

ITEM NO.X300A

X-SERIES 2.4G • 6-AXIS HEADLESS MODE

6-Axis Gyro Quad-copter 3D ROLL • ONE KEY RETURN



INSTRUCTION MANUAL

Technical parameter of the model

Fuselage Length:230mm Gross Weight: about 102g Motor: Coreless motor
 Overall height: 50mm Battery: Li-polymer 3.7V
 Main Rotor Diameter: 106mm Charging Time: about 70 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 9 minutes steady flight.

Product/spare parts included in this packaging

Description	QTY (pc)	Description	QTY (pc)	Description	QTY (pc)
Model	1	Propeller	4	Screw	4
Remote Controller	1	Holder of the mobile phone	1	Screwdriver	1
Manual	1	Protecting Guard	1	USB charging cable	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.

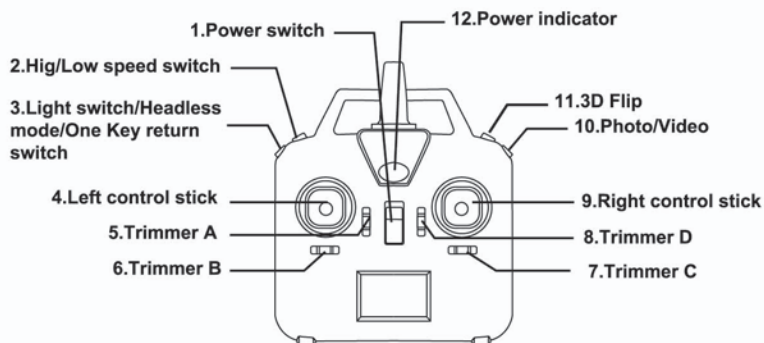
The LCD remote controller

Main features of the remote controller

- Adopt 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 .

Sketch and function switches of the remote controller

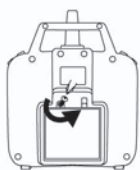


Remote Controller(Transmitter)

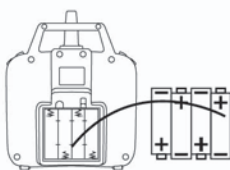
No.	Function switch	Function description
1	Power switch	It controls the power source of the transmitter. Slide the power switch to the "ON" position, the transmitter is powered on; slide the power switch to the "OFF" position, the transmitter is powered off.
2	H/L speed switch	There are 2 flight modes of the model: low speed and high speed.
3	Light switch/ Headless mode/One key return switch	<p>1.This is the light switch of the model. Press it once to turn on the light and press it once again to turn off the light.</p> <p>2.Headless mode on-off button: Press this button for about 2 seconds, the remote control will send out 2 beep sounds and letters " stick mod" will be flashing on the LCD screen, the indicator light of the model turns from constant "on" to "flashing", then,the model is in the headless mode. Press this button again for about 2 seconds, the remote control will send out 2 beep sounds and "stick mod" keeps constant "on", indicator light of the model turns from flashing to constant "on", then, the model exit headless mode.</p> <p>3.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.</p>
4	left stick	throttle control,turn left/turn right.
5	Trimmer A	this button is null.
6	Trimmer B	turn left/right trimmer.

No.	Function switch	Function description
7	Trimmer C	leftward/rightward flight trimmer.
8	Trimmer D	forward/backward flight trimmer
9	Right stick	forward/backward/leftward/rightward control stick.
10	Photo/video	This button is camera, video recording function.
11	3D roll	Keep pressing the 3D rolling button and push the forward/backward and the leftward/rightward control stick to the edges to perform the roll actions accordingly.
12	Power indicator	<p>The indicator light keeps blinking slowly: the transmitter is not activated.</p> <p>The indicator light keeps flashing rapidly: the transmitter is sending out connectional signal to the model.</p> <p>The indicator light keeps on without blinking: the transmitter is ready for controlling the flight.</p>

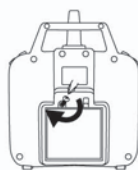
How to install the battery of remote controller



Pic.1



Pic.2



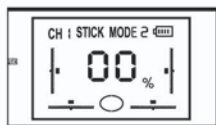
Pic.3

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)

Flight mode selection

There are 2 flight modes available: low speed and high speed. Player can select the flight speed by pressing the flight mode button.



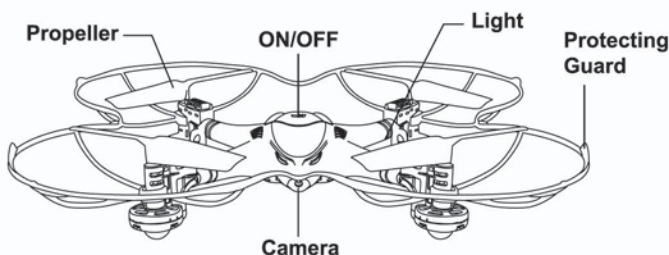
Pic.3



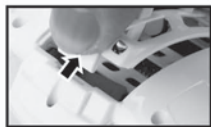
Pic.4

The model

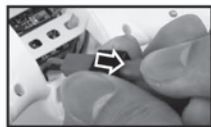
Major parts of the model



How to change new battery for the model



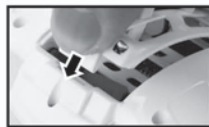
Pic.5



Pic.6



Pic.7



Pic.8

1. Open the battery compartment cover. (Pic.5)
2. Unplug the battery wire from the power wire plug of the model and take out the battery. (Pic.6)
3. Plug the new battery wire into the power wire plug of the model and insert the battery into the battery compartment. (Pic.7)
4. Close the battery compartment cover. (Pic.8)

How to charge the model

Turn off the model, open the battery door ,unplug the battery cable from the power wire plug and take out the battery. Insert the USB charger into the USB interface of the computer or other USB outlet; connect the battery cable with the USB wire plug, and charging is proceeding with indicator light "off". Once the battery is full charged, the indicator light of the USB will turn red. Full charging takes about 70 minutes.



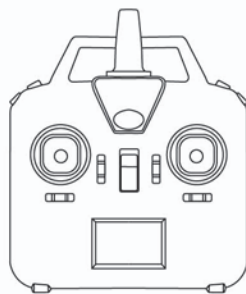
Pic.9

NOTE:Battery should be full charged before storing.

Preparation for flight

The remote control

- Recheck the playground; be sure that it is free from crowd, animals and other barrier.
- Slide down the throttle control stick to the bottom.
- Turn on the remote controller and the power light will blink slowly. Then slide the throttle control stick up to the top; the power light blinks at a higher speed; return the throttle control stick to the bottom; there will be a beep sound heard and the power light keeps flashing which means that the remote controller is sending out connectional signal. It will take about 10 seconds to finish the signal connection process. Once signal connection is completed, the power light will stay "on" without blinking and the remote controller is set for flight.



Pic.10

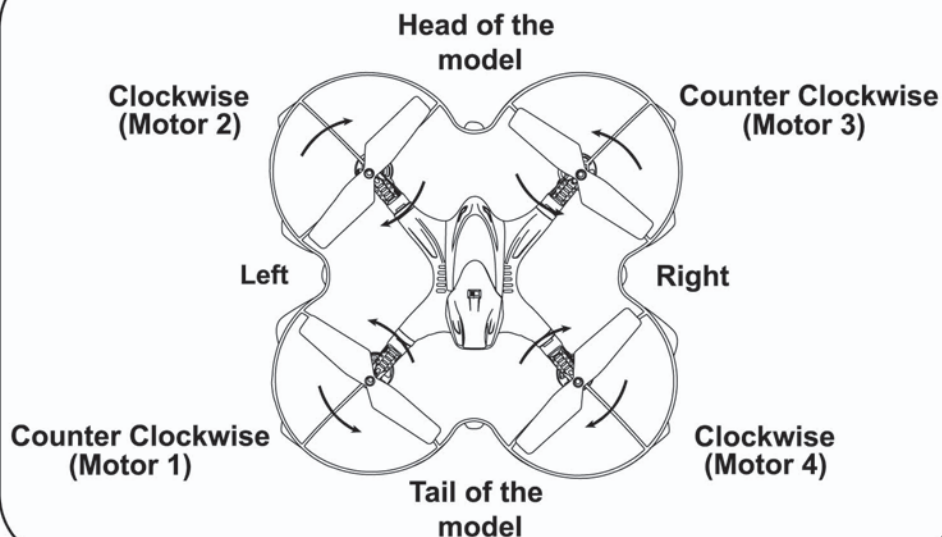
The model

- Make sure that the battery (at the bottom of the model) is well installed and connected with power wire of model. The model is OFF.
- Turn on the model; the flash light will keep flashing quickly, the gyro of the model will be in signal detecting condition. Set the model to flat surface, about 4 seconds later, the flash light will keep constant "ON". It means that signal connection is finished and the model is ready for flight.



Pic.11

- To ensure steady flight, please set the value of the trimmer to the midpoint.
- Push up the throttle stick slowly and the model takes off.
- To avoid any misunderstanding, we have defined the orientation of the model as follows: The model 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 named 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 named as "right". All the directions we are talking about in this manual are subject to the definition above.



Pic.12

- When the model 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 model keeps flying to one side, it can be corrected by adjusting the trimmer on the remote control.

Remarks:

- Signal connection between the model 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.

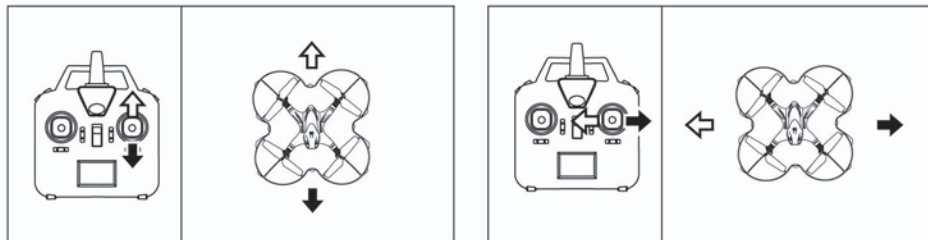
Trimmer Functions

Users may adjust the elevator trim to keep the model balanced.

Forward/backward trimmer	Turn left/ turn right trimmer	Leftward/rightward trimmer

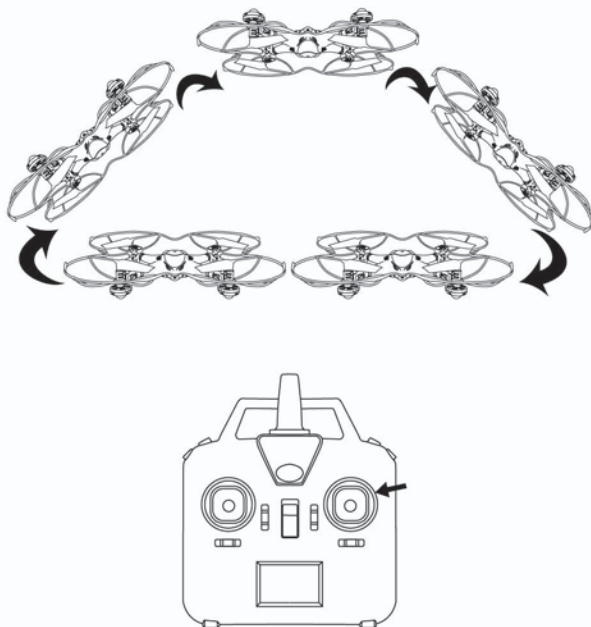
Operating

Remote controller	Model	Remote controller	Model



3D Roll:

Press down the 3D rolling button and push the right control stick to the top/bottom/leftmost/rightmost at the same time, the model will roll as per the control signal from the remote control.



Pic.14

TIPS:

For beginners, please choose wide and open space for flying.

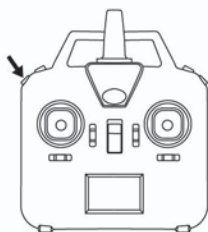
Headless mode:

Enter into headless mode:

Once signal of the model and the remote control is successfully connected, press the function button located at top left 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 2 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.



Pic.15

Model calibration in headless mode:

When the model is in headless mode, model calibration is needed. Position the model in such a way that its front is your front, turn both of two control sticks to the lower right corner for about 2 seconds, the model’s indicator light will turn from slowly flashing to quick flashing and model calibration is finished.




Pic.16



Pic.17

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:

When you take off, make sure that your front is the model's front; push up the right control stick, the model will fly forward.		When you take off, make sure that your front is the model's front; turn the right control stick to the right, the model will fly rightward.
When you take off, make sure that your front is the model's front; push down the right control stick, the model will fly backward.		When you take off, make sure that your front is the model's front; turn the left control stick to the right, the model will turn right.
When you take off, make sure that your front is the model's front; turn the right control stick to the left, the model will fly leftward.		When you take off, make sure that your front is the model's front; turn the left control stick to the left, the model will turn left.

One key return:

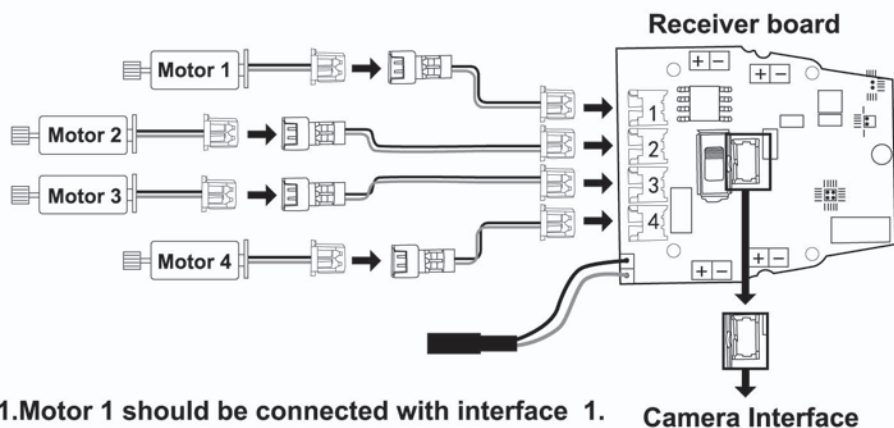
When the model is flying in headless mode, press one key return button, the model will fly towards player. Press the one key return button again or operate the forward /backward control stick, the model will exit the one key return function.

Remarks:

- Model calibration 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 re-calibrate the model.

Schematic diagram of the connection of the motors and the PCB

It is important that the installation of the PCB and the wire connection of the motor to the PCB should be connected properly according to the diagram shown as below.



- 1.Motor 1 should be connected with interface 1.
- 2.Motor 2 should be connected with interface 2.
- 3.Motor 3 should be connected with interface 3.
- 4.Motor 4 should be connected with interface 4.

How to change the protection frame



Pic.18

Install the protection frame:Thoroughly buckle the snap-ring of the protection frame to the snap-ring interface.

How to change the motor case



Pic.19

- 1.Take out the screws with a screwdriver by turning counter clockwise.



Pic.20

- 2.Pull out the motor case.



Pic.21

- 3.Unplug the motor wire from the power wire plug.



Pic.22

4. Connect the motor wire of the new motor case to the power wire plug.



Pic.23

5. Install the motor case to the main body of the model.



Pic.24

6. Lock the motor case with screws.

Install mobile phone holder



Pic.25

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



Pic.26

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



Pic.27

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

Remark:



Pic.28

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

FPV software download and installation

Install software "MJX H"

- The model is with built-in camera #C4015, install the "MJX H" software to smart phone, the photos and videos that taken by the camera can be seen alive when the model is flying.

- For Android system, please visit our website www.mjxrc.net 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 and in green color, 5 seconds later, the green light will turn into red light and flash. Then, enter into settings of the smart phone, open WIFI, search "MJX H****" and connect it. After successful connection, exit settings. 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.



Pic.29

1. Open the software "MJX H".



Pic.30

2. Click the **MONITOR** button.



Pic.31

3. Image is showing on the screen.

Accessories (Optional)



300C01
Upper Cover
(Silver)



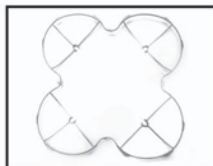
300C02
Upper Cover
(White)



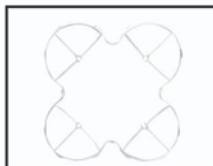
300C03
Lower Cover
(Silver)



300C04
Lower Cover
(White)

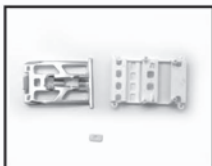


300C05
Protecting Guard
(Silver)



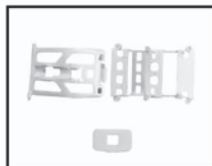
300C06

Protecting Guard
(White)



300C07

Battery Cover/
Battery
Compartment/
Switch Slip Sheet
(Silver)



300C08

Battery Cover/
Battery
Compartment/
Switch Slip Sheet
(White)



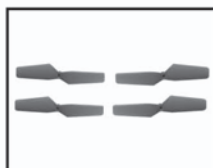
300C09
Motor Case /
Motor Case
Cover/
Motor Cover
(Silver)



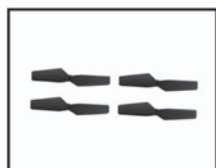
300C10
Motor Case /
Motor Case
Cover/
Motor Cover
(White)



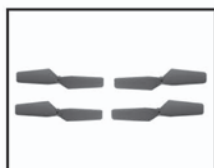
300C11
Propeller A/B
(White)



300C12
Propeller A/B
(Blue)



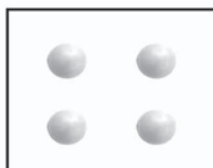
300C13
Propeller A/B
(Black)



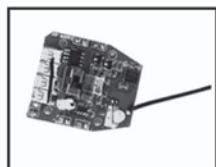
300C14
Propeller A/B
(Red)



300C15
Gear/Copper Bush/
Steel Tube



300C16
motor case



300C17
Receiver PCB



300C18
Battery



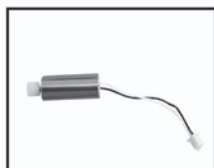
300C19
USB charging cable



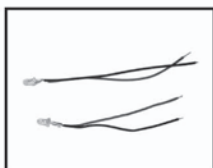
300C20
Camera Board



300C21
Clockwise
Motor/
Motor Gear



300C22
Counter Clockwise
Motor/
Motor Gear



300C23
Front and
rear lights



300C24
Screws Pack



300C50
Manual



300C51
Gift Box



300C52
Inner Blister



GR305
Remote
Controller

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.
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.
5	The model is flying tilting to one side severely or flying disorderly.	The gyro data is unreadable	Re-calibrate the model and the remote controller: connect the signal of the remote controller and the model; push the left and right control stick to the bottom right for 3 seconds; the remote controller indicator light change from solid on to flashing; once calibration is finished, the indicator light keeps solid on again.

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.

