X8C GYROSCOPE 2.4G EXPLORERS

4CH 2.4G REMOTE CONTROL QUADCOPTER

INSTRUCTION MANUAL

IMPLEMENT STANDARD: GB/T26701-2011

Main characteristics

Four-axis structure is applied,which makes the quadcopter more flexible and rapid

when flying.It has the characteristics of wind-resistant and can be flied indoor or

outdoor.

Built-in 6 axis gyroscope for precise hovering in the sky.

Modular design structure is applied, more simple for assembly and convenient for

maintenance.

With 360°3D eversion function and throwing flight function .

Newly-increased headless function can recall the aircraft easily.

The materials and specification mentioned in this instruction manual or the parts inside this package is

for reference only.Our company won’t be responsible for any adaption of the outer package.Nor shall

we keep our customers informed in advance.Any information updates or changes,please be subject to

our website .

Safety regulations

1. Please put smaller parts of the quadcopter in the place where children can’t

reach, avoiding from accidents.

2. Power of this quadcopter is adequate. Therefore, when flying for the first time, it

should push remote control’s right/left variable-speed joystick slowly, avoiding

from collisions caused by rising quadcopter rapidly.

3. After flying, please turn off the power of quadcopter and controller, also take

out the batteries from controller.

4. Please don’t put battery in high-temperature and heated places(such as fire or

nearby electric heating devices).

5. When the quadcopter flies, it should maintain 2-3 meters from the user or

others, avoiding from crashing into others’ head, face or body when it lands.

6. When children operate the quadcopter, they should be accompanied with the

adult and guided by the adult. Ensure that the quadcopter is controlled within

the range of operator’s (or instructor’s) visibility. It is convenient for controlling.

7. Non-rechargeable battery can’t charge. As installing or changing battery,

please pay attention to the polarity. Don’t use a mixture of old and new battery

or battery with different types.

8. When it isn’t used, it should turn off power supply of remote controller and

quadcopter, respectively, and take out the battery in remote controller.

9. Power supply terminal can’t be short circuit.

Maintenance

1. Use clean soft cloth to clean this product frequently.

2. Avoid from exposure or heating in the sun.

3. Don’t put the toy in the water. Otherwise, it’ll damage electronic parts.

4. Please check the plug and other accessories at regular intervals. If there

is any damage, please stop using it immediately until it is repaired completely.

Contents

Product included following contents:

Quadcopter

2.4G Remote controller

Charge box

Instruction manual

Screwdriver

Blade(4 pieces)

Battery

Four riggers

Four foot stands

Blade lockstitch

Card reader

Iron shaft

Screw(24)

Camera

Get to know your transmitter

Introduction of transmitter:

High/Low speed & Headless mode switch

Left control lever

Photo and video

Left Fine -tuning(Mode 1) Sideward Finetuning(Mode 2)

Power ON/OFF

Mode 1 / 2 switch Sideward Fine-tuning (Mode 1) Left Fine -tuning(Mode 2)

Forward and backward trimmer

Right control lever

3D Eversion

Indicator

Antenna

Battery Cover

4 X AA(LR06)1.5V Batteries（Batteries notincluded）

Installation methods of battery: Open back battery cover of remote control, and

put 4 No.5 alkaline batteries in the middle place correctly, according to battery

box's pole indication (battery should be available separately).

1.Install batteries with correct polarity.

2.Do not mix old and new batteries.

3.Do not mix different types of batteries.

Remote control keypad and lcd manual

01.Sideward Fine-tuning :Power-on start in the centering.(Be turn Left/Right Fine

-tuning in Mode2)

02.Forward/Backward fine-tuning:Power-on start in the middle.

03.Turn Left/Right fine-tuning:Power-on start in centering.(Be Sidewoard Fly Fine

-tuning in Mode2)

04.Forward shows:Power-on start in the lowest level.(At the center spuare)

05.Backward shows:Power-on start in the lowest level.(At the center spuare)

06.Right sideward fly shows:Power-on start in the lowest level.(At the center

spuare)

07.Left sideward fly shows:Power-on start in the lowest level.(At the center

spuare)

08.Turn left: Pull left function lever to left, it will be higher, than quad copter turn

left faster.

09.Turn right: Pull left function lever to right, it will be higher, than quad copter turn

right faster.

10.High/Low speed: Press button “A” for seconds to switch between high speed

mode or low speed mode. “H” means high speed and “L” means low speed.

Headless Mode：Press button “A” for 3 seconds to enter headless mode or exit .

11.Power shows:According to the battery's energy for the controller.

12.MODE 1: Default mode when power-on.When change to MODE 2, please keep pressing button "B" to right than return on the power of transmitter, the MODE on LCD displayer will be changed. Same steps to change to MODE 1 again.

13.Signal shows:Normally to full frame.

Installation steps of quadcopter’s safety guard

1. Pull out decorating parts as shown in Figure (1).

2. Press down decorating parts as shown in Figure(2) and insert blade protective frame into fuselage interface.

3. Twist two screws of every parts as shown in Figure（3）.

Note: Without rigger, blade protective frame effect in flight will be better.

Installation steps of quadcopter’s stands

1.Insert stands into the quadcopter body as figure(1).

2.Twist the wide screws to locking the stands as figure(2).

Install camera

Installation steps of X8C camera:

1.Push the camera and tight it as figure (1).

2.Connect the camera power line into the socket on quadcopter body as figure (2).

Disassembly steps of X8C camera:

1. Pull out power supply cable of the camera as shown in Figure (3).

2. Press down safe lock of lower main body as shown in Figure (4).

3. Push forward the camera and take it out as shown in Figure (5).

Note: After turning on quadcopter’s power supply, it forbids to insert or pull out the camera’s plug connecting to the aircraft.

Photography/Video instructions

1.Methods:1 Make sure the power line of camera is inserted to the quadcopter.

2.Turn the quadcopter power on,the camera works normally when the RED indicator change form flashing to green and keep light on.lf the RED indicator just light on and light off seconds later, it means the SD card is not in the camera.please insert the SD card,than the indicator light on GREEN.

2.Get to know take photo and video:

① Turn on the transmitter and pull left lever up and down to connect signal between quadcopter and transmitter.

② Take Photo : Make sure camera normally work, when push the button “C” up, camera will take a photo after a beep from transmitter and the GREEN indicator on camera will be RED and flash on time.

Take Video : Make sure camera normally work , when pull the button “C” down ,camera starts to take video after a beep from transmitter and the GREEN indicator on camera will change to RED than keep flashing.

Press the button “C” slightly again , another beep from transmitter means video stopped and the RED flashing light on camera will be GREEN and keep light on.

Controller modes & instructions

The transmitter built-in two modes, Mode 1 & Mode 2, in line with different customer’s usage pattern. Keep pushing button B to right, than turn on the transmitter power to change Mode 1 or Mode 2.

MODE 1

Operating direction

Hover up and down

Push the throttle up or down, the quadcopter flies upward or downward.

Forward and backward

Push the direction lever up or down,the quadcopter flies forward or backward.

Turn Left and Right

Pull the throttle left or right, the quadcopter turns to left or right.

Sideward fly

Pull the direction lever left or right, the quadcopter flies to left side or right

side.

Fine-tuning operation

Forward/Backward fine-tuning

When the quadcopter keeps flying forward /backward, you can correct it by pressing fine-tuning button down / up.

Sideward fly fine-tuning

When the quadcopter keeps flying to left / right side, you can correct it by pressing the fine-tuning button right / left.

Turn left/right fine-tuning

When the quadcopter keeps rotating to left /right, you can correct it by pressing the finetuning button right / left.

MODE 2

Operating direction

Hover up and down

Push the throttle up or down, the quadcopter flies upward or downward.

Forward and backward

Push the direction lever up or down, the quadcopter flies forward or backward.

Turn Left and Right

Pull the direction lever left or right, the quadcopter turns to left or right.

Sideward fly

Pull the throttle left or right, the quadcopter flies to left side or right side.

Fine-tuning operation

Forward/Backward fine-tuning

When the quadcopter keeps flying forward /backward, you can correct it by pressing fine-tuning button down / up.

Sideward fly fine-tuning

When the quadcopter keeps flying to left / right side, you can correct it by pressing the fine-tuning button right / left.

Turn left/right fine-tuning

When the quadcopter keeps rotating to left /right, you can correct it by pressing the finetuning button right / left.

Ready to fly your quadcopter

1.Press the ON/OFF power switch up.

2.Open battery cover,and connect battery connector with dash receiver.

3.Enclose battery into the fuselage, after closing battery cover,turn on the switch on the bottom of aircraft.

4.Push the throttle lever to the highest position,and then pull it back to the lowest position.There will be one clear sound from the transmitter,this shows that the quadcopter has entered into the pre-fly state.

Function introduction

1.Low-voltage protection:

If four indicator lights in the bottom of aircraft start to twinkle, it means that the aircraft is short of electricity and is not able to roll. At that time, a return voyage shall immediately be made to the aircraft.

2.Over-current protection:

In the condition of rotating aircraft’s fan blade, when being crashed or stuck, aircraft’s circuit will conduct over-current protection.

3.Horizontal correcting function:

Place the quadcopter on a horizontal postion,then push transmitter both left and right lever

to lowest right conner for about 2-3 second ,indicator on the quadcopter changed from

normal lights up to quickly flashing ;After 2-3 second ,the indicator changed to normal lights,it means the quadcopter restarted /reset successfully.

4.3D eversion:

When you are familiar with the basic operation,you can do some awesome& exciting tricks and stunts! First of all,fly the aircraft to a height of more than 3 meters, press the 3D Eversion switch on the rear right side of the transmitter,then push the right rudder(in any direction)to make 360 degree flip.

Tips:3D eversion goes better when battery power is enough.

5.Headless function:

1. Forward definition

1. Turn on power switch of remote control.

2. After aircraft connects with power supply, place the switch in “ON” position, adjust the direction pointed by aircraft’s handpiece and regard it as the dead ahead in headless situation.

3. Push the accelerator’s push rod of remote control to the highest point and pull back to the lowest point.When remote control pops, it indicates that frequency

modulation and forward definition have already finished.

2. Switch to headless function and general function

1. After frequency modulation, the aircraft defaults to general pattern. The indicator light on aircraft is long bright state. After pressing down headless function switch on the top left of master remote controller for 2 seconds, remote control will give out “DDD...”, it means that it enters into headless state. After pressing for 2 seconds and hearing long “D”, it means that it exits headless state.(In headless mode, four indicators on the

aircraft flicker slowly for once within four seconds)

2. In headless state, the operator has no need torecognize the position of aircraft’s headpiece, and he just needs to control the aircraft in accordance with the direction of remote control’s operating rod.

3. Correcting forward direction

1. When the aircraft is in the headless condition, if there is any deviation in the fixed-head direction, it is necessary to re-fix the right direction of the aircraft and stir the

accelerator and direction lever to the bottom left side.Long-time shining of indicator lights on the aircraft after slow flashing for 3 seconds shows that adjustment is

Completed.

Battery replacement and charging method

Steps of battery replacement:

1. Turn off aircraft’s power supply, and push the switch to “OFF”.

2. Open aircraft’s battery cover backward.

3. Connect battery interface with dash receiver.

4. After battery replacement, fasten the battery cover again.

Steps of battery charge:

1. Connect battery switch with charger.

2. Connect charger to power supply socket.

Balanced charger:

1. Insert adapter’s DC outlet into import socket of balanced charger. Red light

of balanced charger will light on.

2. Insert three-position balanced plug of power battery to output end of charger.

Green light of balanced charger will light on. When green light extinguishes,

it means the end of battery charging.

(Charging time is less than 200 minutes)

Note: if power battery inserts into the charger, the light has no change. It

indicates that this battery is full energy. There is no need to recharge.

Charging time: about 200 minutes Flying time: about 7 minutes!

Cautions when charging:

1.When charging, please put this product on a dried or ventilated area and keep

it far away from heat source or explosive product.

2.When charging, please remove the batteries from the quadcopter. Then

charging process should be supervised by an adult so as not to cause an

accident.

3.When finish flying, please do not charge the battery if the surface temperature

is still not cool. Otherwise it may cause a swollen battery or even a fire hazard.

4.Please make sure that you use the original USB charging cable provided.

When the battery has been used for a long time, or appears to be swollen,

please replace them.

5.A battery when not in use for a long time will lose its charge automatically.

Charging or discharging too often may reduce the life of the battery.

Steps of fan blade’s installation/disassembly of aircraft

Steps of fan blade’s disassembly:

1. Rotate and back out fan blade cover in anti-clockwise direction as shown in Figure (1) .

2. Rotate blade lockstitch for about 90° in the anti-clockwise as figure(2) till the iron shaft point to the

opening of blade lockstitch.

3. Get iron shaft out and pull blade lockstitch upward as figure (3) shows.

4. Pull out fan blade upward as shown in Figure (4).

Installation steps of fan blade:

1. Insert fan blade into principal axis pipe as shown in Figure (1)

2. Install the blade lockstitch inside the quill as figure (2) shows to ensure that the gap of blade

lockstitch aligns at the hole on the quill.

3. Install the iron shaft inside and rotate blade lockstitch for about ninety degrees in the clockwise

direction shown in figure (3).

4. Rotate and twist fan blade cover in clockwise direction as shown in Figure (4).

Maintenance procedure

Problems	Causes	Solutions
Aircraft has no response		
	1. Aircraft enters into low-voltage protection.	1. Charge the aircraft.
	2. Electric quantity of remote control is insufficient, power indicator light will flicker.	
	3. Channel selection of remote control is inconsistent with aircraft’s match codes.	

2. Change remote control’s battery.

3. Adjust channels of remote control and aircraft, and make them become consistent.

Aircraft’s flying response is insensitive

1.The remote-control unit suffers low battery or the quality of battery is not good enough.

2. Remote control with the same frequency is transmitting interference.

1.Change battery with better quality.

2. Change the place where has no transmitting interference of the same frequency.

When hovering, side flight is formed

1. Have no horizontal correction.

1. Conduct horizontal correction, as shown in p.8(3)(correcting function)

In headless state, it deviates to dead ahead

1. Head deflection is caused by multiple collisions.

2.Long time usage of headless mode.

1. Define forward again, as shown in p.9(5)(headless function)

Spare parts

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.**

Hereby,SYMA MODEL AIRCRAFT INDUSTRIAL CO.,LTD,declares that this Remote control aircraft is in compliance with the essential requiremetnts and other relevant provisions of Directive 1995/5/EC.