



# INSTRUCTION MANUAL



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IOS



Android

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

## Technical parameter of the quad-copter

Fuselage Length:298mm      Gross Weight: about 130g  
Motor: Coreless motor      Overall height: 76mm  
Battery: Li-polymer 3.7V      Main Rotor Diameter: 135mm  
Charging Time: About 120 minutes      Flying Time: About 8-9 minutes

## Introduction

- Quad-rotor design insures more stable and powerful performance and make all kinds of 3D action more easier.
- Headless Mode is available.
- New designed structure makes assembly and maintenance easier.
- Adopting 2.4G auto connection technology, scores of quad-copters can be played at the same time.
- 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 8.5 minutes steady flight.

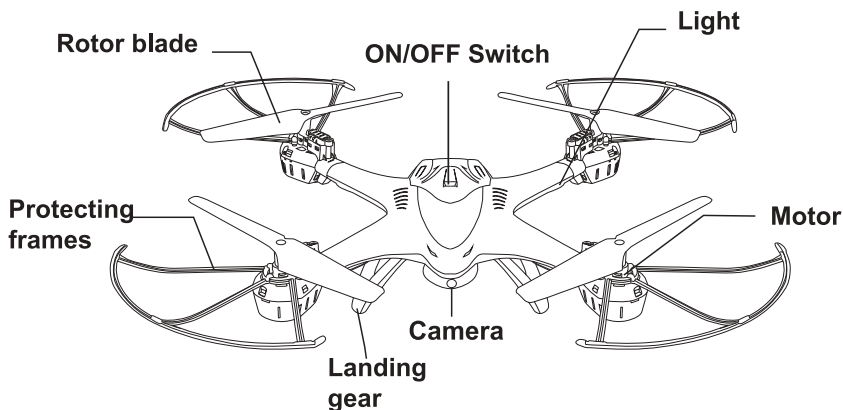
## Safety Guidelines

- 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; remote controller need 3XAA 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 quad-copter

### Major parts of the quad-copter



### Protection frame and landing gear installation



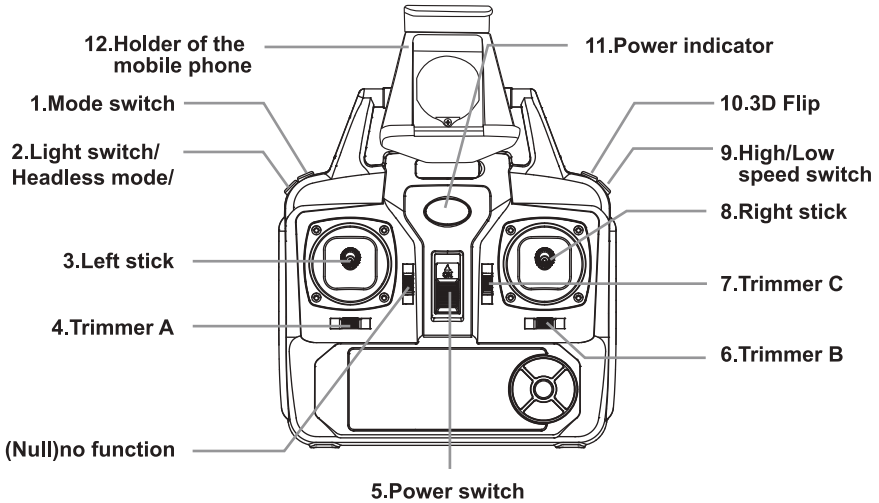
1. There are 3 interfaces on each motor cabinet. Insert the frame plugs into the interfaces and fix it.
2. Fix the protection frame by screwing clockwise.
3. There are 4 interfaces at the bottom of the quad-copter, insert the landing gear plugs into the interfaces and fix it. The landing gear is trapezoid, make sure that the longer waist of the trapezoid is pointed to the direction of the quad-copter's nose.

# 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.

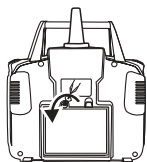
## Sketch and function switches of the remote controller



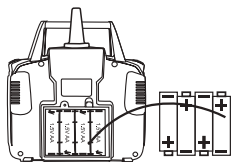
No.	Function switch	Function description
1	Mode switch	Also named Stick Mode changing button.Press this button to change the control stick mode.
2	Light switch/ Headless mode/	This is the light switch of the quad-copter. Press it once to turn on the light and press it once again to turn off Long press to enter/exist the Headless Mode.
3	Left stick	STICK MODE 1:upward/downward,turn left/turn right. STICK MODE 2:upward/downward,leftward/rightward.

No.	Function switch	Function description
4	Trimmer A	In stick Mode 1, it helps to tune the quad-copter's left and right direction turning speed. In stick Mode 2, it helps to tune the quad-copter's sideward flight.
5	ON/OFF switch	Switch on to turn on the remote controller, switch off to turn off the remote controller.
6	Trimmer B	In stick Mode 1, it helps to tune the quad-copter's sideward flight. In stick Mode 2, it helps to tune the quad-copter's left and right direction turning speed.
7	Trimmer C	In stick Mode 1 and 2, it helps to tune the quad-copter's forward and backward flight.
8	Right stick	STICK MODE 1: forward/backward, leftward/rightward; STICK MODE 2: forward/backward, turn left/turn right.
9	High/Low speed switch	There are 2 flight modes of the quad-copter: Low speed and High speed. Press the speed switch button once and you will hear the sound "Di" for slow speed mode; and press once again, you will hear the sound "Di.Di." for high speed mode.
10	3D Flip	When the quad-copter is flying, press this button and turn the right control stick to the top-most/bottom-most /left-most/ right-most at the same time, the quad-copter will flip forward/backward/leftward/rightward accordingly.
11	Power indicator	The indicator light keeps blinking slowly: the remote controller is not activated. The indicator light keeps flashing rapidly: the remote controller is searching for signal to the quad-copter. The indicator light keeps on without blinking: the remote controller is synced and ready to control the quad-copter.
12	Holder of the mobile phone	Being used to fasten the mobilephone to the remote controller.

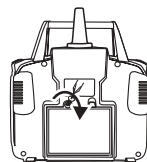
## How to install the battery of remote controller



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)

### Install the holder of the mobile phone:



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



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



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

### Remark:



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

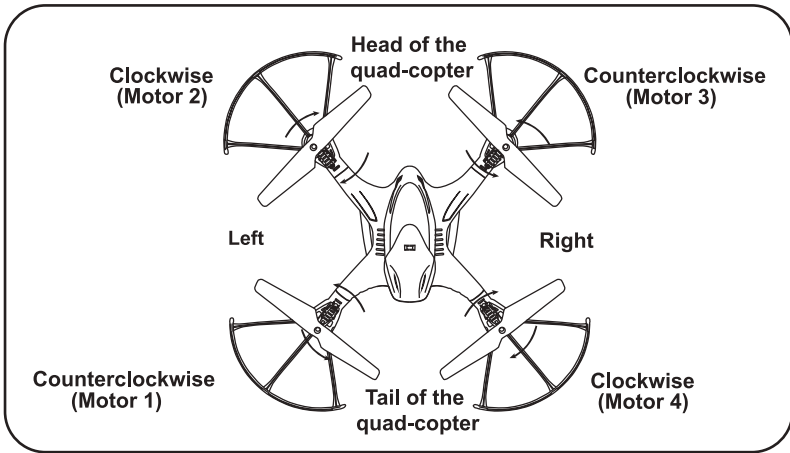
### Preparation for flight

- Make sure that the battery (at the bottom of the quad-copter) is well installed and connected to power wire of quad-copter. The quad-copter is OFF.
- 1 Turn on the remote controller and push the left throttle stick to the lowest position.
- 2 Turn on the drone by turn on the switch button.
- 3 Push the left throttle stick UP and DOWN quickly.
- 4 Please don't press any buttons on the remote controller until the green indicator on it turns from quick flashing to slow flashing. That means the drone has been synced with the remote controller. Now you can control the drone.
- 5 This drone has powerful, ultra-responsive motors, so push the throttle stick slowly, then you can fly the drone now.



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 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.



- The blue lights are at the front of the quad-copter; the orange lights are at the back of the quad-copter.
- 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 controller.

#### Remarks:

- You have to do the syncing progress every time you TURN OFF the controller.
- Set the connection one by one to avoid signal connection error.
- For better protection for the battery, please unplug the battery cable from the power wire after use.

## How to change new battery for the quad-copter

1. Open the battery door by screwing counter-clockwise.
2. Unplug the battery wire from the power wire plug of the quad-copter.



## FPV camera #C4015 installation

Installed with #C4015 camera, the quad-copter can take photos and videos, if download and install the FPV APP on your smart phone, FPV real-time transmission can be achieved through the connection of the quad-copter and the smart phone.

### C4015 installation



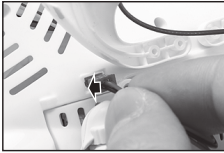
1. The camera should be fastened to the interface at the bottom of the quad-copter.



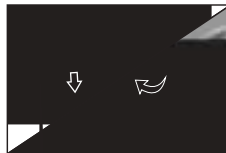
2. Place the camera by screwing clockwise.



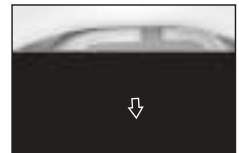
3. Insert the camera wire plug to the camera interface.



4. Insert the camera wire plug to port of C4015.



5. Insert the antenna bracket



## How to charge the quad-copter

Turn off the quad-copter, open the battery door by screwdriver, 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 charged, the indicator light of the USB will turn red. takes about minutes.



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





If the model keeps moving rightward, turn left of Trimmer A 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:



If the model keeps spinning counterclockwise in the air, turn right of Trimmer A until it gains balance.



If the model keeps spinning clockwise in the air, turn left of Trimmer A until it gains balance.

#### STICK MODE 2:



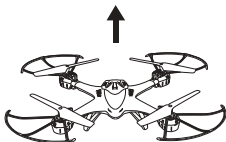
If the model keeps spinning counterclockwise in the air, turn right of Trimmer B until it gains balance.



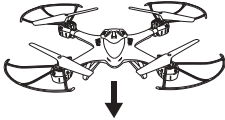


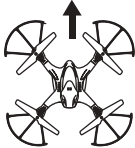

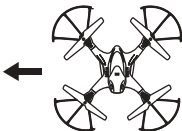
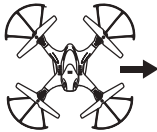
If the model keeps spinning clockwise in the air, turn left of Trimmer B until it gains balance.

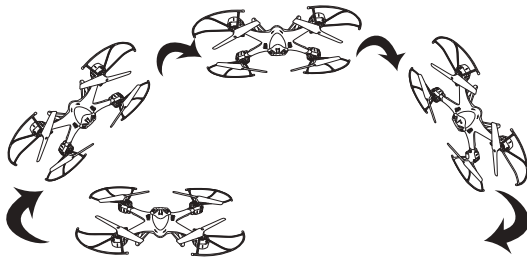
### Operating

Upward



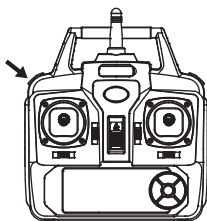
Push up the throttle control stick, the rotation speeds of the mains rotors are increasing and the quad-copter ascends accordingly.

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



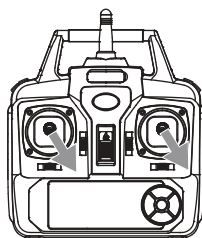
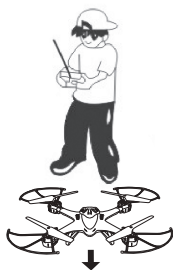
### Exit headless mode:

When the quad-copter is in headless mode, press the function button at top left of the remote controller for 2 seconds, the remote controller will send out 3 beep sounds ; the quad-copter's indicator light turns from flashing to constant "on". That means the quad-copter has exited the headless mode.



### Check up on the direction of the quad-copter in headless mode:

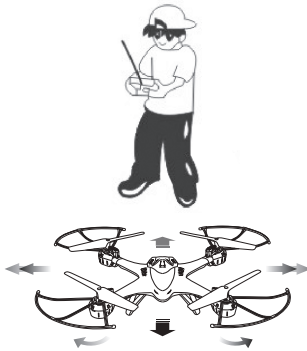
When the quad-copter is in headless mode, calibration of flight direction is needed. Set the head of the quad-copter ahead of the player, turn both of two control sticks to the lower right corner for about 2 seconds, the quad-copter's indicator light will turn from slowly flashing to quick flashing and calibration of flight direction is finished.



### Flight direction control in headless mode:

- When checking up on the flight direction of the quad-copter, set the quad-copter nose right ahead and tail facing the player's, at this time, the quad-copter's nose is pointing forward; this direction will be constantly considered as "forward" when forward signal is given from the remote controller, no matter where the quad-copter 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 quad-copter is flying in headless mode, player should keep facing the forward direction. Otherwise, the quad-copter will be out of control. The quad-copter control is showed as below:

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

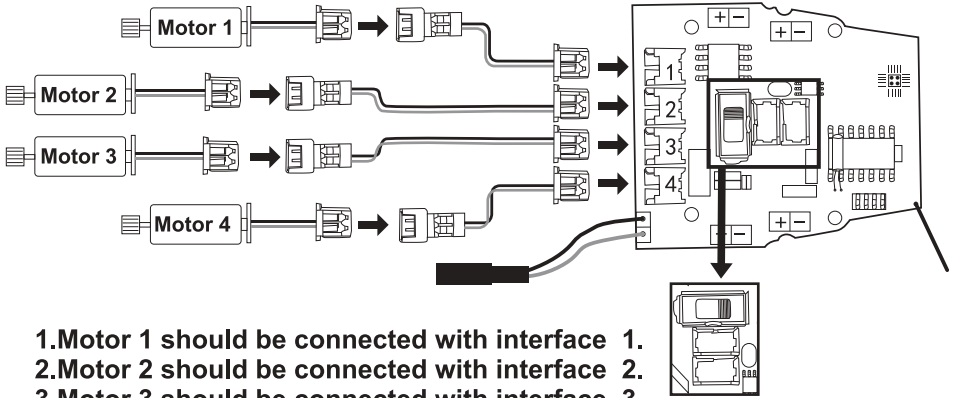
### Remarks:

- Calibration of flight direction is needed when the quad-copter is going to fly in headless mode. When checking up on the flight direction, the quad-copter should be set right ahead and tail facing the player; the player should keep facing to the calibrated forward direction while playing in the headless mode, and don't change.
- When the quad-copter 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 do the calibration of flight direction again.

### 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.

## Receiver board



- 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.

## FPV APP download and installation

### Install APP

- Snap it with camera set #C4015 and install the “MJX H” APP to smart phone, the photos and videos that taking by the model can be seen live when the model is flying.

- For Android system, please visit our website [www.mjxrc.com](http://www.mjxrc.com) to download the APP “MJX H”.
- For Apple IOS system, please go to the APP store to download the APP “MJX H”.

### Instructions

Power on the model, the FPV indicator light (at the bottom of the quad-copter) is on and in green color,15 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 to it. After successful connection, exit settings. Open “MJX H” APP on the smart phone and click the logo “MONITOR” to enter into the control interface to watch the real-time video.



1.Open the APP “MJX H”.



2.Click the MONITOR button.



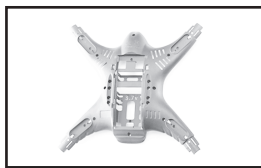
3.Image is showing on the screen.



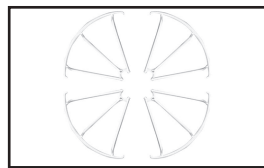
# Accessories (Optional)



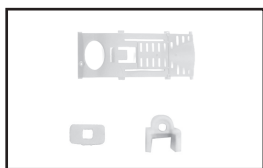
**400001**  
**Upper Cover**



**400W01**  
**Lower Cover**



**400005**  
**Protecting Guard**



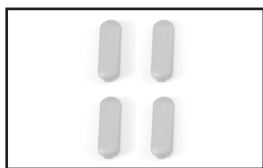
**400007**  
**Battery Cover/  
Switch Slip Sheet/  
Socket**



**400009**  
**Propeller A/B**



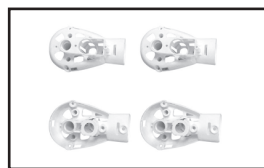
**400011**  
**Transparent Plastic  
Part (Blue)**



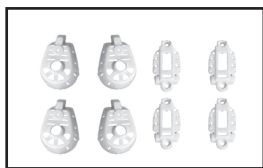
**400012**  
**Transparent Plastic  
Part (Orange)**



**400013**  
**Left/Right Landing Gear**



**400015**  
**Motor Case**



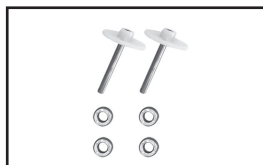
**400017**  
**Motor Case Cover /  
Motor Cover**



**400019**  
**Clockwise Motor/  
Motor Gear**

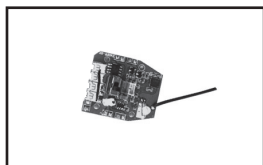


**400020**  
**Counter Clockwise  
Motor/Motor Gear**



**300C15**

**Gear/Copper Bush/  
Steel Tube**



**400021**

**Receiver PCB**



**300C18**

**Battery**



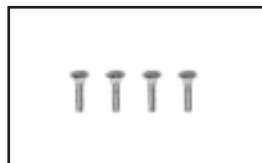
**300C19**

**USB Charging Cable**



**400022**

**Front and rear lights**



**400023**

**Screws Pack**



**400W50**

**Manual**



**400W51**

**Gift Box**



**400W52**

**Inner Blister**



**GR400**

**Remote Controller**

## Trouble shooting

	phenomenon	reason	solution
1	When powered on, the lights on the drone are flashing quickly.	The drone is detecting signal of the remote controller.	Remember to turn on the remote controller in advance, so that the signal could be connected smoothly, the indicator will turn on solid.
2	The lights are flashing on twice and flashing off once.	The drone is not received the signal from the remote control or signal connection is interrupted.	For absence of signal, activate the remote controller for the signal connection. For signal interruption, turn off the remote controller and turn it on again.

	<b>phenomenon</b>	<b>reason</b>	<b>solution</b>
3	The lights are flashing on and off.	The drone is under powered.	Charge the battery or change another full charged battery.
4	When charging, the indicator on the USB charger will not turn on Red after a long time.	A. The output current of the power source might be too low. B. The USB charger should be used with a current input between 0.5A and 1A.	1. Use another power source with upgraded output current, 1 A would be suggested. 2. Contact the seller for help: <a href="mailto:service@unicdrone.com">service@unicdrone.com</a>
5	Battery's working time reduced after several times of flight.	The battery's capacity will become lower than before if no good storing after flights.	Recharge the battery every time after a flight, and store it independently. Buy spare batteries.
6	The drone is shaking fiercely	One or more of the blades are out of shape.	Change the correct blades with the spare parts inside the package.
7	The blades won't rotate after starting the drone.	1. The battery is not fully charged. 2. Some obstacles fall into the engines after some flights. 3. Motor is broken.	1. Fully charge the battery. 2. Open the motor mount with a screwdriver and replace the motor. 3. Contact the seller for help: <a href="mailto:service@unicdrone.com">service@unicdrone.com</a>
8	The blades rotate but the drone won't fly up.	The blades are not built correctly. There are two pairs of blades which marked with "A" and "B".	Reinstall the blades on to the correct positions.
9	The engines are getting hot.	The motors and circuit board may heat up when using.	Take a 10-minute cool-down break between flights to ensure your parts last as long as possible.

- 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.



MADE IN CHINA