

INSTRUCTION MANUAL

Technical parameter of the quad-copter

PRODUCT PARAMETERS:

INCLUDES 3.7V 600MAH LI-PO BATTERY AND A/C CHARGER

RADIO RANGE: 100M **GROSS WEIGHT:67G**

FLIGHT TIME: 6-8MIN TRANSMITTER: 2.4GHZ

DIMENSIONS: 30*30CM

►MOTOR TYPE: 820

Introduction •

- Quad-rotor design insure more stable and powerful performance and make all kinds of 3D action more easier.
- Innovative designs, easy of installation and convenient for maitenance
- By using of the 2.4G auto connection technology, scores of copters can be played at the same time with high stability.
- Equipped with the newest 3-Axis Gyro control system, this quad-cophas the characteristics of stable flight and easy operation.
- Full charged battery can support 13 minutes steady flight.

Safety Guidelines

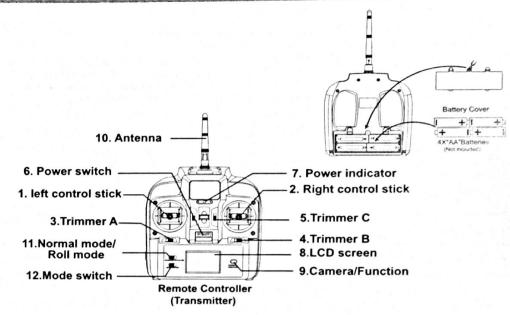
- This product is not a toy. It is not applicable for children who are unable 14 years old.
- Please read this instruction manual carefully before playing and open the product according to the manual.
- The users are in full charge of proper operating the helicopter. The manufacturer and dealers disclaim all responsibility for the damage caused by misuse.
- Keep the small accessories away from the kids to avoid accident.
- Keep batteries away from fire or high temperature environment.
- When flying the helicopter, keep it 1~2 meters away from user or others to avoid injury due to collision.
- Not to decompose or modify the product which may cause malfunction or accident.
- Fly the quad-copter within your eye vision for easy and safety control.
- Need adult supervision when this helicopter is being played by children.
- Only batteries of the same or equivalent type as recommended are to be used.
- Insert batteries with correct polarity.
- Non rechargeable batteries are not to be charged; the transmitter need 3XAA batteries for work.
- Do not mix old and new batteries.

The LCD Remote controller -

Main features of the remote controller

- Adopt microcomputer control remote controller system and 2.4G auto connection technology, scores of cotpers can be played at the same time without any interference.
- Control the function of upward,downward,forward,backward, leftward,rightward,turn left, turn right 3D flips & roll of the copter.

Sketch and function switches of the remote controller

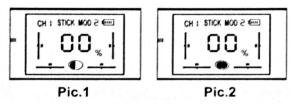


No.	Function switch	Function description	
1	Left control stick	Mode 2:upward/downward, turn left/turn right, Mode 4:upward/downward,leftward/rightward.	
2	Right control stick	Mode 2:upward/downward, leftward/rightward, Mode 4:upward/downward,turn left/turn right.	
3	Trimmer A	In mode 2, it helps to tune the Qua-copter's sideward flight In mode 4 it helps to tune the Qua-copter's left and right direction turning speed.	
4	Trimmer B	In mode 2, it helps to tune the Qua-copter's left and right direction turning speed.In mode 4 it helps to tune the Qua-copter's sideward flight.	
5	Trimmer C	In mode 2 and 4 , it helps to tune the Qua-copter's upward and downward flight.	
6	Power switch	It controls the power source of the transmitter. Slide the power switch to the "ON" position, the transmitter is powered on; slide the power switch to the "OFF" position the transmitter is powered off.	
7	Power indicator	The indicator light keeps blinking slowly: the transmitter is not activated. The indicator light keeps flashing rapidly: the transmitter is sending out connectional signal to the helicopter. The indicator light keeps on without blinking: the transmitter is ready for controlling the flight.	

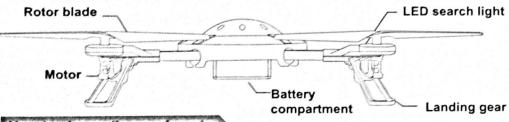
LCD screen	Show relevant parameters of the remoter controller
	10. 3D roll button/Camera buttonPress the function button
Camera/Function	to achieve 3D rollaction when the quad-copter is flying under Roll mode. When the quad-copter build a camera,
	thisbutton is used for shooting or taking photo.
Antenna	Transmits wireless signal.
Normal mode/	When the button is on the left side, it is Normal Mode;
Roll mode	when the button is on the right side, it is Roll Mode.
Mode switch	When the button is on the left side, it is Mode2; when the button is on the right side, it is Mode 4.
(Antenna Normal mode/ Roll mode

Select the Flight Mode

 There are2 flight modes available for selection, intermediate speed mode (Pic.1) and full speed mode (Pic.2)



The Quad-copter



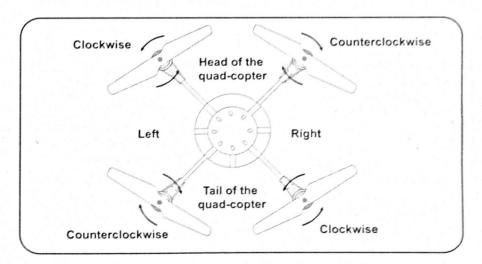
How to charge the quad-copter

- Connect the charger to the Power socket the green indicator light will turn on.
- Insert the charging plug into the jack of the battery wire to start charging. (Pic.3)
- Once charging is proceeding, the Green light on charger is ON. When charging is finished, the light will turn Red.
- Full charge takes about 1.5 hours.

NOTE:Battery should be full charged before storing.

Preparation for flight

- Put the battery into the battery compartment of the quad-copter;install 4X AA batteries into the battery compartment of the remote controller.
- Connect the battery wire plug with power plug of the quad-copter. The LED light on the tail of quad-copter will keep constant "on" and the LED light on the head of the quad-copter will keep flashing Then, set the quad-copter to the platform.
- Slide the power switch of the remote controller to "ON" position .To activate the remote controller, slowly push up the throttle stick to the top and then push it down to the bottom. The remote controller is activated once you hear a beep sound. Then, the indicator light flashes slowly while the remote controller is sending out connection signal.
- The indicator light on quad-copter will flashing rapidly when it received the signal. It will takes about 5 seconds to check out the gyro before the whole auto signal connection process is finished.
- To ensure steady flight, please set the value of the Trimmer to the midpoint. Slide the trimmer button, a short beep sound will be heard; then, slide the trimmer button until hearing a long beep sound, which means that it reaches the midpoint. Mode 2 are left-handed throttle control, Trimmer A is null. Please adjust Trimmer B,C,D one by one. Mode 4 are right-handed throttle control, Please adjust Trimmer A,B,C one by one.
- Push up the throttle stick slowly and the quad-copter takes off.



- To ensure steady flight, please set the value of the Trimmer to the midpoint.
- Remark: The left-front and the right back rotor blades rotate in counter-clockwisedirection, the right-front and left-back rotor blades rotate in clockwise direction when the copter is flying.

Pic.3

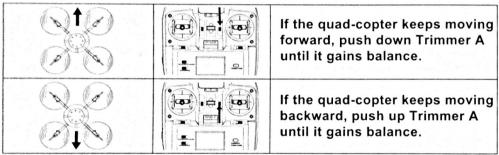
Operational Tips

- User may push either of the control sticks to skip the auto signal connection process once the quad-copter finished signal connection.
- Set the connection one by one. Otherwise, it may not be connected.
- Once the transmitter is turned off, the connection procedure must be repeated to operate the quad-copter.
- If the quad-copter keeps moving sideward even no control signal is given, players may adjust trimmer button to keep the quad-copter balanced.
- Please pull out the battery plug from the quad-copter battery socket.

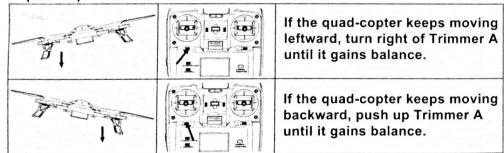
Trimmer Functions

1.If the quad-copter keeps moving forward/backward even there is no control signal given, users may adjust the trimmer button to keep the quad-copter balanced.

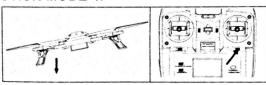
STICK MODE 2 or 4:



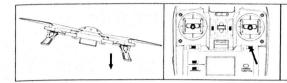
2. If the quad-copter keeps moving sideward even there is no control signal given, users may adjust the trimmer button to keep the quad-copter balanced.



STICK MODE 4:

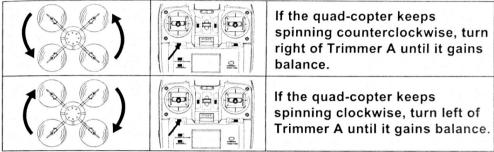


If the quad-copter keeps moving leftward, turn right of Trimmer B until it gains balance.

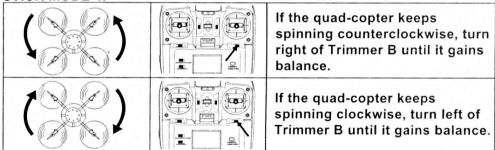


If the quad-copter keeps moving rightward, turn left of Trimmer B until it gains balance.

3. If the quad-copter keeps spinning even there is no control signal given, users may adjust the trimmer button to keep the quad-copter balanced.



STICK MODE 4:

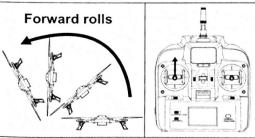


3D Roll Action:

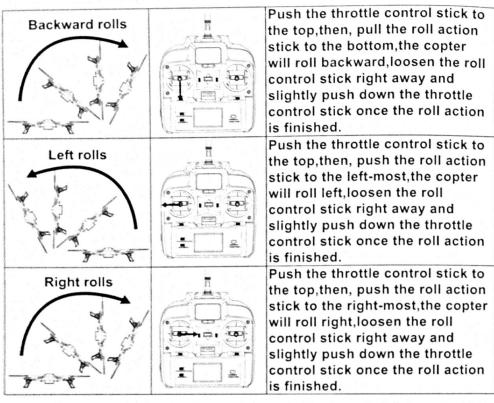
The quad-copter can perform 3D Roll action under Full Speed Mode by Hand control or by pressing the 3D Roll button.

Turn the Flight Mode changing switch to the right position to set the quad-copter under Roll Mode.

Hand control Mode:



Push the throttle control stick to the top, then, push the roll action stick to the top, the copter will roll forward, loosen the roll control stick right away and slightly push down the throttle control stick once the roll action is finished.



The 3D roll button

To share the fun of 3D roll to the beginners, we specially design the 3D roll action button which can perform the roll action without the operation of the Roll control stick.

- 1. Make sure that the copter is flying up to 3 metters high.
- 2. Make sure that the copter is under Roll Mode, press to 3D roll button, the copter will automatically perform the roll action.

Operating Upward	† †	Push up the throttle control stick, the rotation speed of the mains rotors are increasing and the quad-copter ascends accordingly.	
Downward		Push down the throttle control stick, the rotation speed of the mains rotors are decreasing and the quad-copter descends accordingly.	

Turn left		Turn the left/right turning control stick to the left,the quad-copter will left.	
Turn right	()	Turn the left/right turning control stick to the right, the quad-copter will right.	
Forward	O	When the quad-copter is flying, push up the forward/backward control stick, the quad-copter will move forward.	
Backward		When the quad-copter is flying, push down the forward/backward control stick, the quad-copter will move backward.	
Leftward flight	-00	Turn the sideward flight control stick to the left side,the quad-copter will fly leftward.	
Rightward flight	○	Turn the sideward flight control stick to the right side,the quad-copter will fly rightward.	

Tips:

- Beginners are recommended to do more excersise under normal mode before playing the 3D roll mode.
- Please choose a wide and open area for playing the helicopter and make sure that there is no barrier, no animals and people nearby when playing.
- Before performing the 3D roll action, the throttle control stick must be pushed to the top, when the copter is ready to roll, the throttle control stick should be slightly push down; when the copter finishes the roll action and recovers to normal flight, the throttle control stick should be slightly push up. Players may adjust the throttle control stick according to their playing experience.
- 2 seconds interval is needed between the first roll and the second roll.
- When the copter is flying forward,backward,leftward or rightward under Roll Mode, please do not press the Roll button,otherwise, it may result in the copter stopping flying.

Videography and Photography Function

- 1. Install the videography module to the button of the quad-copter and fix it by screw.(Pic.4)
- 2. Insert the videography module plug to the video socket which is located on the PCB of the quad-copter. (Pic.5)

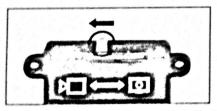


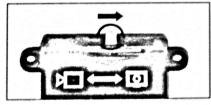


Pic.4

Pic.5

- when the helicopter is finished signal connection and is not under shooting condition, the indicator light of the videography module keeps constant "NO" .At this time.
- Turn the switch button on videography module to the direction of the videography icon(pic6), and then turn on the camera switch of thr remote control, it will start taking videography taking will be stopped.
- Turn the switch button on videography module to the direction of the photography icon(Pic7), and then press the camera button on the remote control to take photos.





Pic.6

Pic.7

TIPS

- ◆To stop shooting, please press the shooting switch on the remote controller. Directly unplug the battery cable or take out the TF memory card from the videography module will result in loss of the video data.
- To avoid helicopter crash, please do not insert or take out the TF emory card from the videography module, when the circuit is on TF memory card should be installed before circuit is on and take out after shooting switch is turned off.

- When crash occurs, turn off the helicopter and then turn on the power to recover normal working.
- When the red light and the green light of the videographic device keep flashing alternately, it means that the TF memory card is not inserted or the TF memory card is damaged. It is possible to restore the memory card by reformatting (Take out the TF memory card, then, insert it into the car reader, then, connect it to the computer and format the memory card)
- The red light will keep constant "ON" to indicate insufficient memory.

■Trouble shooting

Problem	Reason	Solution	
	1.The helicopter is underpowered.	1.Get the battery of the helicopter charged	
No reaction from the helicopter	2.The indicator light of the helicopter flashing rapidly, and the gyo is in the testing statement	Set the helicopter down to a platform, until the indicator light turn to constant "ON" without blinking.	
	3.the helicopter and the transmitter is out of radio connection	3.Repeating the connection procedure.	







