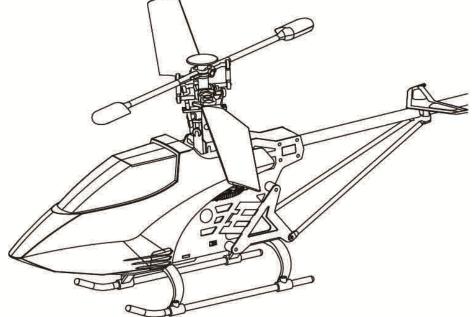


#### 1.6 User Manual







# 2.4G R/C Helicopter

#### Main characteristics

- Die-cast structure is applied, which makes the action of the helicopter more flexible with stable flying per formance and it can be flied indoor.
- Built-in Gyro, which make sure accurate positioning in the air.
- Use modular design structure, simple assembly and convenient maintenance.

The material, specification on this instruction manual and parts content inside this package are for reference only. Our company won't be responsible for any change with this instruction manual or package. Content inside the package may be changed with or without prior notice. Any information updated or changed, please be subject to our website.



#### PREFACE

Dear customers:

Hello!

Thank you for purchasing our flying model. Please read this instruction manual carefully in order to master the skill required in order to master the skill more quickly and operate this product more safely. In the mean time, please well keep the original of this instruction manual for future reference.

#### IMPORTANT INSTRUCTION

- 1. This product is not a toy but one precisive equipment that integrating mechanics and electronics with expertise of aerodynamics and high-frequency transmitting. It requires to be correctly assembled and debugged so as to prevent the accident from being happened. The product owner should operate or control it in safe way. Please noted that we won't take any responsibility for any wrong operation as this may result in severe injury or loss of property and we can not control the operating process during the time when the user assemble or use this product.
- This product is suitable to be used by people who has operating experience in flying model or age no less than 14 years old.
- 3. The flying ground we required should be the local field and legal for remote control flying.
- 4.Once this product is sold, we won't be responsible for any safety responsibility during the time the user operates or uses or controls this product.
- 5.If there is any problem occurred during the time of using, operating or repairing, please reach our sales agent for details. The sales agent that we authorized will provide you with the technical support and after-sale service.

#### SAFETY & CAUTIONS

This R/C flying model is one high dangerous commodity. Please make sure that it should be flied far away from the crowd. Please also pay more attention to the phenomenon such as incorrect assembly or damaged model or incorrect connection of electronic control equipment. Please also pay attention to the flying safety when operating and know more about the accident that may be happened due to your own negligence.

- 1. Keep it far away from the barrier or crowd.
- 2. Keep it far away from the moisten environment.
- 3. Use this product correctly and avoid operating by your own.
- 4. Keep it far away from the high-speed rotating part and heat source.
- 5. Please conform to the sequence of power ON/OFF.As the picture below shown, incorrect sequence of power ON/OFF may cause this product out of control and affect your own safety or others. Please form a good habit of switching on or switching off this product correctly.



#### SAFETY REGULATIONS

- 1. Placed in small perts of the reach of children, to avoid accidents.
- 2. The blades of this helicopter is used activities blades, don't screw up.
- The helicopter was powerful, should be gradually pushed up the remote control shift lever on the left for first flight, to avoid the surge caused the helicopter crash damage. to avoid the fast rising caused quad-copter crash damage.
- Should be turn off the power of controller first then turn off the power of the helicopter when finished flight.
- 5. Do not put the battery in high temperature or heating place(e.g:Fire or electric heating devices).
- 6. Note that the quad-copter should keep off the user or other persons from 2-3m to avoid the landing copter crash into other person's head, face or body etc.
- 7. Children should fly the copter by adults in the guidance and ensure the copter control in flyer's (or guides's) line of sight range for easy to control.
- 8. Non-rechargeable battery is not charging. Installing or changing the lbattery, please note the positive and negative poles. Don't mix old batteries and new batteries or different type.
- 9. Please turn off the power of the controller and helicopter when not in use.
- Power terminal is not allow short circuiting.

#### READY TO FLY

- 1. Please check the ground and keep it far away from the crowd, animal or any other barrier.
- 2.Please pull the ON/OFF power switch of the helicopter from "OFF" to "ON" position, this time the helicopter nose will be glittering, then please place the helicopter on the flat surface.
- 3.Switch on the power of the transmitter, pull the ASCENDING/DESCENDING Control Lever back to the lowest position, this time the indicator of the transmitter will be kept flashing quickly with sound of "di,di", 5 seconds later, the indicator will appear eternal bright, this time the indicator of the helicopter nose will be changing from glittering to eternal bright, and the rudder will reposition automatically, this shows that decoding is successfully finished and the helicopter will enter into the state of "Ready for Flying", (During the process of decoding, please DO NOT touch the helicopter.)
- 4.Push slowly the ASCENDING/DESCENDING Control Lever, this time the helicopter will take off.

# LOW VOLATAGE PROTECTION

Low-voltage protection: When the helicopter battery is low, the helicopter control system battery will be protected, and stop the supply of helicopter rotor; low power protection, the need to charge to secure a new flight of the helicopter.

Overcurrent protection: When the helicopter blades in the rotating state by collision or jammed, the helicopter circuit overcurrent protection.

# **MAINTENANCE**

- 1. Cleaning the helicopter with clean and soft cloth.
- 2. Don't put the helicopter under the direct sun or strong lighting
- 3. Don't soak the toys in the water, or the electronic parts will be destructed.
- Regularly check the plug and other spare parts, if find some parts broken, please stopping using till the product in good condition.

# **ANNOUNCEMENTS**

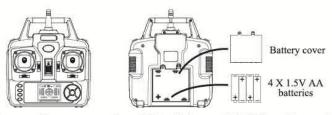
- (1) Every time turn off or reset the battery, please reseach the signal.
- (2) Please keep one controller to one helicopter at every time searching the signal to avoid the interference.
- (3) Please keep the controller closed to the helicopter when searching signal for a short searching time.

-2-



# **BATTERY INSTALLATION AND CHARGING**

#### **Battery Installation**

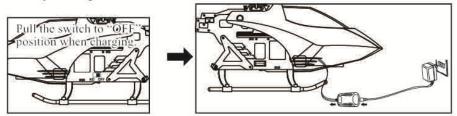


Unscrew and remove battery cover from R/C unit, insert 4 'AA' batteries, noting polarity indicators. Replace battery cover.



- 1. Install batteries carefully.
- 2. Do not mix old and new batteries.
- 3. Do not mix different types of batteries.

#### **Battery-Helicopter**



#### Integrated charger:

Turn off the helicopter, take out the power connecting. Please insert the charger into the power jack, the power LED light up, then connect the charger to helicopter, after 2 seconds, the charger LED light up too, it start charge. When charging finished, the charger LED light off, it takes about 80 minutes.

# 80 minutes charging can flying more 6 minutes.

Quad-copter is equipped with a LI-Poly battery, please also pay attention to the following cautions orsafety use.

Do not use or leave the battery near a heat source such as fire heater. Otherwise it will cause damageor explode.

Do not use the battery slam or beating hard surface.

Do not immerse the battery in water, and keep it in a cool dry place.

Charger included with the product can only be used for the product charge.

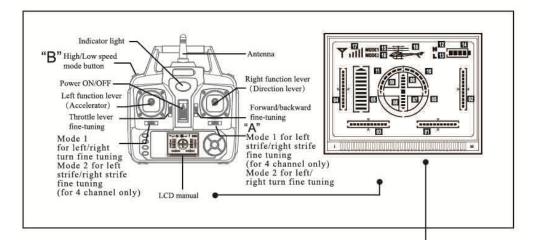
Do not disassembly the battery.

Never leave the battery unattended during charging.

To protect the batteryafter flight, battery temperature is higher, please charge when it cooling .



## REMOTE CONTROL KEYPAD AND LCD MANUAL



#### Remote Control Keypad and LCD Manual

- Strife fine-tuning: Power-on start in the centering.(Be Turn Left/Right Fine-tuning in Mode2)
- Forward/backward fine-tuning: Power-on start in the middle.
- Turn Left/Right fine-tuning: Power-on start in centering. (Be Strife Fine-tuning in Mode2)
- Throttle lever fine-tuning: Power-on start in middle.
- Throttle shows: Power-on start in lowest level. (Left and right throttle shows at one time)
- Forward shows: Power-on start in the lowest level.(At the center spuare)
- ☑ Left Strife shows: Power-on start in the lowest level.(At the center spuare)
- Backward shows: Power-on start in the lowest level.(At the center spuare)
- Right Strife shows: Power-on start in the lowest level.(At the center square)

- 10 Turn left: Power-on start in zero.
- 11 Turn right: Power-on start in zero.
- 12 High speed mode:Power-on without display "H".
- Low speed mode: Default mode when power-on with "L".(Change to H mode when press button"B".)
- Power shows: According to the battery's energy for the controller.
- MODE 1: Default mode when power-on. (Suit for right-handed) In MODE 1, turn left/right controled by left lever, Strife controled by right lever.
- MODE 2: Push the button "A" to right to change MODE 1 into MODE 2 (Suit for left-handed).In MODE 2, Strife controlled by left lever, turn left/right controlled by right lever.
- Signal shows: Normally to full frame.
- Mini helicopter shows when power on with on function now.

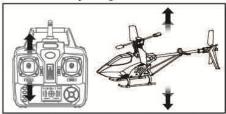
Special tips: If the helicopter you have purchased is the 3 Channel R/C Helicopter, then it will be without left or right side flying function. Only when the transmitter is switched into the Mode 2 can you use it normally (the LED panel on the transmitter will show "MODE2" on the left upper corner. Details of the Switch Mode, please kindly check "Introduction on LCD display and function 16.

-4-

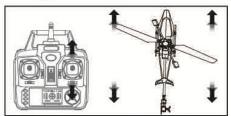


# ILLUSTRATION ON CONTROLLING THE HELICOPTER (MODE 1, DEFAULTED MODE WHEN STARTING)

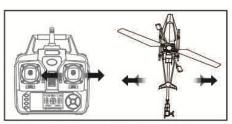
Operating direction



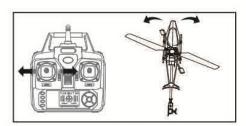
Push the throttle upward or pull it downward, the helicopter will fly upward or downward accordingly.



Push the control lever upward or downward, the helicopter flies forward or backward.

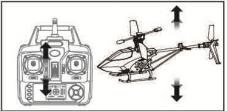


Push the control lever to the left or to the right, the helicopter will fly side to side.

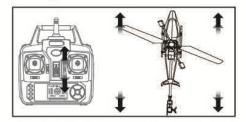


Pull the throttle lever to the left or to the right, the helicopter will turn left or turn right.

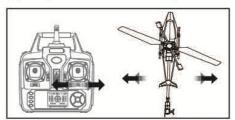
Trimming operation



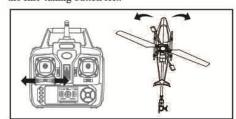
While helicopter is descending, push the fine-tuning button up, While helicopter is ascending, push the fine-tuning button down.



When the helicopter is hovering in the air, push the helicopter forward or backward, you can correct it by pushing the trimmer downward or upward.



While helicopter strifes left, push thefine-tuning button right, while helicopterstrifes right, push the fine-tuning button left.

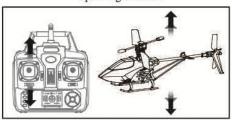


While helicopter turns left, push the fine-tuning button right, while helicopter turns right, push the fine-tunning button left.

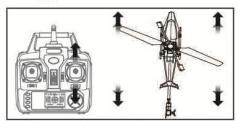


# ILLUSTRATION ON HOW TO CONTROL THE HELICOPTER (MODE 2)

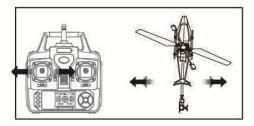
Operating direction



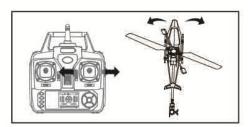
Push the throttle upward or pull it downward, the helicopter will fly upward or downward accordingly.



Push the control lever upward or downward, the helicopter flies forward or backward.

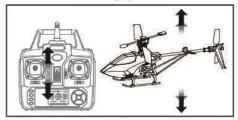


Push the control lever to the left or to the right, the helicopter will fly side to side.

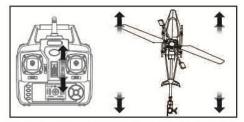


Pull the throttle lever to the left or to the right, the helicopter will turn left or turn right.

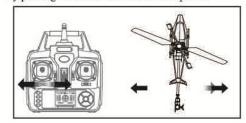
#### Trimming operation



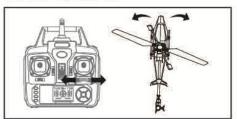
While helicopter is descending, push the fine-tuning button up, While helicopter is ascending, push the fine-tuning button down.



When the helicopter is hovering in the air, push the helicopter forward or backward, you can correct it by pushing the trimmer downward or upward.



While helicopter strifes left, push thefine-tuning button right, while helicopterstrifes right, push the fine-tuning button left.



While helicopter turns left, push the fine-tuning button right, while helicopter turns right, push the fine-tunning button left.



### TRIMMING OF THE RUDDER CONNECTING LEVER

After trimming on the transmitter,however, the helicopter still keep flying Forward/Backward or Left/Right automatically, this time please trim the rudder connecting lever by rotating the trimmer so as to make sure balance of the helicopter during flying. Detailed operation is as below:

The helicopter keeps flying forward automatically when hovering, this
time please take out the left rudder connecting lever from the tilted
plate, then twist it in clockwise direction, take one or two circles as one
time of trimming. Otherwise, please twist it in anticlockwise direction.
(The left rudder of the helicopter controls the forward/backward.)

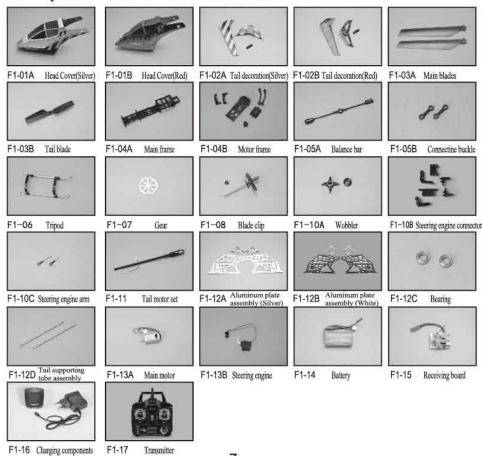


2. When the helicopter keeps flying to the left when hovering, this time please take out the right rudder connecting lever from the tilted plate, then twist it in clockwise direction, take one or two circles as one time of trimming. Otherwise, please twist it in anticlockwise direction. (The right rudder of the helicopter controls the Left/Right Side flying.)

Caution: When trimming the rudder connecting lever, we do suggest you trim only one side of the connecting lever so that it won't make you confused due to disorder, which may make it worse the flying effect; Please well protect the rudder and parts during the process of trimming.

#### Spare parts list

Order by item number from local distributors.



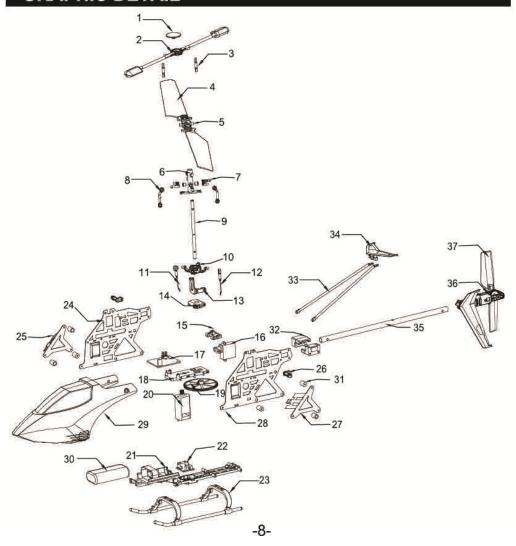
-7-



# **MAINTENANCE PROGRAM**

Problem	Cause	Check this		
No reaction from the helicopter	Not enough power for the helicoper.     Not enough power for the controller.     The channel was different from helicopter and the controller.     The gyro of the helicopter can't find out the right point.	Should be charging for the helicopter.     Change new batteries instead.     Remote control and the aircraft power supply is turned off, re-code.     Move the helicopter onto the flat ground, when the gyro receive the signal, then open the controller.		
Not reaction from the helicopter when was fly  1. The remote control are running low. 2. Antenna Weld.		Replace the remote control batteries.     Antenna re-welding.		

# **GRAPHIC DETAIL**





Ltem Number	Description	Qty Need	Ltem Number	Description	Qty Need
01	Decorative dome	1	32	Tail tube basic	2
02	Balance bar	1	33	Tail hole tube	2
03	Connect buckle	2	34	Tail decoration	1
04	Main blades	2	35	Tai tube	1
05	Blades grip set	1	36	Tai tube set	1
06	Main shaft basic	1	37	Tail blade	1
07	Skip cutting stem	2			
08	Seven words connect button	2			
09	Main shaft	1			
10	Swashplate set	1			
11	Short steering engine push rod	1			
12	Long steering engine push rod	1			
13	Swashplate limite set	1			
14	Main shaft limite set	1			
15	Upper limite of steering engine	1	1		
16	Steering engine set	1			
17	Circuit board	1			
18	Main motro basic	1			
19	Main gear	1			
20	Main motor set	1			
21	Main basic	1			
22	POWS	1	.:		
23	Landing skids	1			
24	Rightside upper metal frame	1			
25	Rightside under metal frame	1			
26	Head cover limite	2			
27	Leftside upper metal fram	1			
28	Leftside under metal frame	1			
29	Head cover	1	-1		
30	Li-poly battery	1			
31	Metal frame limites	6			



# MAIN PARAMETER Diameter of main rotor: 400mm Length of fuselage:450mm Width of fuselage: 75mm Height of fuselage: 155mm Code of main engine: 180 Battery: 7.4V/650mAh Gyroscope: Tail-locking gyro 450mm

Test Report No.: 14033258 001 Appendix 4 page 19 of 20

-10-



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 acept any interference received, including interference that may cause undesired operation.

Changes or modifications notexpressly approved by the party responsible for compliance could void the user's anthority to operate the equipment.

