MJXRC

ITEM NO. X701

14+

3D ROLL • GRAVITY SENSOR 2.4G • 6-AXIS

X-SERIES

6-Axis Gyro Quad-copter

INSTRUCTION MANUAL

Technical parameter of the quad-copter

Fuselage Length:127mm	Gross Weight:about 37g	Charging Time:about 1.5 hours
Overall Height:35mm	Battery:Li-polymer 3.7V 250mAh	
Main Rotor Diameter:60mm	Motor:Coreless Motor	

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 the newest 6-Axis Gyro control system, this quad-copter has the characteristics of stable flight and easy operation.
- Full charged battery can support 13 minutes steady flight.

Safety Guidelines

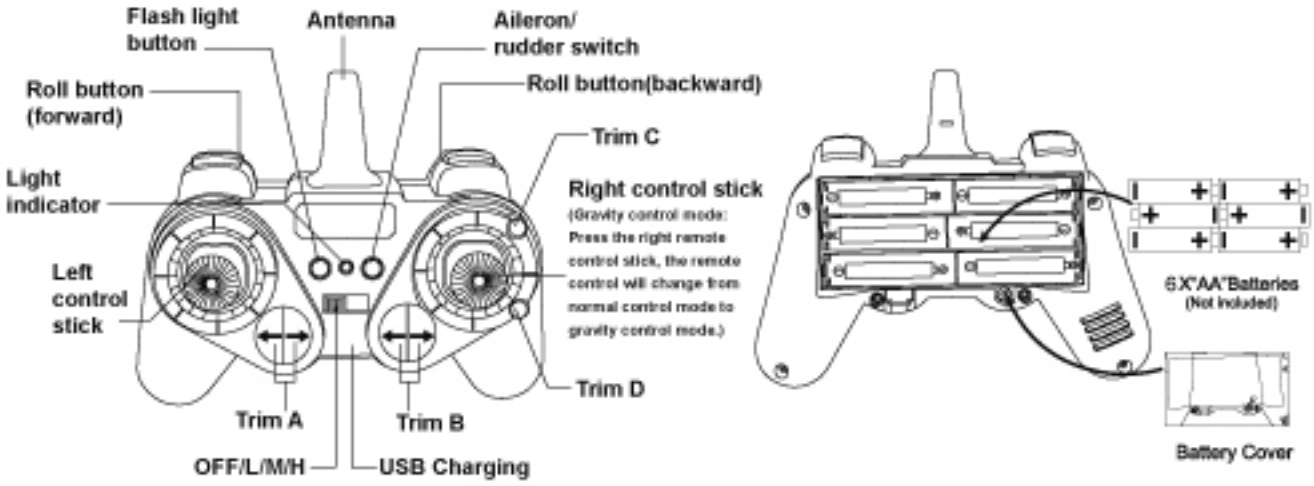
- This product is not a toy. It is not applicable for children who are under 14 years old.
- Please read this instruction manual carefully before playing and operate the product according to the manual.
- The users are in full charge of proper operating the quad-copter. The manufacturer and dealers disclaim 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 quad-copter, 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 quad-copter 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 6XAA batteries for work.
- Do not mix old and new batteries.

The LCD Remote controller

Main features of the remote controller

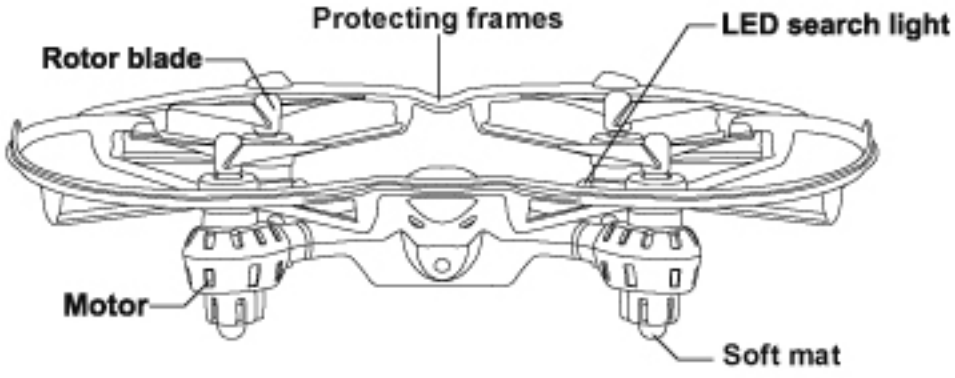
- Adopt microcomputer control remote controller system and 2.4G auto connection technology, scores of cotpers can be played at the same time without any interference.
- Control the function of upward,downward,forward,backward, leftward, rightward,turn left, turn right and 3D flips & roll of the copter.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

Sketch and function switches of the remote controller



No.	Function switch	Function description
1	Left control stick	**Mode 1:upward/downward, turn left/turn right** **Mode 2:upward/downward,leftward/rightward**
2	Right control stick	Mode 1:Forward/backward,leftward/rightward Mode 2:Forward/backward,turn left/turn right Gravity control mode: press the right remote control stick,there will be a beep sound, the remote control code will change from normal control to gravity control.
3	Trim A	Mode 1: Turn left/turn right fine tuning Mode 2: Leftward/rightward fine tuning
4	Trim B	Mode 1: Leftward/rightward fine tuning Mode 2: Turn left/turn right fine tuning
5	Trim C	When the quad-copter keeps flying backward, press this button until it gains balance.
6	Trim D	When the quad-copter keeps flying forward, press this button until it gains balance.
7	OFF/L/M/H	This is the power switch and the speed toggle switch of the remote control. There are 3 flight speed available for choosing. L is low speed; M is medium speed; H is high speed.
8	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 quad-copter. The indicator light keeps on without blinking: the transmitter is ready for controlling the flight.
9	Flash light button	This is the light switch of the quad-copter. Press it once to turn on the light and press it once again to turn off the light.
10	Antenna	**Transmits wireless signal.**
11	Aileron/rudder switch	This is the toggle button of MODE 1 and MODE 2. Press the button, there will be a beep sound, and the remote control mode can be changed from Mode 1 to Mode 2 or Mode 2 to Mode 1.

The Quad-copter



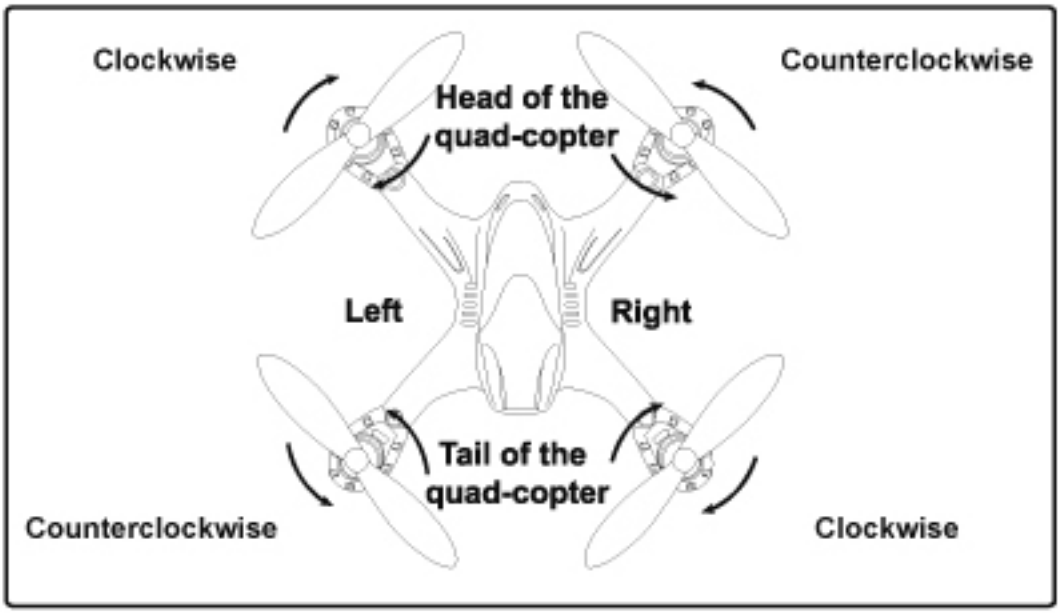
How to charge the quad-copter

Unplug the battery cable from the powerwire plug and take out the battery. Insert the USB charger into the USB interfaceof the computer; connect the battery cable with the USB wire plug.The indicator light of the USB will be offwhen charging is proceeding; once the battery is full charged, the indicatorlight turns red. Full charging takes about 1.5 hours.

NOTE:Battery should be full charged before storing.

Preparation for flight

- Make sure that the battery (at the bottom of the quad-copter)is well installed and connected with power wire of quad-copter.
- Connect the battery wire plug to the power wire plug, then, the quad-copter is on;the flash light will keep flashing quickly, the gyro ofquad-copter will be in signal detecting condition. Set the quad-copter to flat surface, about 3 seconds later, the flash light will keep constant “ON”. It means that signal connection is finished and the quad-copter is ready for flight.
- To ensure steady flight, please set the value of the Trimmer to the midpoint.
- Push up the throttle stick slowly and the quad-copter takes off.
- To avoid any misunderstanding, we have defined the orientation of the quad-copter as follows:The quad-copter is set to be copter nose right ahead and tail facing the player .The copter nose direction is named as “forward”, the tail direction is named as “backward”. The copter flies up to the sky is name as “upward”; the copter flies down to the ground is named as “downward”. Player’s left side is named as “left”, player’s right side is names as “right”. All the directions we are talking about in this manual are subject to the definition above.



- **To ensure steady flight, please set the value of the Trimmer to the midpoint.**
- **When the quad-copter is on, checking the rotation direction of the rotor blades;the front-left and right-back rotor blades should be rotating in clockwise direction; the right-front and left-back rotor blades should be rotating in counter-clockwise direction.**
- **If the quad-copter keeps flying to one side, it can be corrected by adjusting the trimmer on the remote control.**

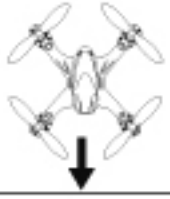
Remarks:

- **Signal connection between the quad-copter and the remote control is required for the first use.**
- **Set the connection one by one to avoid signal connection error.**
- **To better protect the battery, please unplug the battery cable from the power wire after the use.**

Trimmer Functions

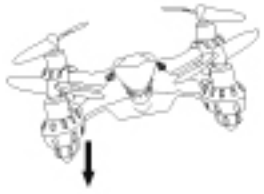
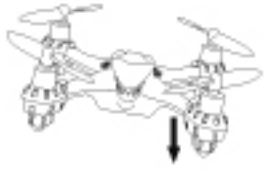
1.If the quad-copter keeps moving forward/backward even there is no control signal given, users may adjust trim C or trim D to keep the quad-copter balanced.

Mode 1 or mode 2

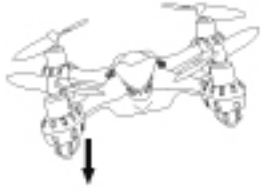
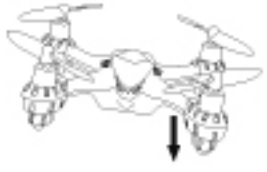
	**If the quad-copter keeps moving forward, press Trim D until it gains balance.**
	**If the quad-copter keeps moving backward, press Trim C until it gains balance.**

2. If the quad-copter keeps moving leftward/rightward even there is no control signal given, users may adjust trim A or trim B to keep the quad-copter balanced.

Mode 1

	If the quad-copter keeps moving leftward, press the right button of Trim B until it gains balance.
	If the quad-copter keeps moving rightward, press the left button of Trim B until it gains balance.

Mode 2

	If the quad-copter keeps moving leftward, press the right button of Trim A until it gains balance.
	If the quad-copter keeps moving rightward, press the left button of Trim A until it gains balance.

3. If the quad-copter keeps spinning even there is no control signal given, users may adjust trim A or trim B to keep the quad-copter balanced.

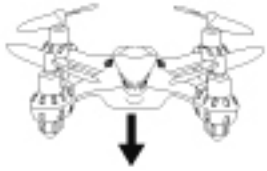
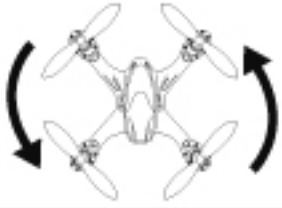
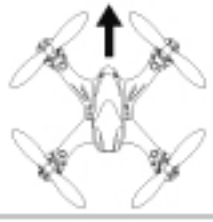
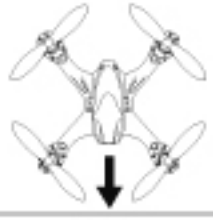
Mode 1

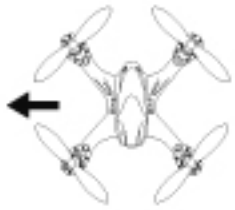
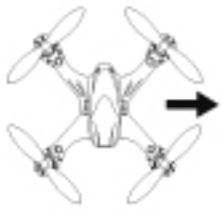
	If the quad-copter keeps spinning counterclockwise in the air, press the right button of Trim A until it gains balance.
	If the quad-copter keeps spinning clockwise in the air, press the left button of Trim A until it gains balance.

Mode 2

	If the quad-copter keeps spinning counterclockwise in the air, press the right button of Trim B until it gains balance.
	If the quad-copter keeps spinning clockwise in the air, press the left button of Trim B until it gains balance.

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 turn left.
Turn right		Turn the left/right turning control stick to the right,the quad-copter will turn right.
Forward		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		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.

3D Roll

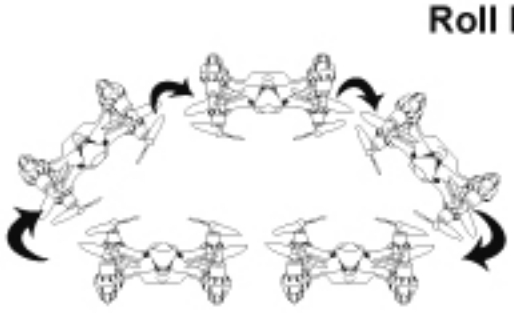
There are 3 channels of the remote control: low speed channel, medium speed channel and high speed channel. At any channel, press the roll button on top of the remote control, the quad-copter will roll forward or roll backward accordingly. When the remote control is at high speed channel, roll action can be done through controlling the forward/backward control stick and the leftward/rightward flight control stick.

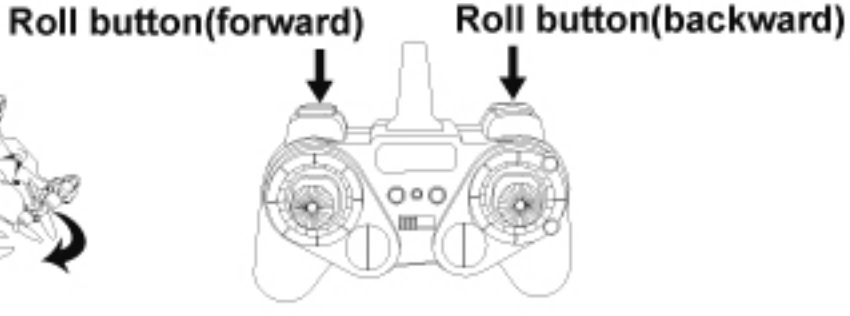
Manual Roll(at high speed channel):

When both of the left and right control stick travels are more than 95%, roll action will be performed once; when both of the left and right control stick travels are less than 95%, the quad-copter will perform the flight according to the received control signal.

One key Roll (at any channel):

To easily enjoy the fun of rolling, player can press the one key roll button to perform roll action. Before rolling, make sure that the quad-copter is flying 3 meters above the ground; then, press the one key roll button, the quad-copter will roll forward or backward according to the given signal.



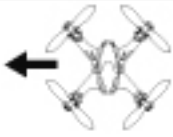
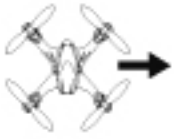


TIPS:

1. Beginners are recommended to play the quad-copter at low speed or medium speed channel.
2. It is better to play the quad-copter at open and wide space.

Gravity control mode

1.Press the right remote control stick,there will be a beep sound, the remote control code will change from normal control to gravity control.

		When the remote control is leaned forward, the quad-copter will fly forward.
		When the remote control is leaned backward, the quad-copter will fly backward.
		When the remote control is leaned left, the quad-copter will fly leftward.
		When the remote control is leaned right, the quad-copter will fly rightward.

Trouble shooting

	phenomenon	reason	solution
1	The lights are flashing quickly.	Gyro of the quad-copter is under signal detecting condition.	Set the quad-copter to any flat surface.
2	The lights are flashing on twice and flashing off once.	The quad-copter is not received the signal from the remote control or signal connection is interrupted.	For abesence of signal, activate the remote control for the signal connection.For signal interruption,turn off the remote control and turn it on again.
3	The lights are flashing on and off.	The quad-copter is underpowered.	Charge the battery or change another full charged battery.
4	The quad-copter is shaking fiercely.	The rotor blade is out of shape.	Change the rotor blades.