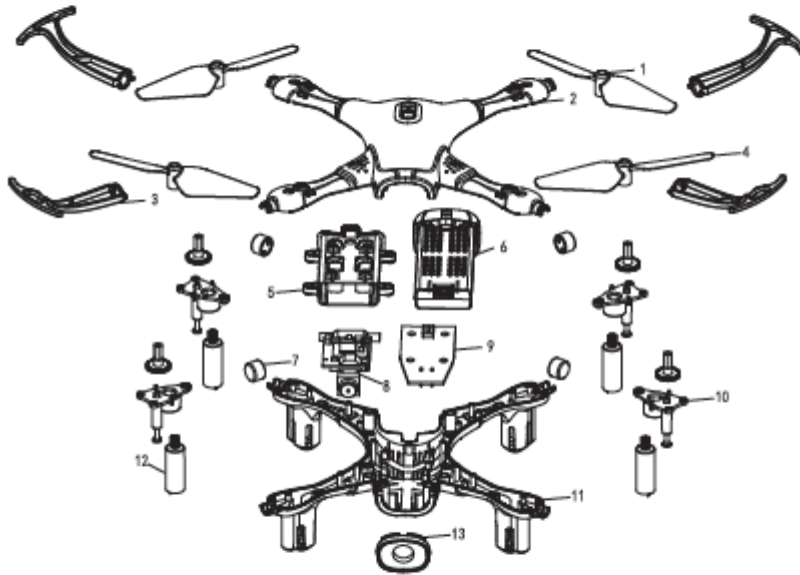


Remote Control (Green)



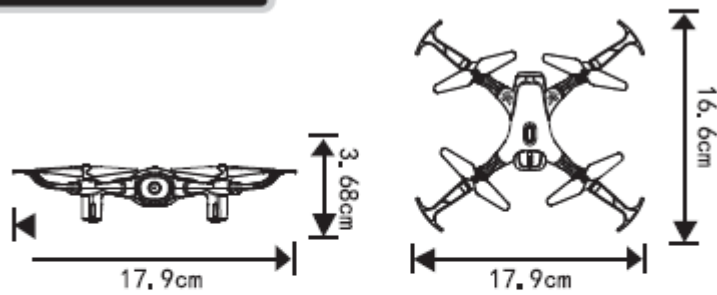
Remote Control (Red)

Product Descriptions



NO.	Product Name	Qty.	NO.	Product Name	Qty.	NO.	Product Name	Qty.
01	Blade(Counterclockwise Direction)	2	07	Lamp Cover	4	13	Camera Cover	1
02	Top Main Body	1	08	Camera Board Assembly	1			
03	Protective Gear	4	09	Receiver Board	1			
04	Blade(Clockwise Direction)	2	10	Gearbox Assembly	4			
05	Battery Fastener	1	11	Bottom Main Body	1			
06	Battery	1	12	Motor Assembly	4			

Main Specifications



Drone's Length : 16.6cm Drone's Width : 17.9cm
 Drone's Height : 3.68cm Motor's Model : $\phi 7$
 Battery : 3.7V/400mAh lithium battery

Rectification Procedures

Problem	Reason	Solution
The drone has no response	<ol style="list-style-type: none"> 1. The drone has entered into low-voltage protection. 2. When the power of the remote control is weak, the power light indicator will blink. 	<ol style="list-style-type: none"> 1. Charge up the drone. 2. Change the batteries of the remote control.
The flight response of the drone is not sensitive	<ol style="list-style-type: none"> 1. The power of the remote control is weak. 2. There is an interference with the same frequency as that of the remote control. 	<ol style="list-style-type: none"> 1. Change the batteries. 2. Change to a place where there is no interference with the same frequency.
The drone is flying towards its side in one direction during hovering	<ol style="list-style-type: none"> 1. The drone is not calibrated level to the ground. 	<ol style="list-style-type: none"> 1. Re-adjust the calibration until the drone is level to the ground. For further details, see No.3 on Page 5 for details (Level Calibration Function).
In the headless state, it is biased towards the front direction	<ol style="list-style-type: none"> 1. Many collisions may cause head biasness. 	<ol style="list-style-type: none"> 1. Re-define the front direction. For further details, see No. 7 on Page 6 for details (Headless Function).

Problem	Reason	Solution
Fixed high instability / up and down movement	<ol style="list-style-type: none"> 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. 	<ol style="list-style-type: none"> 1. Re-adjust the calibration until the drone is level to the ground. For further details, see No.3 on Page 5 for details (Level Calibration Function). 2. Avoid to fly under the severe weather condition. 3. Make level adjustment again, see No.3 on Page 5 for details (Level Calibration Function).

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

Le présent appareil est conforme aux CNR d'Industrie 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, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.



**QR code for Android
system**



**QR code for Apple iOS
system**

Manufacturer

Guangdong Syma Model drone Industrial Co., Ltd.
The Crossing of No.2 West Xingye Road and North Xingye Road, Laimei, Industrial Park Chenghai
District Shantou City Guangdong China.
Contact person: SYMA Telephone: +86 0754 86381898

FOR CUSTOMER SERVICE, DO NOT RETURN TO THE STORES.
PLEASE CONTACT: SYMATOYS
BY EMAIL: SERVICE2@SYMATOYS.COM

**The company has the right of final interpretation of this
instruction manual statement.**