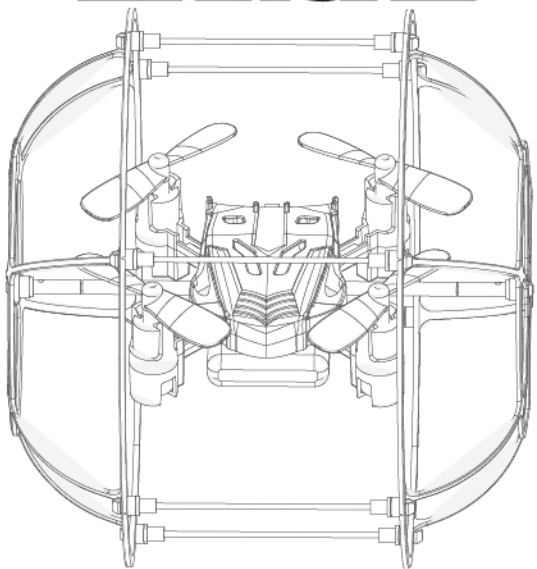


# INSTRUCTION MANUAL



**944842 mini**

- Mini quadcopter
- Four coreless motor
- 3.7V 200mAh Li-po battery
- Flight time more than four minutes

2.4GHZ CONTROLLER USB CHARGE GORO

## 1.INTRODUCTION

Thanks for using Skytsch products. This is the first helicopter which can fly outdoor in a weather. In order to play Helicopter more convenient and easy, please read it carefully before playing. Meanwhile, please keep it well, and take it for reference when adjustment and maintenance.

Flight vehicle can satisfy whatever rainy or sunny, even when outdoor wild grade 2, it will keep moving.

### IMPORTANT NOTES

It is not a toy. Mini quad copter it is, but still dangerous, please play it according to the user manual. Any assemble or improper operation is limited, otherwise will lead to accident.

Attention, manufacture or distributor would not respond to any duty when your spare part is out of use, improper assemble and unsafely used. It is suitable for 14+, we could not respond to your lose and injury for wrong operation.

Model hobby require high technical to play and easy damage, after unpacked, will cause spare part spoilage, we will consider the return condition according to its status.

## 2.SAFETY NOTES

### ⚠ WARNING

Mini model quad copter, also a dangerous toy. You had better play it far from the group. Any improper assemble or damage part or unfamiliar control may lead to accident. Player should pay attention to the safety.

### ⊘ FORBIDDEN

**Special despecial design for indoor&outdoor, please keep it away from obstacle**

This product is suitable for indoor and outdoor playing. Please choose the space without obstacle, and keep distance from the people and pets. Don't play it near heat and lines and power source to avoid crash and electric hit or fire, take care.

### ⊘ FORBIDDEN

**PREVENT MOISTURE**

R/C models are composed of many precision electrical components. It is critical to keep the model and associated equipment away from moisture and other contaminants. The introduction or exposure to water or moisture in any form can cause the model to malfunction resulting in malfunction, or a crash. Do not operate or expose to rain or moisture.

### ⊘ FORBIDDEN

**PROPER OPERATION**

To avoid potential fire hazard from batteries, please do not short, reverse polarity, or puncture batteries. Battery charging must be done under supervision at all time, and at location out of reach by children. Double check the four AA batteries are rechargeable Ni-CD/MH batteries before charging. The manufacturer or this product will not be liable for accidental damages incurred by charging non-rechargeable batteries.

1

### ⊘ FORBIDDEN SAFETY NOTE FOR NI-MH BATTERIES

Make sure the batteries are installed based on polarity indicated in the case and do not mix batteries of different chemistry/spec. Please take out the batteries if you are not going to use for a long time to avoid potential leakage which may damage the transmitter. Please dispose depleted batteries according to local laws and ordinances. Do not dispose improperly.

### ⚠ CAUTION KEEP AWAY FROM HEAT

R/C models are made of various forms or plastic. Plastic is very susceptible to damage or deformation due to extreme heat and cold climate. Make sure not to store the model near any source of heat such as an oven, or heater. It is best to store the model indoors, in a climate-controlled, room temperature environment.

### ⚠ WARNING OBTAIN THE ASSISTANCE OF AN EXPERIENCED PILOT

The products are suitable for more than 14 years old age. At the beginning it will have some certain difficulty in learning, suggestion guidance by experienced person playing.

### ⊘ FORBIDDEN SAFETY NOTE ON LI-POLYMER BATTERIES

Li-polymer batteries poses higher operational risks compared to other battery chemistry, thus it is imperative to follow its usage instructions. Manufacturer and dealer assume no liability for accidental damages caused by improper usage. Do not use charger other than the factory supplied unit to avoid potential fire and explosion. Do not crush, disassemble, burn, and reverse polarity. Avoid metallic materials to come into contact with battery's polarity and cause it short and never puncture batteries to avoid fire hazards. Battery charging must be done under supervision at all times, and at location out of reach by children. Please stop the use or charge of the battery should there be an unusual increase in battery temperature after use. Continue use of this battery may cause it to expand, deform, explode, or even result in fire hazards. Please dispose depleted batteries according to local laws and ordinances. Do not dispose improperly.

The statements should be displayed in the user manual: changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

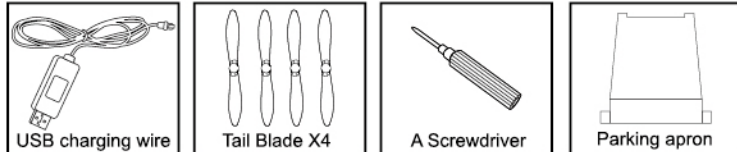
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate 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:

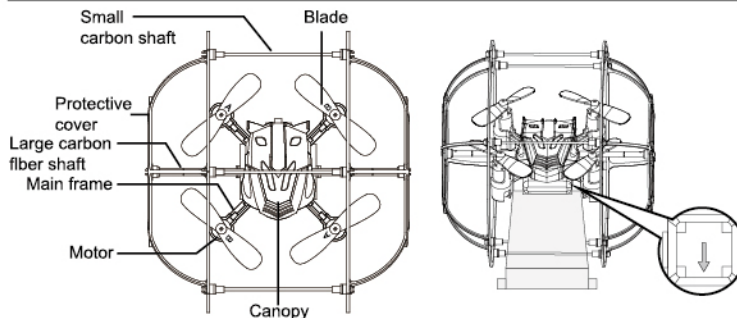
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

2

## 3.STANDARD EQUIPMENT

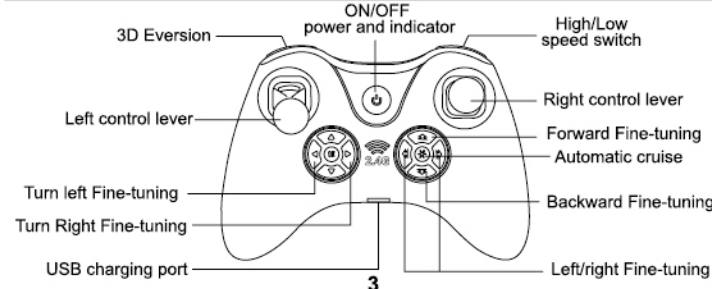


## 4.NOMENCLATURE AND SKETCHES OF TAKE OFF

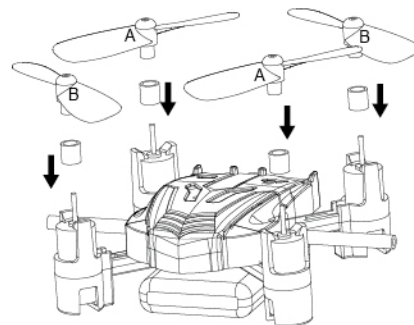


Remark: when the quad-copter take off, the nose of the quad-copter should be aimed at the pattern of forward arrow that in parking apron, then put the quad-copter on the parking apron and binding of radio transmitter and receiver, as seen above. (The more information for the binding of radio transmitter and receiver please reference P5)

## 5.REMOTR CONTROL FUNCTION AND BLADE POSITION AND ASSEMBLY DIAGRAM



3



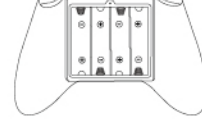
## 6.TRANSMITTER BATTERY INSTALLATION

### ⊘ FORBIDDEN Do not disassemble

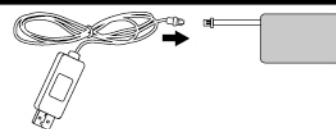
1. Use the screwdriver to unscrew the battery compartment in anticlockwise direction. (as step 1)
2. Load 4 PCS of AA batteries into the transmitter as per the correct polarity shown in battery compartment. (as step2)

Step 1

Step 2



## 7.CHARGING BATTERIES



LED Indicator LED

|                   |               |
|-------------------|---------------|
| Red light on      | Red light off |
| Charge Completion | Charging      |

With the distribution of special USB charging cable, charging cable into the charging port for charging Battery

### ⚠ WARNING

For safety concerns, battery charging must be done under supervision at the times.

## 8. BATTERY AND CHARGER SPECIFICATION

Battery usage and charge duration reference

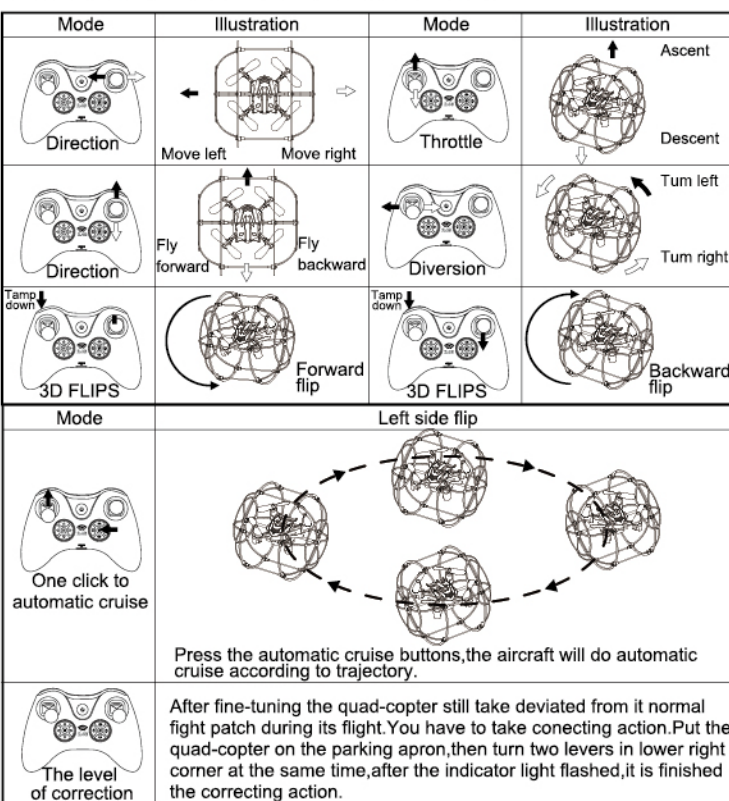
4

## 10.FLIGHT ADJUSTMENT AND SETTING

Get familiar with all kinds of direction control and keep repeating until you can play it as you perform your wishes.

1. Place the flight vehicle a clear open field and the tail of helicopter point to yourself.
2. Practice to operate the throttle stick (as below illustration) and repeat practicing "Throttle high/low", "Aileron left/right", "Rudder left/right", "Elevator up/down" and "3D Flips".

3. The simulation flight practice is very important, please keep practicing until the fingers move naturally when you hear operation orders being call out.



6

## FLIGHT ADJUSTMENT AND NOTICE FOR BEGINNERS

### ⚠ CAUTION When arriving at the flying field

- Check if the screws are firmly tightened.
- Check if the transmitter and receivers are fully charged.
- Make sure that no people or obstructions in the vicinity.
- You must first practice hovering for flying safety, this is a basic flight action. (flight vehicle means keeping the helicopter in mid air in a fixed position)
- Please stand approximately 2m diagonally behind the helicopter.
- It means that the battery of quadcopter be in Low battery condition when the four lights flashed at the bottom of airframe.

## 11.TROUBLE SOLVING DURING FLIGHT

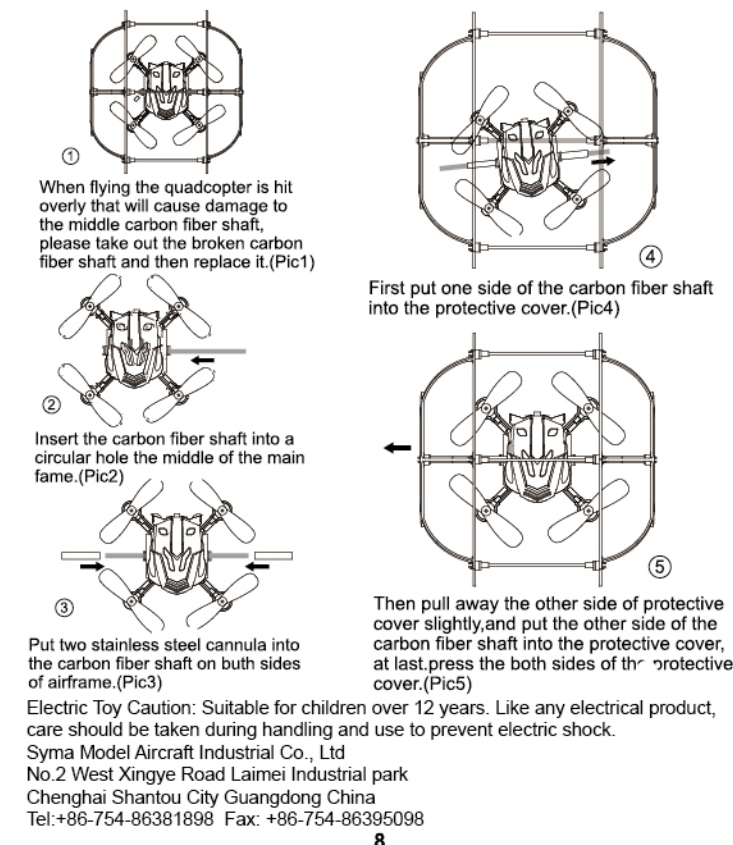
| Situation                                                                                                                          | Cause                                                                                                                              | Way to deal                                                                                                                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 Receiver status LED blinks continuously for more than 4 seconds after helicopter battery inserted. No response to control input. | Unable to bind to transmitter                                                                                                      | Repeat the power up initializing process. (Refer to P.5: Binding of radio transmitter and receiver)                                                                                           |
| 2 No response after battery is connected to helicopter.                                                                            | 1. Check power to transmitter and receiver.<br>2. Check transmitter and receiver voltage.<br>3. Poor contact on battery terminals. | 1. Turn on transmitter and ensure flight vehicle battery is inserted properly.<br>2. Use fully charged batteries.<br>3. Re-seat the battery and ensure good contact between battery contacts. |
| 3 Motor does not respond to throttle stick, receiver LED flashes.                                                                  | Helicopter battery depleted.                                                                                                       | Fully charge the battery, or replace with a fully charged battery.                                                                                                                            |
| 4 The main blade do not turn                                                                                                       | The main blade and motor are assembled cohesively.                                                                                 | Pull the main blade up to keep in an appropriate state with motor.                                                                                                                            |
| 5 Main rotor spins but unable to takeoff.                                                                                          | 1. Deformed main blades.<br>2. Helicopter battery depleted.                                                                        | 1. Replace main blades.<br>2. Charge or replace with fully charged battery.                                                                                                                   |
| 6 The quadcopter was violently shaking or lurched sideways                                                                         | The main blade is be out of shape                                                                                                  | Change the transformative main blade                                                                                                                                                          |
| 7 Tail still off trim after adjustment, or inconsistent speed during left/right pirouette.                                         | 1. Damaged tail rotors.<br>2. Damaged tail drive motor.                                                                            | Replacement of the main wing. Replace the main motor.                                                                                                                                         |
| 8 Helicopter still wonders forward after trim adjustment during hover.                                                             | 1. Elevator servo not level during power up.<br>2. Elevator pushrod too long or too short.                                         | After turn on the quadcopter then fine-tuning to return-to-zero.                                                                                                                              |

7

### ⚠ WARNING:

When the quadcopter is in the level of correction's condition and the indicator light is flashed slowly, please do not push the rocker ceaselessly in order not to affect the function for the level of correction, which and it will result in the quadcopter become unstable or other exceptions. If other exceptions occurs, please turn off the switch and then restart the quadcopter and transmitter.

## CARBON FIBER SHAFT INSTALLATION AND REMOVAL



8

This device complies with Industry Canada license-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.

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.

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.