

14+



MINI PET

2.4GHz 4-CH MiNi Quad-copter

6 AXIS



INSTRUCTION MANUAL

Thank you for purchasing this product. Please read this manual carefully before use and retain it for future reference.

Technical parameter of the quad-copter

Fuselage Length: 145MM	Gross Weight: about 35.5g	Main Rotor Diameter: 56MM
Overall height: 200MM	Battery: Li-polymer3.7V 300mAh	Motor: Coreless Motor
Gear Ratio: 14:1	Tail Rotor Diameter: 145MM	Charging Time: about 60 minutes

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 maintenance.
- By using of the 2.4G auto connection technology, scores of copters can be played at the same time with high stability.
- Equipped with 6-Axis Gyro control system, this quad-copter has the characteristics of stable flight and easy operation.
- Full charged battery can support 7minutes steady flight.

Safety Guidelines

- This product is not a toy. It is not applicable for children who are under 14 years old.
- Please read this instruction manual carefully before playing and operate 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.

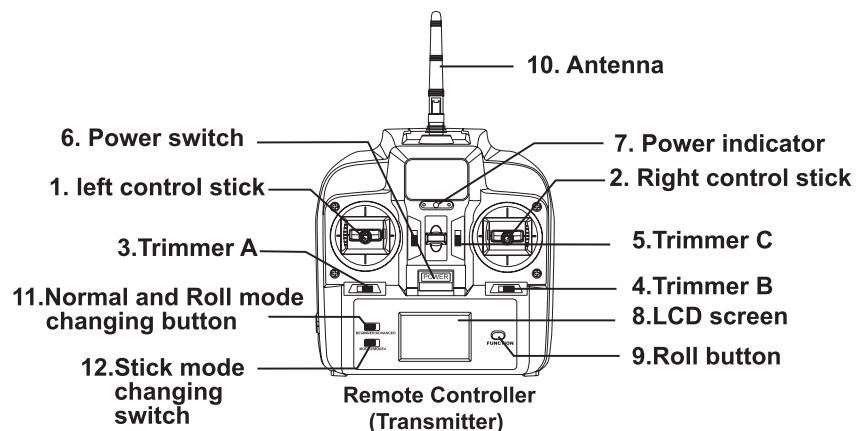
The LCD Remote controller

Main features of the remote controller

- Adopt microcomputer control remote controller system and 2.4G auto connection technology, scores of copters 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.
- Left-handed throttle control stick or right-handed throttle control stick can be freely switched according to player's willingness.

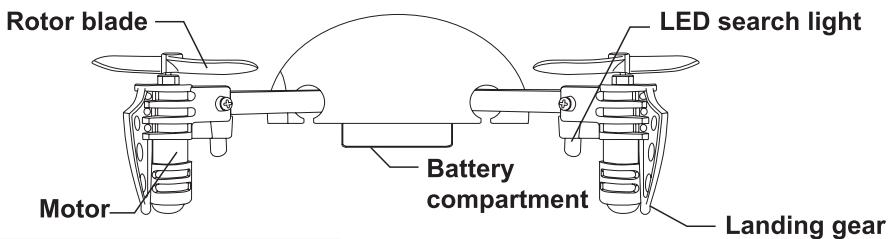
Sketch and function switches of the remote controller



No.	Function switch	Function description
1	Left control stick	Mode 2:upward/downward, leftward/rightward, Mode 4:upward/downward, turn left/turn right.
2	Right control stick	Mode 2:upward/downward, turn left/turn right, Mode 4:upward/downward, leftward/rightward.
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.

No.	Function switch	Function description
8	LCD screen	Show relevant parameters of the remoter controller
9	Roll button	Press the function button to achieve 3D roll action when the quad-copter is flying under Roll mode.
10	Antenna	Transmits wireless signal.
11	Normal and Roll mode changing button	When the button is on the left side, it is Normal Mode; when the button is on the right side, it is Roll Mode.
12	Stick mode changing switch	When the button is on the left side, it is Mode2 ; when the button is on the right side, it is Mode 4.

The Quad-copter



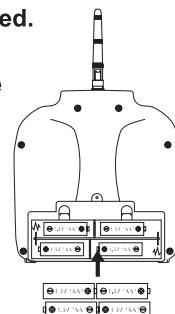
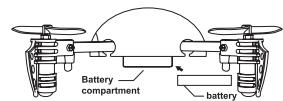
How to charge the quad-copter

- Connect the USB charger to the USB interface of the computer.
- Disconnect the battery wire plug from the quad-copter's power wire plug, then, insert the USB charging plug into the jack of the battery wire to start charging.
- Once charging is proceeding, the light on USB charger is ON. When Charging is finished, the light will turn OFF.
- Full charge takes about 60mins.

NOTE: Battery should be full charged before storing.

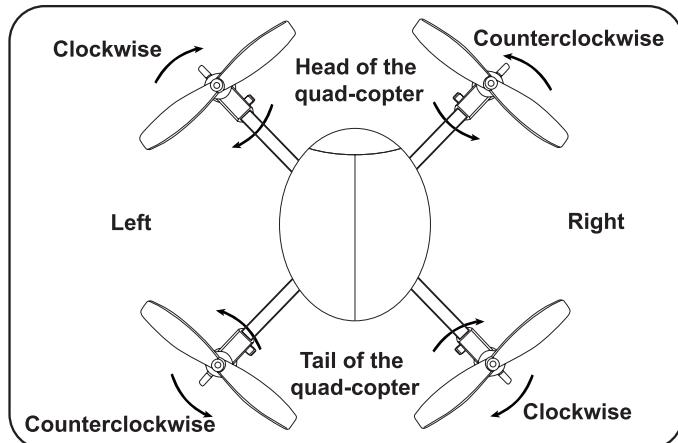
Preparation for flight

- Preparation for flight: Please put the battery to the battery box which is under the flyer. Then insert the battery plug into the battery socket of the flyer. Please pull out the battery plug from the flyer battery socket when it is not being played.
- Put the battery into the battery compartment of the quad-copter; install 4 X 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 connectional 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.



Pic7

- Remark: The left-front and the right-back rotor blades rotate in clockwise direction, the right-front and left-back rotor blades rotate in counter-clockwise direction when the copter is flying.

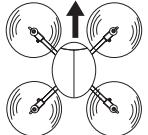
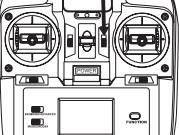
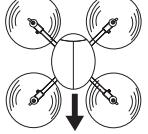
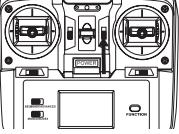
Operational Tips

- 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 sidward 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

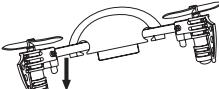
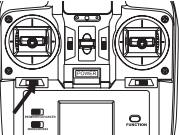
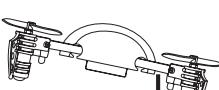
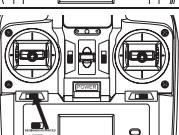
1. If the quad-copter keeps moving forward/backward even there is no control signal given, users may adjust the trimmer button to keep the quad-copter balanced.

STICK MODE 2 or 4:

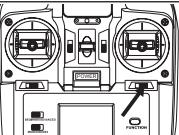
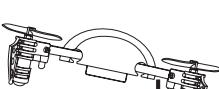
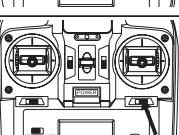
		If the quad-copter keeps moving forward, push down Trimmer A until it gains balance.
		If the quad-copter keeps moving backward, push up Trimmer A until it gains balance.

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 2:

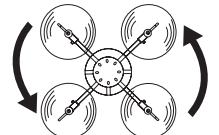
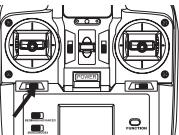
		If the quad-copter keeps moving leftward, turn right of Trimmer A until it gains balance.
		If the quad-copter keeps moving backward, push up Trimmer A until it gains balance.

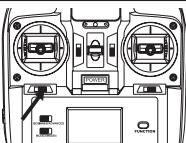
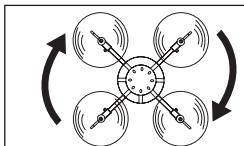
STICK MODE 4:

		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.

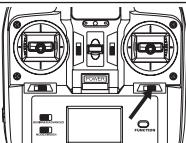
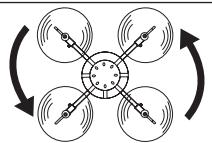
STICK MODE 2:

		If the quad-copter keeps spinning counterclockwise, turn right of Trimmer A until it gains balance.
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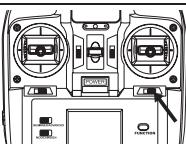
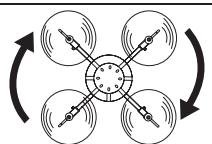


If the quad-copter keeps spinning clockwise, turn left of Trimmer A until it gains balance.

STICK MODE 4:



If the quad-copter keeps spinning counter-clockwise, turn right of Trimmer B until it gains balance.



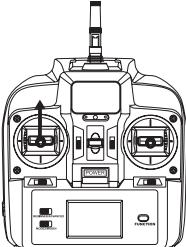
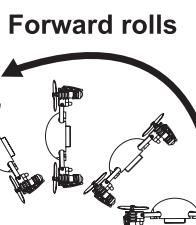
If the quad-copter keeps spinning clockwise, turn left of Trimmer B until it gains balance.

3D Roll Action:

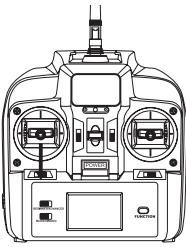
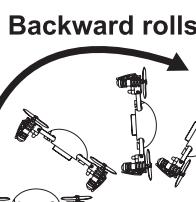
The quad-copter can perform 3D Roll action under Roll Mode by Hand control or by pressing the 3D Roll button.

Turn the Normal mode/Roll mode changing switch to the right position to set the quad-copter under Roll mode.

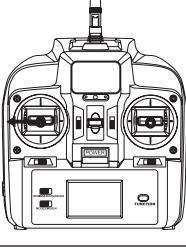
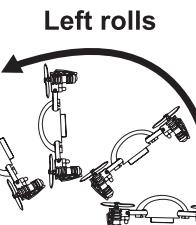
Hand control Mode:



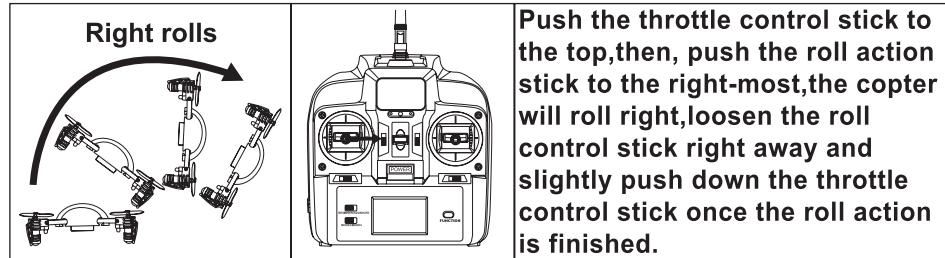
Push the throttle control stick to the top, then, push the roll action stick to the top, the copter will roll forward, loosen the roll control stick right away and slightly push down the throttle control stick once the roll action is finished.



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



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

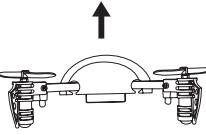
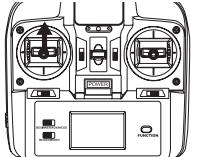
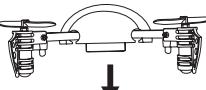
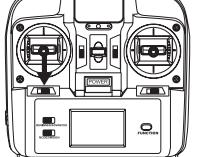
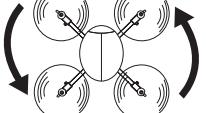
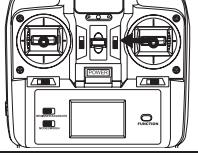
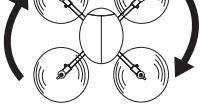
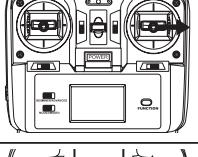
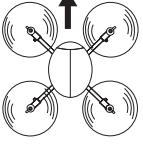
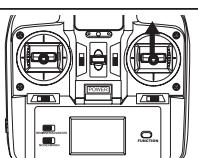


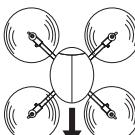
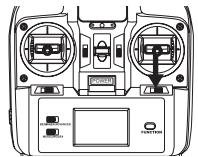
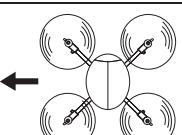
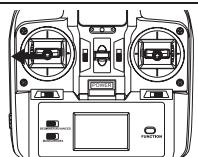
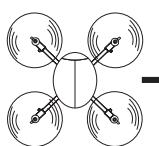
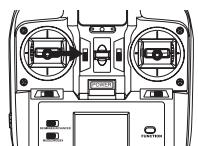
The 3D roll button

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 meters 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

<p>Upward</p> 	<p>Push up the throttle control stick, the rotation speed of the mains rotors are increasing and the quad-copter ascends accordingly.</p>	
<p>Downward</p> 	<p>Push down the throttle control stick, the rotation speed of the mains rotors are decreasing and the quad-copter descends accordingly.</p>	
<p>Turn left</p> 	<p>Turn the left/right turning control stick to the left, the quad-copter will left.</p>	
<p>Turn right</p> 	<p>Turn the left/right turning control stick to the right, the quad-copter will right.</p>	
<p>Forward</p> 	<p>When the quad-copter is flying, push up the forward/backward control stick, the quad-copter will move forward.</p>	

Backward		When the quad-copter is flying, push down the forward/backward control stick, the quad-copter will move backward.	
Leftward flight		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 excersies 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 pused 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.

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.

Trouble shooting

Problem	Reason	Solution
No reaction from the helicopter	1.The helicopter is underpowered.	1.Get the battery of the helicopter charged
	2.The indicator light of the helicopter flashing rapidly, and the gyo is in the testing statement	2.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.



