# X-SERIES

First Person View 6-Axis Gyro Quadcopter



# INSTRUCTION MANUAL

## Technical parameter of the model

Fuselage Length:138mm
Overall Height: 35mm
Main Rotor Diameter: 55mm

Gross Weight: about 52g
Battery: Li-polymer 3.7V 380mAh
Charging Time: about 70 minutes

Motor: Coreless motor

## Introduction

- Quad-rotor design insures more stable and powerful performance and make all kinds of 3D action more easier.
- Headless mode and one key return are available.
- Adopting 2.4G auto connection technology, scores of model can be played at the same time.
- Equipped with the newest 6-axis gyro control system, this model has the characteristics of stable flight and easy operation.
- Advanced barometer is adopted to realize the altitude hold mode function.
- Full charged battery can support 5 minutes steady flight.
- APP remote controller.
- 3D Visual effects function is increased, which should work together with 3D VR glasses (not included).
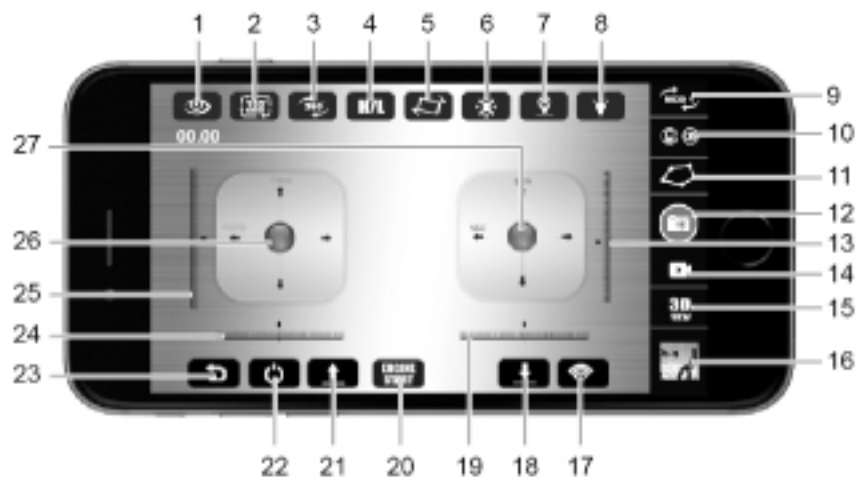
# Product/spare parts included in this packaging

| Description | QTY (pc) | Description | QTY (pc) | Description | QTY (pc) |
|---|---|---|---|---|---|
| Model | 1 | Propeller | 4 | Protecting Guard | 4 |
| Manual | 1 | USB charger | 1 | Propeller Changer | 1 |

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

# 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 model. 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 model, 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 model within your eye vision for easy and safety control.
- Need adult supervision when this model is being played by children.
- Rechargeable batteries are to be removed from the toy before being charged.
- Rechargeable batteries are only to be charged under adult supervision.
- Exhausted batteries are to be removed from the toy.
- The supply terminals are not to be short-circuited.
- The USB charing line to be used with the product should be regularly examined for potential hazard,such as damage to the cable or cord,plug,enclosure of other parts and that in the event of such damage,the product must not be used until that damage had been properly removed.
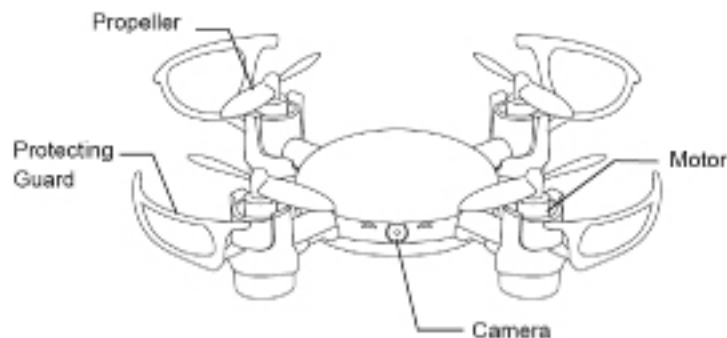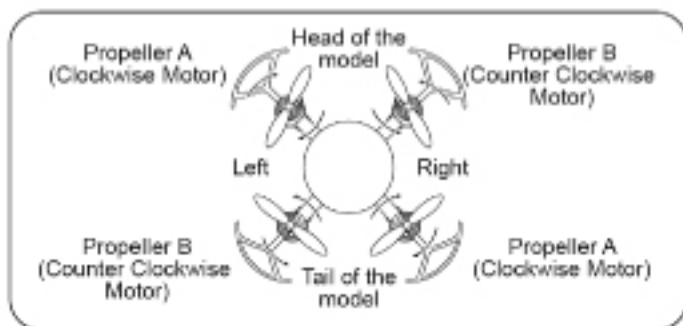
# Mobile phone APP "MJX H" control functions introduction



1. Hide the interface
2. 180° screen eversion
3. 360° Roll
4. H/L speed
5. Gravity control mode
6. Headless mode
7. One key return
8. Light switch
9. Modes switches
10. Low-level/medium-level throttle switch
11. Flight route
12. Photo
13. Trimmer D
14. Video
15. 3D visual effects
16. File play
17. WIFI signal of the drone
18. One key landing
19. Trimmer C
20. One key Unlock
21. One key start
22. App control switch
23. Return
24. Trimmer B
25. Trimmer A
26. Left stick
27. Right stick

# The model

## Major parts of the model



- Propeller
- Protecting Guard
- Motor
- Camera

## Orientation confirmation



Propeller A
(Clockwise Motor)

Head of the model

Propeller B
(Counter Clockwise Motor)

Left    Right

Propeller B
(Counter Clockwise Motor)

Tail of the model

Propeller A
(Clockwise Motor)

Power on the model and make sure that the Propeller are installed at the right position. Propeller A at the left-front and the right-rear corner should clockwise motor; propeller B at the right-front and the left-rear corner should counter clockwise motor.

## How to charge the battery for the model

Disconnect the battery wire plug from the power supply wire plug ; then, connect the battery wire plug with the USB charging cable plug and insert the USB interface to any USB charging outlet to charge the battery. The USB indicator light is on while charging is proceeding and turns off once the battery is full charged. Full charging time is around 70 minutes.
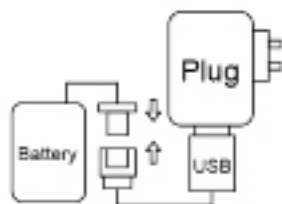


NOTE:Battery should be full charged before storing.

## Install the battery for the model
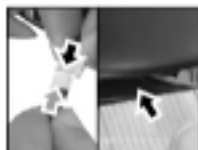


Pic.1

Connect the battery wire plug with the power supply wire plug and insert the battery into the battery compartment.

## Install and remove the protecting guard



Pic.2

1. Insert the foot of the model into the base of the protecting guard and push up the base until the buckles fixed.



Pic.3

2. Slightly break apart the buckles and pull down the base until it is removed from the foot of the model.

# Preparation for flight

## APP Remote control software download

- For Android system, please visit our website www.mjxrc.com to download the software "MJX H".
- For Apple IOS system, please go to the APP store to download the software "MJX H". (Or download the mobile phone APP by scan the below QR code.)

QR Code (IOS system)          QR Code(Android system)

## WIF connection instruction

1. Power on the model, the indicator light of the model is flashing quickly. The model is in gyro detecting stale. Put the model on the ground.
2. Enter into settings of the smart phone, open WIFI, search the WIFI signal "MJX H *****" and connect it. After successful connection, exit settings.
3. Open "MJX H" software at the smart phone and click the logo"MONITOR" to enter into the control interface to watch the real-time video or click "CONTROL" to enter into the APP control interface to control the flight by the APP. Touch" ⏻ " , when it is in red color, it means that the mobile phone has successful connected with the model. At this time, the indicator light of the model keeps constant on. Touch" ▦ " , the rotor blades will rotate slowly; then, push up the throttle control stick, the model will take off.

## Enter into the APP control interface



1. Open the software "MJX H"

2. Click the "CONTROL" button.

3. Activate the mobile phone APP real-time remote control interface.

## Model calibration

Please perform calibration for the first flight or when the flight performance is poor, because poor flight performance (except vibration created by camera mount) or complete failure may result from an old calibration. The calibration method is as follows:

1. Put the model on the ground or any flat & still surface.
2. Pull down both of the control sticks to the bottom right corner for 2 seconds.(Pic .4) The indicator light of the drone will keep flashing quickly and then keeps constant "on". It means calibration is finished now.

Notes: Please make sure that the model is put on the ground or any flat & still surface. If the model inclines, it will bring unsatisfactory altitude hold performance after the model takes off.



Pic.4

## One key take off/landing

1. After the model is unlocked, the rotor blades rotate slowly; touch " 🔼 ", the model will take off.
2. While the model is flying, touch " 🔽 ", the model will automatically & gently land to the ground.

# Emergency stop

When the model is flying in the sky, but encounters emergency and you need to stop the flight urgently. Please turn the left control stick of the remote control to the left-bottom corner and the right control stick to the right-bottom corner to cease the flying drone.(Pic.5)



Pic.5

# Gravity sensor(g-sensor) control function

Touch" ⟨icon⟩ " ; once it turns red, the model is in G-sensor control mode. The model movement(turn left, turn right, fly leftward, fly rightward, forward and backward) will be controlled by the mobile phone's accelerometer.

# Headless mode

## Enter into headless mode:

Touch the icon" ⟨icon⟩ "; once it turns red and the indicator light of the model turns from constant on to flashing, it means that the model has enter into headless mode.

## Exit headless mode:

While the model is flying in headless mode, touch the icon" ⟨icon⟩ " again. Once the icon turns black and the model indicator light turns from flashing to constant on, it means that the model has exited headless mode.

## Flight direction control in headless mode:

•When checking up on the flight direction of the model, set the model nose right ahead and tail facing the player's, at this time, the model's nose is pointing forward; this direction will be constantly considered as "forward" when forward signal is given from the remote control, no matter where the model nose is pointing to. That is to say, the player's straight front side is defined as "forward"; the player's back side is defined as "backward", the player's left side is defined as left; the player's right side is defined as right.

7

•When the model is flying in headless mode, player should keep facing the forward direction. Otherwise, the model will be out of control. The model control is showed as below:

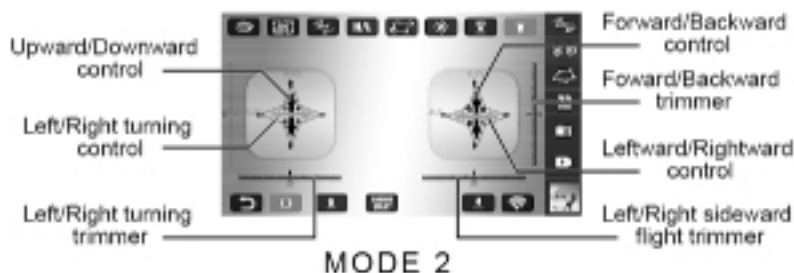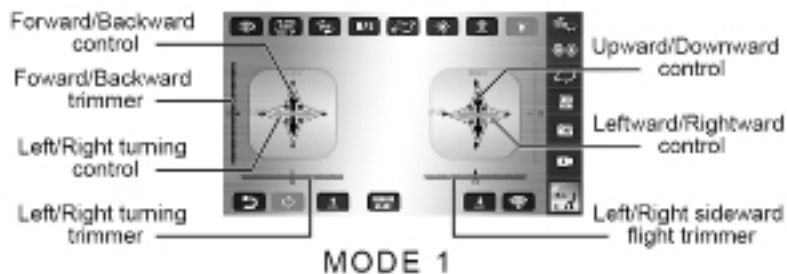| | | |
|---|---|---|
| Push up the forward/ backward control stick, the model will fly forward, away from player. |  | Turn right the sideward flight control stick, the model will fly to the right side of the player. |
| Push down the forward/ backward control stick, the model will fly backward, towards player. | | Turn right the turning control stick; the model will turn to the left side of the player. |
| Turn left the sideward flight control stick; the model will fly to the left side of player. | | Turn left the turning control stick; the model will turn to the right side of the player. |

## Remarks:

•Flight direction proof is needed when the model is going to fly in headless mode. When checking up on the flight direction, the model should be set right ahead and tail facing the player; the player should face the direction where the model nose is pointing to. Player should stand in the same direction when playing the model.
•When the model is flying in headless mode, if the flight direction is inconsistent with the player's operating direction or there's direction deviation, please stop playing and carry out the flight direction proof action again.
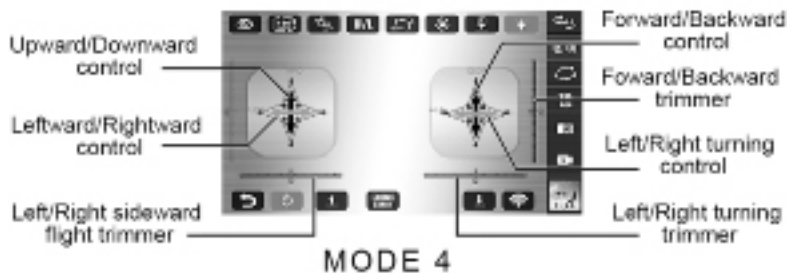
## One key return

When the model is in headless mode, touch " 🔘 ", the model will fly back to the pilot. Press this button again or push the forward/backward control stick to exit one key return function.

# Mode switch

Touch " 🖼 " to choose the control stick mode.

Forward/Backward control
Foward/Backward trimmer
Left/Right turning control
Left/Right turning trimmer

Upward/Downward control
Leftward/Rightward control
Left/Right sideward flight trimmer

MODE 1

Upward/Downward control
Left/Right turning control
Left/Right turning trimmer

Forward/Backward control
Foward/Backward trimmer
Leftward/Rightward control
Left/Right sideward flight trimmer

MODE 2

Forward/Backward control
Foward/Backward trimmer
Leftward/Rightward control
Left/Right sideward flight trimmer

Upward/Downward control
Left/Right turning control
Left/Right turning trimmer

MODE 3

Upward/Downward control
Leftward/Rightward control
Left/Right sideward flight trimmer

Forward/Backward control
Foward/Backward trimmer
Left/Right turning control
Left/Right turning trimmer

MODE 4

# Medium/low throttle control switch

1. Touch " 🔲 " to change the throttle control.
2. When " 🔲 " is displayed, the medium throttle control is used for controlling the model which has altitude hold function.
3. When " 🔲 " is displayed, the low throttle control is used for controlling the model which do not have altitude hold function.

# Flight plan

Touch " 🔲 ", enter into the flight plan interface.(Pic.6)
Touch " 🔲 " to adjust the flight proportion. The maximum proportion is 1:5 and minimum proportion is 1:1. Player can choose different proportion to regulate the flight route range.
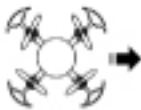


Pic.6

In the flight plan interface, the movement of forward, backward and sideward flight can be achieved through the flight route drew by pilot. For details, please turn to the below photos for reference.
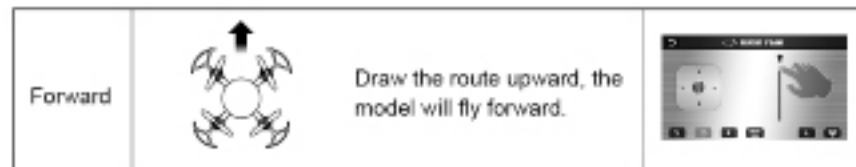
| Forward |  | Draw the route upward, the model will fly forward. |  |

| | | | |
|---|---|---|---|
| Backward |  | Draw the route downward, the model will fly backward. |  |
| Leftward flight |  | Draw the route leftward, the model will fly leftward. |  |
| Rightward flight |  | Draw the route rightward, the model will fly rightward. |  |

## Trimmer function

1. If the model keeps moving forward/backward even there is no control signal given, users may adjust the forward/backward trimmer at the APP control interface to keep the model balanced.
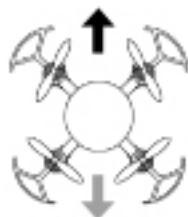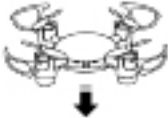
2. If the model keeps moving leftward/rightward even there is no control signal given, users may adjust the leftward/rightward trimmer at the APP control interface to keep the model balanced.



3. If the model keeps spinning even there is no control signal given, users may adjust the left/right turning trimmer at the APP control interface to keep the model balanced.
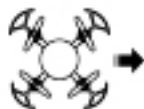


## Model control

| | | | |
|---|---|---|---|
| Upward |  | Push up the throttle control stick, the rotation speeds of the mains rotors are increasing and the model ascends accordingly. |  |

| | | | |
|---|---|---|---|
| Downward |  | Push down the throttle control stick, the rotation speeds of the mains rotors are decreasing and the model descends accordingly. |  |
| Turn left |  | Turn the left/right turning control stick to the left, the model will turn left. |  |
| Turn right |  | Turn the left/right turning control stick to the right, the model will turn right. |  |
| Forward |  | When the model is flying, push up the forward/backward control stick, the model will move forward. |  |
| Backward |  | When the model is flying, push down the forward/backward control stick, the model will move backward. |  |
| Leftward flight |  | Turn the sideward flight control stick to the left side, the model will fly leftward. |  |

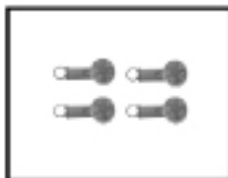| Rightward flight | | Turn the sideward flight control stick to the right side, the model will fly rightward. | |
| --- | --- | --- | --- |

## Accessories (Optional)

906T01
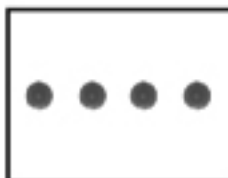Upper Cover/Lower Cover
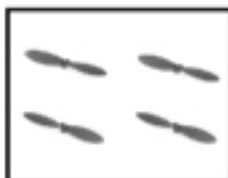Lower Cover Door

906T02
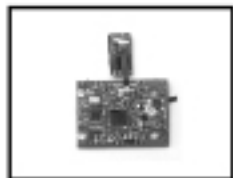Main Frame

906T03
Motor Cover

906T04
Protecting Guard

906T05
Foot Stand

906T06
Propeller A1、A2/
B1、B2

916H01
Receiver PCB
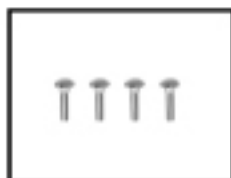
916H02
Camera Board

916H03
Altitude Hold Board

906T09
Battery

906T10
USB Charger

906T11
Front and rear lights

916H04
Screws Pack

916H50
Manual

916H51
Gift Box

916H53
Inner-holding Part

# Trouble shooting

| | phenomenon | reason | solution |
|---|---|---|---|
| 1 | The model is powered on and the indicator light is flashing quickly. | 1.The model is restless while it is in gyro detecting state. 2.The gyro component is damaged. | 1.Put the model to the ground or any flat & still surface. 2.Change the gyro component. |
| 2 | The model's indicator light is flashing very slowly. | The model is under power. | Charge the battery or change new battery. |
| 3 | The model's indicator light repeats flashing twice and off. It cannot be activated. | The model is not connected with the mobile phone. | 1.Open "MJX H" APP and press the remote control power button. 2.Exit "MJX H"; close the running grogram of the mobile phone and re-open the "MJX H" APP to operate. 3.The FPV module is damaged. Change new FPV module. |
| 4 | Unsatisfactory altitude-hold performance | 1.The model is not put on the flat & still surface while it is detecting the gyro. 2.The model has been knocked while it is flying in the sky, which results in the deformation of the rotor blades and excessive vibration. | 1.Put the model to the flat & still surface and perform model calibration once again. 2.Change the distorted rotor blade. |

Note: a) Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

b) 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.