

6-AXIS GYRO QUDCOPTER

# X-SERIES

ALTITUDE HOLD WITH BAROMETER & ONE KEY RETURN



## INSTRUCTION MANUAL

### Technical parameter of the model

Fuselage Length:500mm	Gross Weight: about 430g	Motor: 050
Overall Height: 160mm	Battery: Li-polymer 7.4V 1200mAh	
Main Rotor Diameter: 220mm	Charging Time: about 180 minutes	

### 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.
- New designed structure makes assembly and maintenance easier.
- 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.
- Full charged battery can support 11 minutes steady flight.
- New functions increased are altitude-hold mode, one key start/landing/Unlock.

### Product/spare parts included in this packaging

Description	QTY (pc)	Description	QTY (pc)	Description	QTY (pc)
Model	1	Propeller	4	Screw	30
Remote Controller	1	Landing Gear	2	Screwdriver	1
Manual	1	Protecting Guard	4	Charger (AC: 100-240V DC: 8.4V/500mAh)	1
Camera accessory	1	Camera mount	1		

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

## **Safety guidelines**

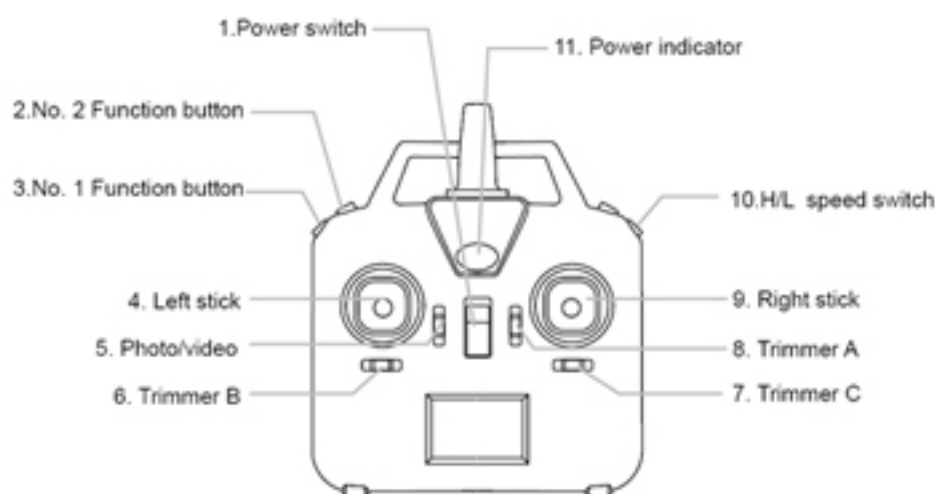
- This product is not a toy. It is not applicable for children who are under 14 years old.
- Please read this instruction manual carefully before playing and operate the product according to the manual.
- The users are in full charge of proper operating the model. The manufacturer and dealers disclaim 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.
- 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 4 X AA batteries for work.
- Do not mix old and new batteries.
- Do not mix alkaline, standard (carbon-zinc), or rechargeable (nickel-cadmium) batteries.
- 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 charging 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.

## 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 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



Remote Controller(Transmitter)

No.	Function switch	Function description
1	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.
2	No. 2 Function button	(1) Control stick mode switch: Long press this button to switch the control stick mode. (2) Unlock the drone: Short press this button to unlock the drone when the drone is not unlocked. (3) One key start: Once the model is unlocked and rotates slowly on the ground, short press this button, the model will take off automatically. (4) One key landing: While the model is flying, short press this button, the model will automatically land to the ground.

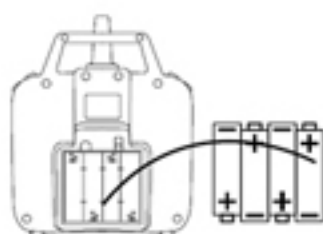
No.	Function switch	Function description
3	No. 1 Function button	<p>(1) Turn on/ Turn off the indicator light : When the drone is in normal flight mode(not headless mode), short press this button to turn on or turn off the indicator light.</p> <p>(2) Enter/exit headless mode: When the drone is in normal flight mode, long press this button for 2 seconds. There will be beeps sounds and the letters "STICK MOD" is flashing on the screen. The indicator light of the drone changes from constant "on" to flashing and the drone enters into headless mode. Long press this button again for about 2 seconds, there will be beeps sounds and the letters "STICK MOD" on the screen keep constant "on". The indicator light of the drone change from flashing to contact on and the drone exits headless mode.</p> <p>(3) One-key return: When the drone is in headless mode, short press this button to get back the drone. Press this button again or push the forward/backward control stick to exit one key return function.</p>
4	Left stick	<p>STICK MODE 2:upward/downward,turn left/turn right;            STICK MODE 4:upward/downward,leftward/rightward.            STICK MODE 1:forward/backward,turn left/turn right;            STICK MODE 3:forward/backward,leftward/rightward.</p>
5	Photo/video	If the drone is mounted with camera, push it up is to take photos; push it down is to shoot.
6	Trimmer B	<p>In stick Mode 3 or Mode 4, it helps to tune the model's sideward flight.</p> <p>In stick Mode 1 or Mode 2, it helps to tune the model's left and right direction turning .</p>
7	Trimmer C	<p>In stick Mode 3 or Mode 4, it helps to tune the model's left and right direction turning .</p> <p>In stick Mode 1 or Mode 2, it helps to tune the model's sideward flight.</p>
8	Trimmer A	It helps to tune the model's forward and backward flight.
9	Right stick	<p>STICK MODE 1: upward/downward,leftward/rightward;            STICK MODE 3: upward/downward, turn left/turn right;            STICK MODE 2: forward/backward,leftward/rightward;            STICK MODE 4: forward/backward,turn left/turn right.</p>

No.	Function switch	Function description
10	H/L speed switch	There are 2 flight modes of the model: low speed and high speed.
11	Power indicator	The indicator light keeps flashing rapidly: the transmitter is sending out connection signal to the model. The indicator light keeps on without blinking: the transmitter is ready for controlling the flight.

## How to install the battery of remote controller



Pic.1



Pic.2



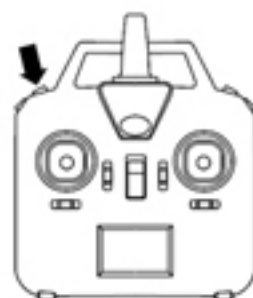
Pic.3

How to remove and insert batteries.

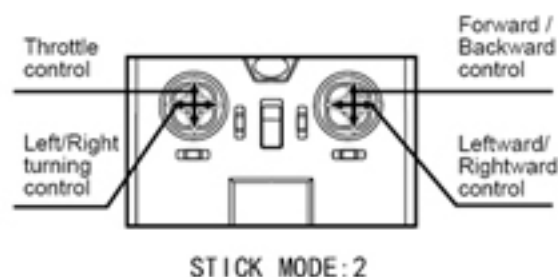
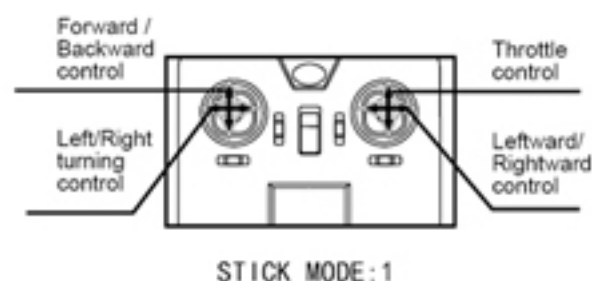
1. Unscrew counter clockwise to open the battery compartment cover. ( Pic.1 )
2. Install 4 X AA batteries into the battery compartment according to the given polarity. ( Pic. 2 )
3. Screw clockwise to close the battery compartment. (Pic. 3)

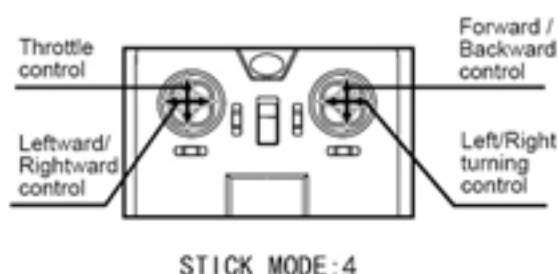
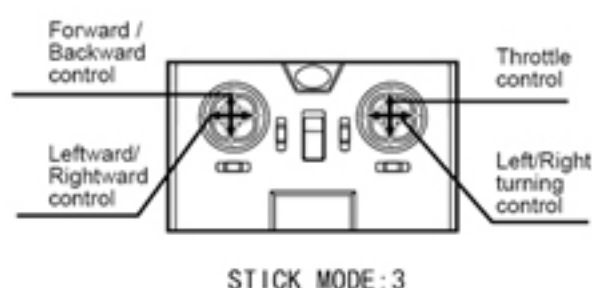
## 4 modes switches

Long-press the mode switch button to choose mode 2/ mode 4/mode 1/ mode 3.



## Stick mode selection





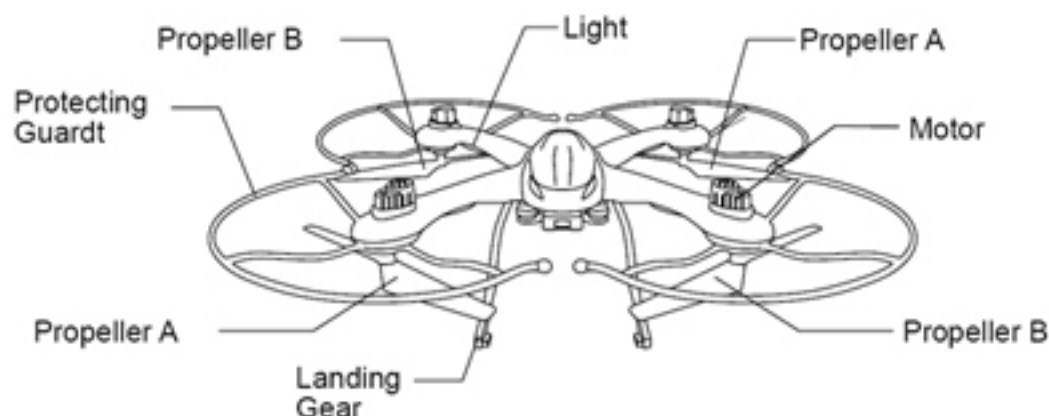
## Flight speed selection

There are 2 flight speeds available: low speed and high speed. Player can select the flight speed by pressing the H/L speed button.



## The model

### Major parts of the model



## Propeller installation



Pic.4

1. When installing the propeller, push up the gear component to make the main shaft protrude, and then insert the main shaft into the propeller fully.



Pic.5

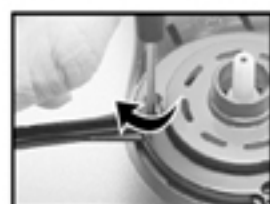
2. Use screw to lock the propeller by turning clockwise.

Before installation, please distinguish clockwise rotor blades and the counter-clockwise rotor blades. Make sure that the clockwise rotor blades are to be fixed on the clockwise motors and the counter-clockwise rotor blades are to be fixed on the counter-clockwise motors .

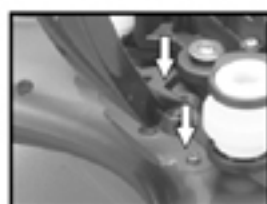
## Protection frame and landing gear installation



**Pic.6**



**Pic.7**



**Pic.8**



**Pic.9**

1. There are 3 interfaces on each motor cabinet. Insert the frame plugs into the interfaces and fix it.

2. Fix the protection frame by screwing clockwise.

3. There are 4 interfaces at the bottom of the model, insert the landing gear plugs into the interfaces and fix it.

4. Fix the Landing gear by screwing clockwise.

## How to change new battery for the model



**Pic.10**

1. Slide the power switch to "OFF".



**Pic.11**

2. Unplug the battery wire from the power wire plug of the model and take out the battery.



**Pic.12**

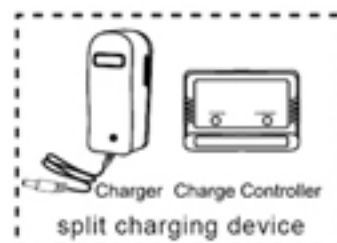
3. Plug the new battery wire into the power wire plug of the model and insert the battery into the battery compartment.

## How to charge the model

To meet the different demands from different customers worldwide, two different charging devices have been designed for charging. One is split charging device (1 piece charger +1 piece charge controller), the other one is all-in-one charging device (one charger only).The product is included with either of the two charging devices. User should check the package to confirm which charging device is included before reading the charging method.

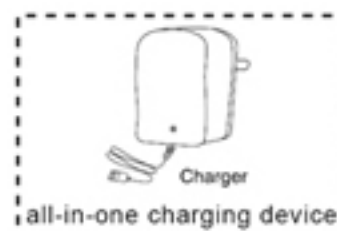
### How to charge the drone by split charging device

- Turn off the drone; unplug the battery cable from the drone.
- Insert the plug of the battery cable into the quadrate port of the charge controller (matching the plug to the port).
- Insert the plug of the charger cable into the circular port of the charge controller, then, connect the plug of the charger to AC power outlet to start charging.
- Once charging is proceeding, the red power light of the charge controller is on. When charging is finished, both the red light and green light of the charge controller are on.
- Full charge takes about 3 hours.



### How to charge the drone by all-in-one charging device

- Turn off the drone.
- Unplug the battery cable from the drone, then, insert the plug of the battery cable into the port of the charger (matching the plug to the port) to start charging.
- Once charging is proceeding, red light is on. When charging is finished, the red light will turn into green light.
- Full charge takes about 3 hours.



**NOTE:**Battery should be full charged before storing.



## **Drone detection and signal connection**

1. Turn on the power switch of the remote control, the indicator light of the remote control will flash quickly and send out connection signal to the drone. Do not push any control sticks at this moment. Otherwise, it will result in signal connection failure.
2. Turn on the drone, the indicator light of the drone will flash quickly. The gyro and barometer are in detecting state. The remote control receives and connects with the receiving signal.
3. Put the drone to the ground or any flat & still interface. About 5 seconds later, push up either of the control stick. The indicator light of the drone will change to constant "on" and the drone detection and signal connection process is finished.

### **Notes:**

- Please make sure that the drone is put on the ground or any flat & still interface. If the drone inclines, it will bring unsatisfactory altitude hold performance after the drone takes off.
- Please turn on the remote control before turn on the drone.
- Please set the connection one by one. Otherwise, it may result in connection failure or misconnection.

## **Drone 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. Make sure that the drone has received signal and finished signal connection.
2. Put the drone the ground or any flat & still interface.
3. Pull down both of the control sticks to the bottom right corner for 2 seconds. The indicator light of the drone will keep flashing quickly for about 5 seconds and then keeps constant "on". It means calibration is finished now.



#### Notes:

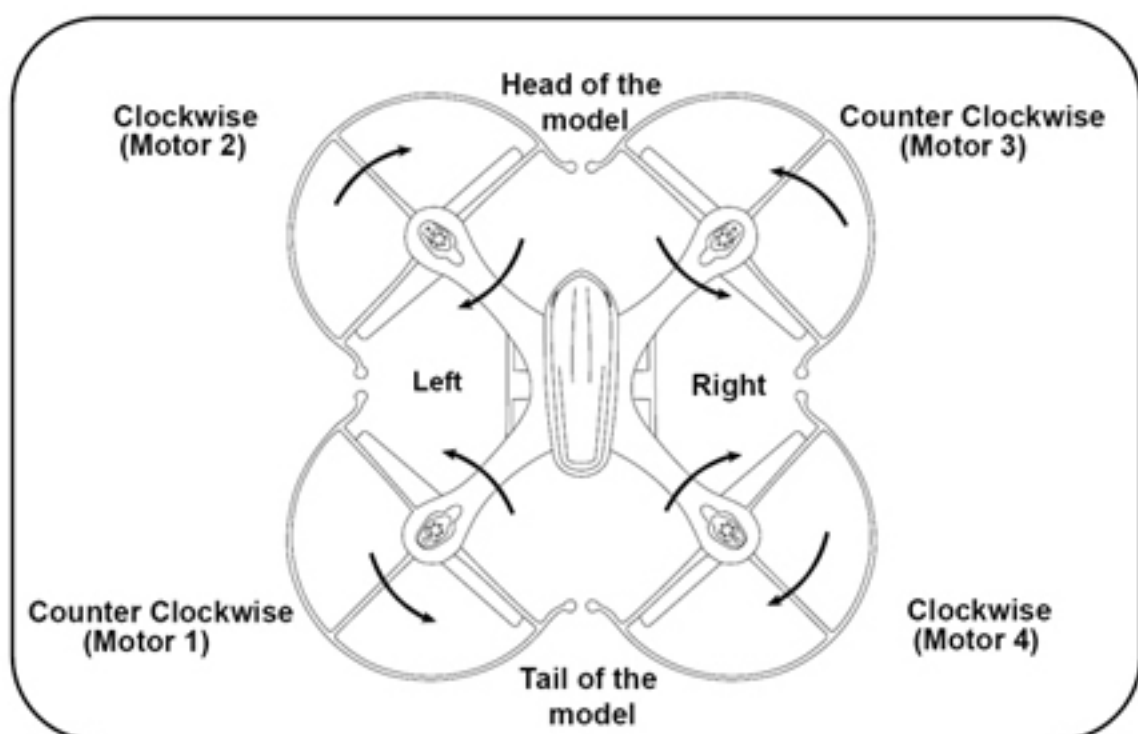
Please make sure that the drone is put on the ground or any flat & still interface. If the drone inclines, it will bring unsatisfactory altitude hold performance after the drone takes off.

### Drone Unlocking and taking off

1. After signal connection between the drone and the remote control is finished, short-press No. 2 function button, the rotor blades of the drone will rotate slowly.
2. Push up the throttle control stick, the drone will take off.



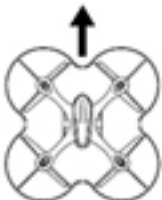
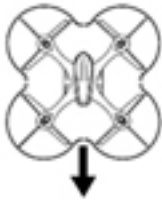
### Confirm the orientation



Check the rotation direction of the propeller which is shown as.



## Trimmer functions

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



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

2. If the model keeps moving leftward/rightward even there is no control signal given, users may adjust the aileron trim to keep the model balanced.

### STICK MODE 3 or 4:

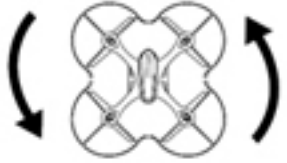

	If the model keeps moving leftward, turn right of Trimmer B until it gains balance.
	If the model keeps moving rightward, turn left of Trimmer B until it gains balance.

### STICK MODE 1 or 2:



	If the model keeps moving leftward, turn right of Trimmer C until it gains balance.
	If the model keeps moving rightward, turn left of Trimmer C until it gains balance.

3. If the model keeps spinning even there is no control signal given, users may adjust the rudder trim to keep the model balanced.


#### STICK MODE 1 or 2:

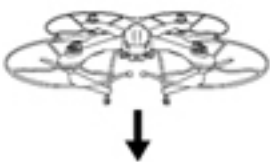
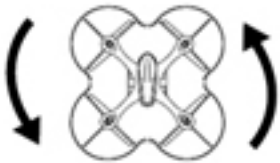

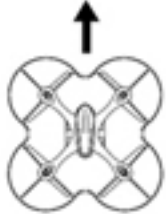
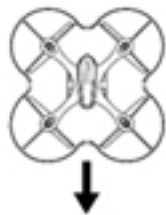
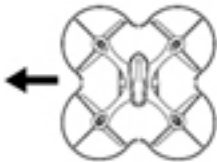
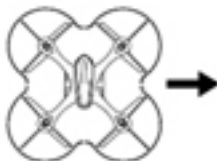
	<p>If the model keeps spinning counterclockwise in the air, turn right of Trimmer B until it gains balance.</p>
	<p>If the model keeps spinning clockwise in the air, turn left of Trimmer B until it gains balance.</p>

#### STICK MODE 3 or 4:

	<p>If the model keeps spinning counterclockwise in the air, turn right of Trimmer C until it gains balance.</p>
	<p>If the model keeps spinning clockwise in the air, turn left of Trimmer C until it gains balance.</p>

## Operating

<p>Upward</p>		<p>Push up the throttle control stick, the rotation speeds of the mains rotors are increasing and the model ascends accordingly.</p>
<p>Altitude hold</p>	<p>Push up the throttle control stick, fly the drone to the expected height and release the throttle control stick. The drone will be hovering at this height.</p>	

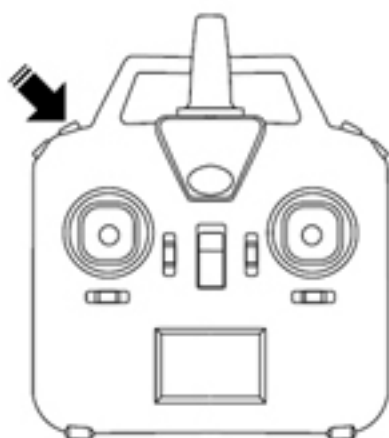
Downward		Push down the throttle control stick, the rotation speeds of the mains rotors are decreasing and the model descends accordingly.
Turn left		Turn the left/right turning control stick to the left, the model will turn left.
Turn right		Turn the left/right turning control stick to the right, the 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.

### One key start:

Once the model is unlocked and rotates slowly on the ground, short press No.2 button(Pic. 13), the model will take off automatically.

### One key landing:

While the model is flying, short press No.2 button(Pic. 13), the model will automatically land to the ground.



Pic.13

### Emergency stop:

When the drone 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.



### Notes:

For beginners, please choose non-obstacles space and soft ground for the flight.

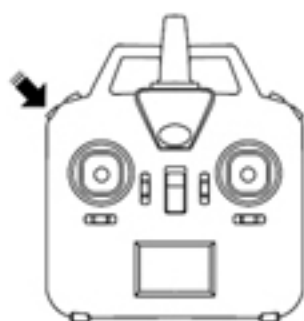
### Headless mode:

#### Enter into headless mode:

Once signal between the model and the remote control is successfully connected, press the function button located at top right of the remote control for 2 seconds. The remote control will send out two beep sounds and there will be letters of "stick mod" flashing on the LCD screen, the model's indicator light turns from constant "ON" to "flashing". That means the model is in headless mode.

### Exit headless mode:

When the model is in headless mode, press the function button at top left of the remote control of 2 seconds, the remote control will send out 3 beep sounds and the letter “Stick mod” is keeping constant “on”; the model’s indicator light turns from flashing to constant “on”. That means the model has exited the 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.
- 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.	A diagram showing a player from the back, wearing a cap and holding a remote control. Below the player is a drone with four rotors. Arrows point outwards from the drone: up, down, left, and right, indicating flight directions.	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.

### One key return:

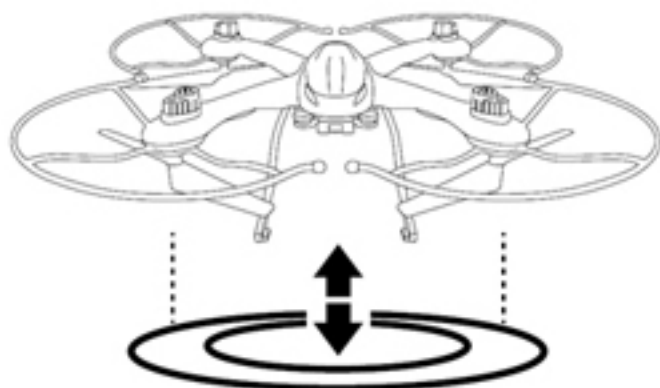
When the model is flying in headless mode, press one key return button, the model will fly towards player. Press the one key return button again or operate the forward /backward control stick, the model will exit the one key return function.

### 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.

### Barometer hold altitude

Once signal connection between the drone and the remote is finished, push up the throttle control stick to take off the drone. When the drone is flying more than 1 meter height, release the throttle stick. The drone will keep hovering at the current height.





## Camera mount installation(not included in the package)



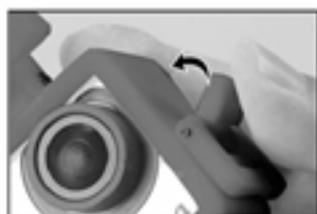
**Pic.14**

- 1.Unlock the fixing buckle of the camera mount with finger or thumb.



**Pic.15**

- 2.Install the camera at the camera mount and close the camera mount.



**Pic.16**

- 3.Lock the fixing buckle of the camera mount.



**Pic.17**

- 4.Insert the camera mount together with the camera into the port of the main body.

## FPV camera #C4015/#4016/#C4018 installation (not included in the package)

Installed with #C4015/#C4016/#C4018 camera, the model can take photos and videos, if download and install the FPV software to the smart phone, FPV real-time transmission can be achieved through the connection of the model and the smart phone.

### Install the holder of the mobile phone:



**Pic.18**

- 1.Connect the stand bar to the mobile phone fixing component.



**Pic.19**

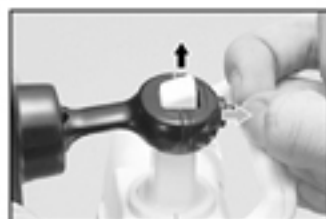
- 2.Adjust the fixing component upward or downward according to the size of the mobile phone.



**Pic.20**

- 3.Set the mobile phone holder to the top of the remote control.

## Remark:



**Pic.21**

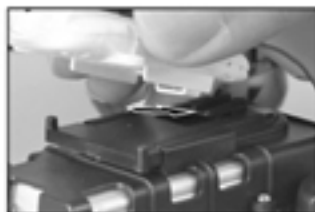
- 1.Pull back the lock center of the stand bar and slowly push up the holder, the mobilephone holder would be taken down.

## #C4015 installation:



**Pic.22**

- 1.Fix the camera accessory onto the bottom of the main body.



**Pic.23**

- 2.The camera should be fastened to the interface at the bottom of the model.



**Pic.24**

- 3.Fix the camera by screwing clockwise.



**Pic.25**

- 4.Insert the camera wire plug to the camera interface.



**Pic.26**

- 5.Insert the camera wire plug to port of C4015.



**Pic.27**

- 6.Insert the antenna bracket into interface of the landing gear.



**Pic.28**

- 7.Lock the screws.



**Pic.29**

- 8.Install the antenna to the antenna bracket.

## #C4016 installation:



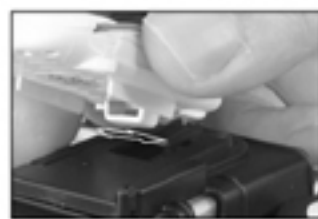
**Pic.30**

1. Fix the camera accessory onto the bottom of the main body.



**Pic.31**

2. Insert the TF memory card into the camera.



**Pic.32**

3. The camera should be fastened to the interface at the bottom of the model.



**Pic.33**

4. Fix the camera by screwing clockwise.



**Pic.34**

5. Insert the camera wire plug to the camera interface.



**Pic.35**

6. Insert the camera wire plug to port of C4016.



**Pic.36**

7. Insert the antenna bracket into interface of the landing gear.



**Pic.37**

8. Lock the screws.



**Pic.38**

9. Install the antenna to the antenna bracket.

## #C4018 installation:



**Pic.39**

1. Fix the camera accessory onto the bottom of the main body.



**Pic.40**

2. Insert the TF memory card into the camera.



**Pic.41**

3. The camera should be fastened to the interface at the bottom of the model.



**Pic.42**

4. Fix the camera by screwing clockwise.



**Pic.43**

5. Insert the camera wire plug to the camera interface.



**Pic.44**

6. Insert the camera wire plug to port of C4018.



**Pic.45**

7. Insert the antenna bracket into interface of the landing gear.



**Pic.46**

8. Lock the screws.



**Pic.47**

9. Install the antenna to the antenna bracket.

#### **Tips:**

Please make sure that the memory card has been installed at the card slot before the camera is powered on; when the camera is powered on, please do not insert the memory card or take out the memory card.

## **FPV software download and installation**

### **Install software**

- Mounted with camera #C4015 and install the "MJX H" software to smart phone, the photos and videos that taken by the camera can be seen alive when the drone is flying.
- Mounted with camera #C4016 and install the "MJX H" software to smart phone, the photos and videos that taken by the camera can be seen alive when the drone is flying.
- Mounted with camera #C4018 and install the "MJX H" software to smart phone, the photos and videos that taken by the camera can be seen alive when the drone is flying.

- For Android system, please visit our website [www.mjxrc.com](http://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".

## Instructions

Power on the model, the FPV indicator light (at the bottom of the model) is on. Enter into settings of the smart phone; open WIFI; search "MJX H \*\*\*\*\*" and connect it. After successful connection, exit settings. Open "MJX H" at the smart phone; click "MONITOR" to enter into the control interface to watch the real-time video.



1. Open the software "MJX H".



2. Click the **MONITOR** button.



3. Image is showing on the screen.

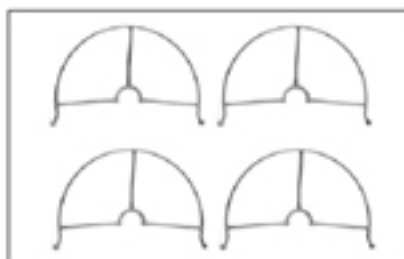
## Accessories (Optional)



**102H01**  
Upper Cover



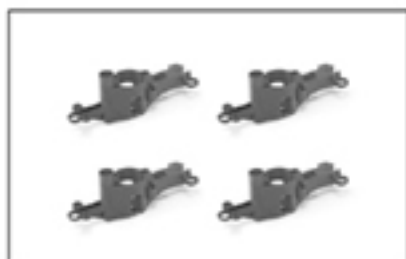
**102H02**  
Lower Cover



**102H03**  
Protecting Guard



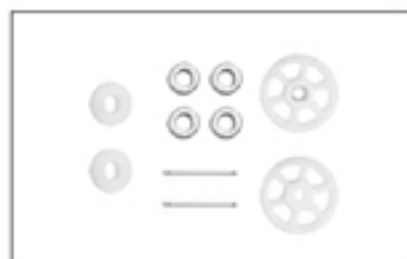
**102H04**  
Landing Gear



**102H05**  
Motor Case

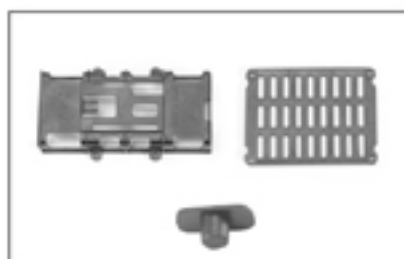


**102H06**  
Propeller A/ B



**102H07**

**Fixing Part/gear/  
Copper Bush/  
Steel Tube**



**102H08**

**Battery Compartment/  
Receiver PCB Cover/  
Switch Cover**



**102H09**

**Transparent Plastic  
Part (Blue)**



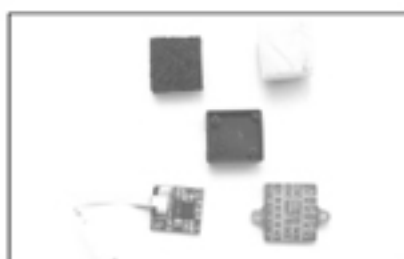
**102H10**

**Transparent Plastic  
Part (Orange)**



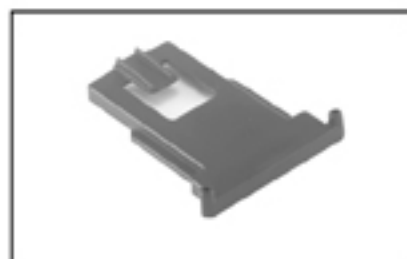
**102H11**

**Front Light Cover**



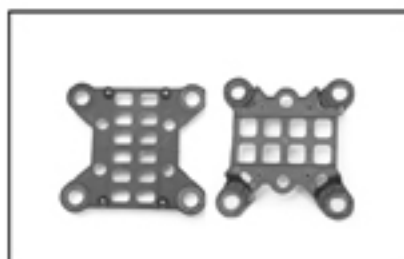
**102H12**

**Altitude Hold PCB  
Component**



**102H13**

**Camera Accessories**



**101010**

**Battery Compartment  
Upper/lower Cover**



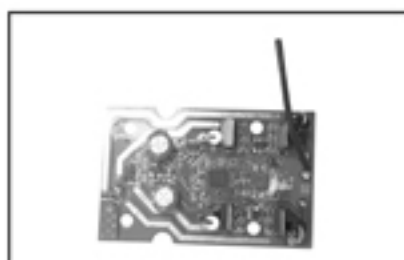
**102H14**

**Clockwise Motor/  
Motor Board/  
Copper Gear**



**102H15**

**Clockwise Motor/  
Motor Board/  
Copper Gear**



**102H16**

**Received PCB**



**101016**

**Battery**



**101017**  
**GS Charge**



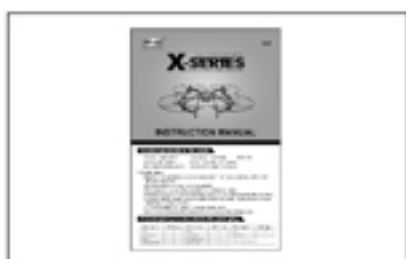
**102H17**  
**Front and rear lights**



**102H18**  
**Camera Lighting**



**102H19**  
**Screws Pack**



**102H50**  
**Manual**



**102H51**  
**Gift Box**



**102H52**  
**Plastic Foam**



**GR302**  
**Remote Controller**



**401101**  
**Camera Mount Fitting**

## Trouble shooting

	phenomenon	reason	solution
1	The lights are flashing quickly.	Gyro of the model is under signal detecting condition.	Set the model to any flat surface.
2	The lights are flashing on twice and flashing off once.	The model is not received the signal from the remote control or signal connection is interrupted.	For absence of signal, activate the remote control for the signal connection. For signal interruption, turn off the remote control and turn it on again.

	<b>phenomenon</b>	<b>reason</b>	<b>solution</b>
3	The lights are flashing on and off.	The model is underpowered.	Charge the battery or change another full charged battery.
4	The model is shaking fiercely.	The rotor blade is out of shape.	Change the rotor blades.

- 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.

