Ages 14+

NOVA

Equipped with WIFI Camera

U47

Operations Guide

Catalog

Instruction For Drone And Controller

Drone

Propeller Guard

Front

A Propeller

B Propeller

Drone
Cover Housing

Left

Right

Power Switch

B Propeller

A Propeller

Rear

Camera

Front LED
(Green)

Front LED
(Green)

Drone Bottom
Housing

Made in China

Rear LED
(Red)

Rear LED
(Red)
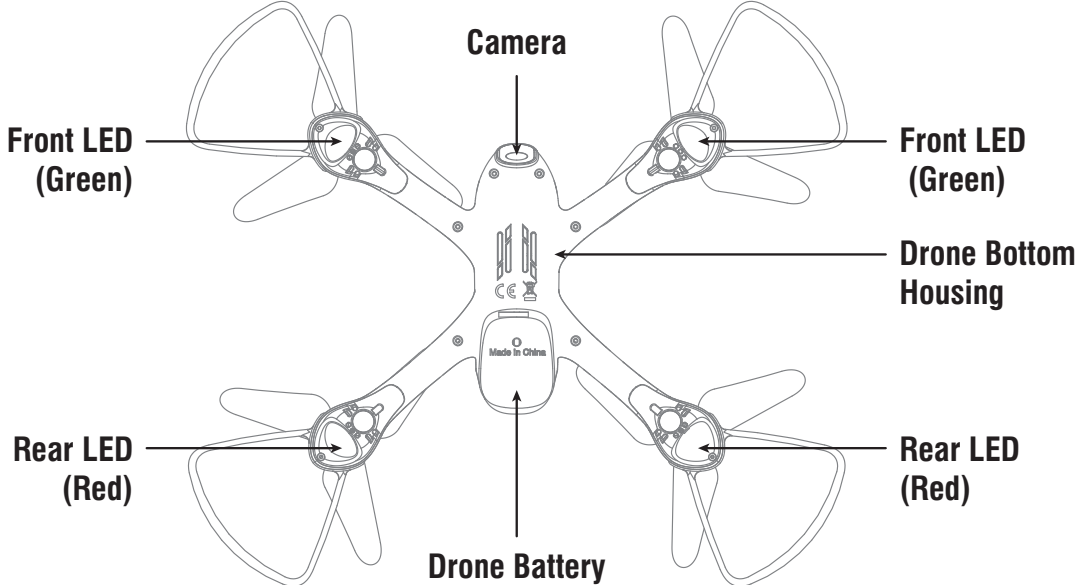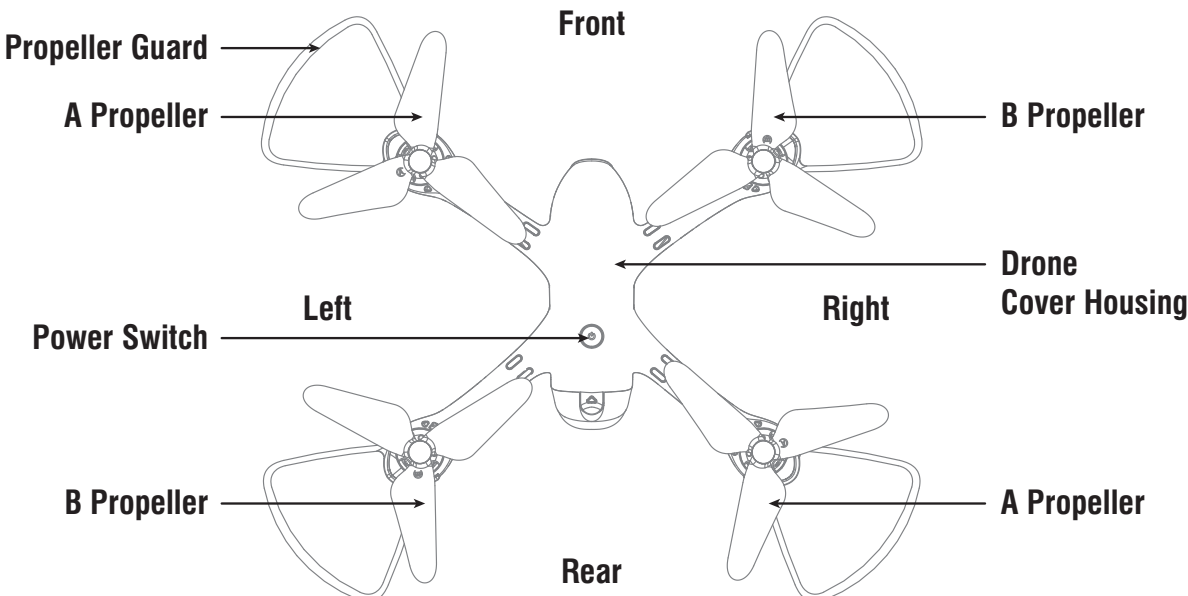
Drone Battery

Specifications

Drone Size	248x280x59.0mm	Charging Time for Drone Battery	120 mins
Drone Weight	138g	Max Flying Distance/Radius	50m
Propeller Diameter	110mm	Max Streaming Video Range/Radius	40m
Flying Time	10 mins	Main Motor	8520x4
Drone Battery	3.7V 1000mAh	Max Flying Height	15m

3

Exploded View

01

02

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03

02

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02

07

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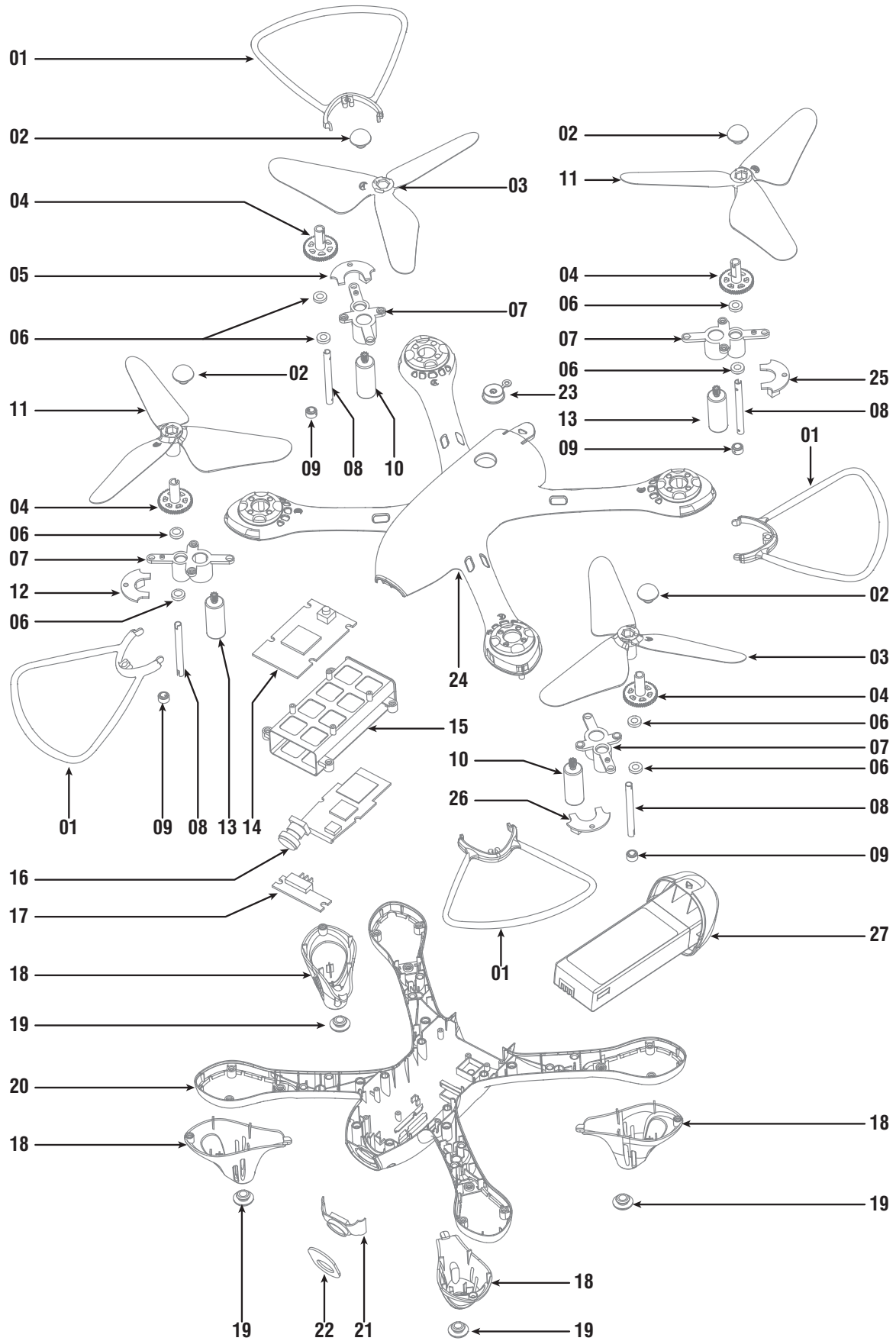
No.	Name	No.	Name
1	Propeller Guards	14	Receiving Board
2	Propeller Piston	15	Receiving Board holder
3	A Propeller	16	Camera Board
4	Transmission Gear	17	Battery Switchboard
5	Rear A LED Board (Red LED/White Plug)	18	LED Cover
5	Rear A LED Board (Red LED/White Plug)	19	Cushion
6	Copper ring	20	Drone Bottom Housing
7	Motor holder	21	Camera Component
8	Spindle steel pipe	22	Camera Organic Board
9	Steel pipe fixings	23	Switch Button
10	Propeller A Motor	24	Drone Housing Cover
11	B Propeller	25	Rear B LED Board (Red LED/Red Plug)
12	Front B LED Board (Green LED/Red Plug)	26	Front A LED Board (Green LED/White Plug)
12	Front B LED Board (Green LED/Red Plug)	27	Battery Compartment
13	Propeller B Motor		

Controller

Phone Holder Slot

Heading Hold Mode

Photo

Video

One Button Take Off / Landing/ Emergency Stop Button

Power Indicator

Left Stick

Right Stick

Power Switch
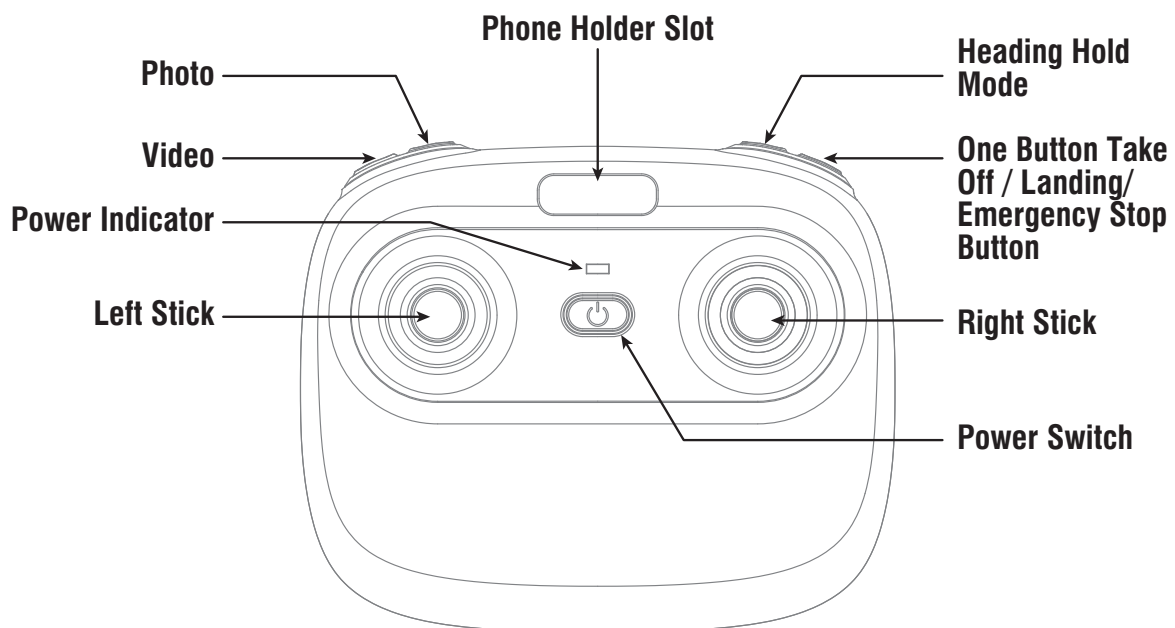
Notice: Taking photo and recording video are available after connecting with smart phone.

**Trimmer Mode Button
(Press Down)**

**High/Medium/Low Speed
Mode (Press Down)**
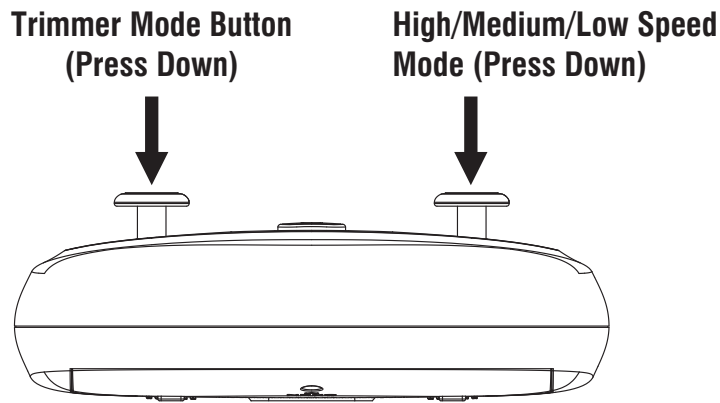
Controller Button Functions

Left Stick: Move the Stick to forward / backward / left / right to fly the drone up / down / turn left / turn right.
Right Stick: Move the Stick to forward / backward / left / right to fly the drone forward / backward / left / right.
Power Switch: Push up the power switch to turn on the controller, and pull down to turn off.
Photo: Press down the button, start to photograph.
Video: Press down the button, start to record video.
Heading Hold Mode: Press to enter Heading Hold Mode. Press again to exit Heading Hold Mode.
Take Off / Landing / Emergency Stop Button: Press once and the drone will take off automatically. Press again and the drone will land automatically. Press and hold the button for more than 1 second for an emergency landing, the drone propellers will stop and it will land immediately.
High / Medium / Low Speed button: Press to right switch to High /Medium/ Low Speed.
Trimmer Mode Button: Press down the left stick and turn to the required trimmer direction, then it will adjust the direction accordingly. Release the stick to exit trimmer mode.

Battery Installation

Open the battery cover on the back side of the controller, insert 4 AA batteries following the polarity indicators. (Picture 1/2, battery is not included)

**Alkaline Battery**

Battery Cover
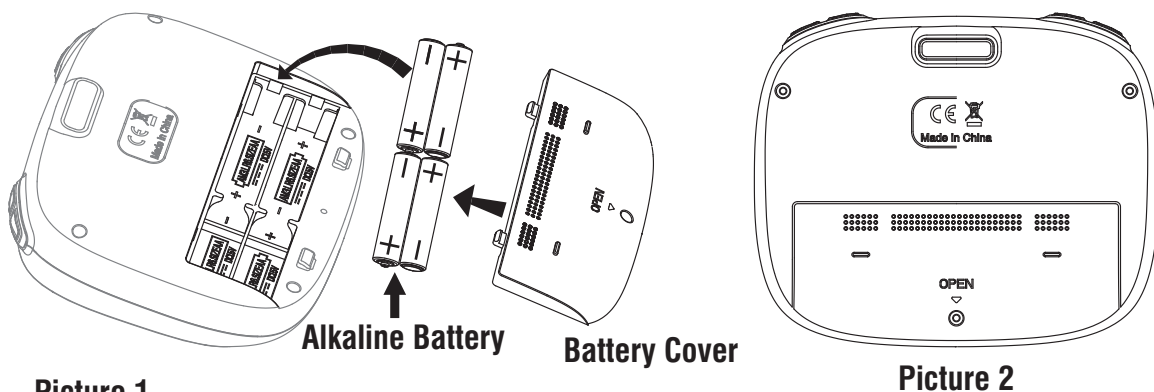
Picture 1

Picture 2

| |
|---|
| **Notice:**
1.Make sure the electrodes are correct. 3.Do not mix different kinds of batteries.
2.Do not mix new with old batteries.   4.Do not charge the non rechargeable battery. |

Phone Installation Instruction

1. Take out the phone holder and insert into the controller(Picture 3).

2. Pull out upper lamp of the holder (Picture 4/5), put the phone into the holder, then release the clamp, and the phone will be fixed on the holder(Picture 6).
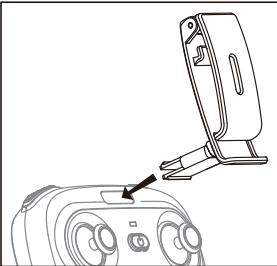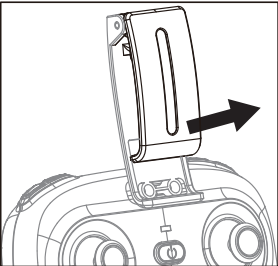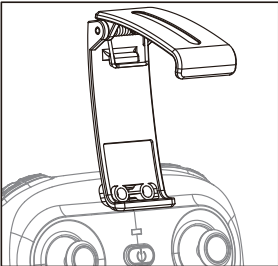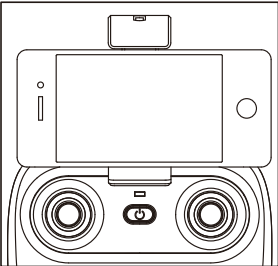
| Picture 3 | Picture 4 | Picture 5 | Picture 6 |

Notice： **Make sure that the button on phone is not clamped.**

Parts installation

Charging Instruction for Drone Battery

1. Connect the drone battery with USB cable first and then choose one of the method as below picture shown to connect with USB plug.

2. The red USB indicator light keeps bright when charging and the light turns green when fully charged.

* For faster charging, it is recommended to use an adapter with 5V 2A output current (not included) to charge the battery

Drone Battery
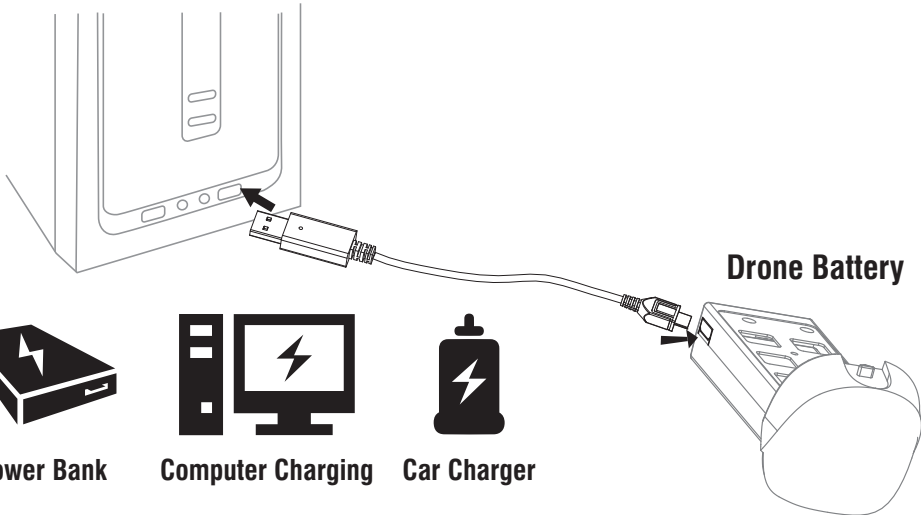
**Phone Charger   Power Bank   Computer Charging   Car Charger**

Li-Po Battery Disposal & Recycling

Wasted Lithium-Polymer batteries must not be placed with household trash. Please contact local environmental or waste agency or the supplier of your model or your nearest Li-Po battery recycling center.

Propeller installation diagram

When install, put the propeller hole aims to the drone shaft hole, and then press down until bottom, tighten it with screw, and then put on propeller cover(Pic 8); when disassemble, loose the screw and then pull out the propeller.

**Notice: When install, please make sure correct propeller in place, otherwise the drone can not work well.**
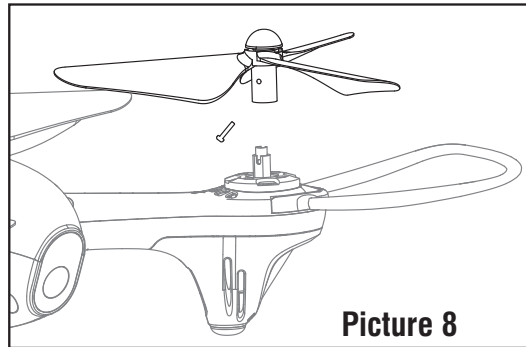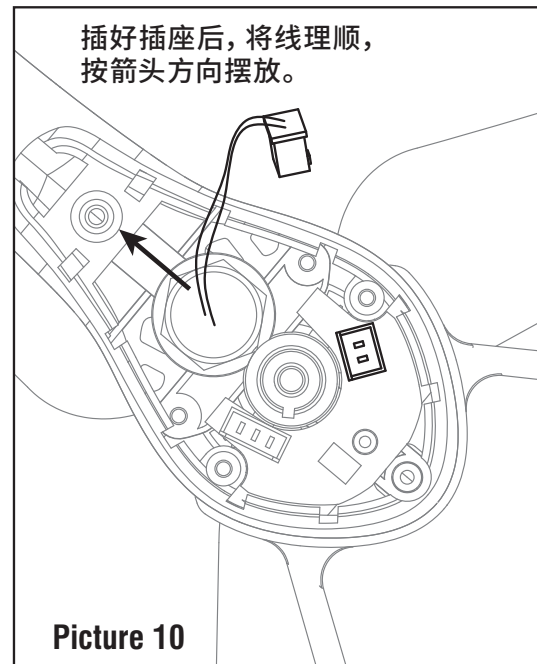
Picture 8

Motors Replacement Diagram

1. To remove the motor, remove the screw from the lampshade first，then take the lampshade out, unplug the motor connector from LED board and then take the defective motor out (Picture 9) .
2. To install the motor, put the motor into motor holder(make sure the motor press down and also the gears are pairing) and plug the required motor connector into the LED board socket. Put on the motor cover and fix it with screw.

Warning: When pick up the motor, please don't damage the LED board.

Picture 9

插好插座后，将线理顺，
按箭头方向摆放。
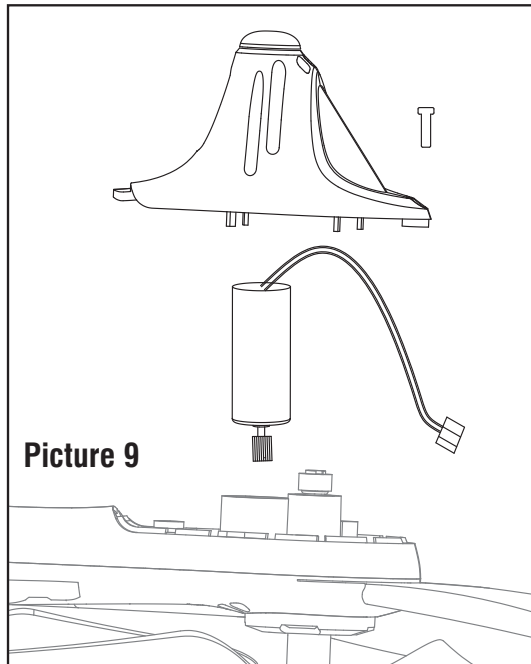
Picture 10

Notice: The motor's rotating direction should be the same, or it will not work.

Tips: The motor is consumable. If it is damaged, please buy new motor for replacement.

8

Propeller guards assembly instruction

When install the propeller guard, attach one buckle to the arm and then push another buckle in until they locks (Picture 11).
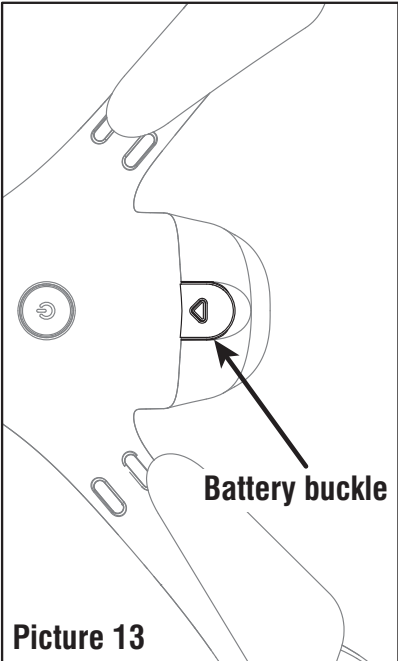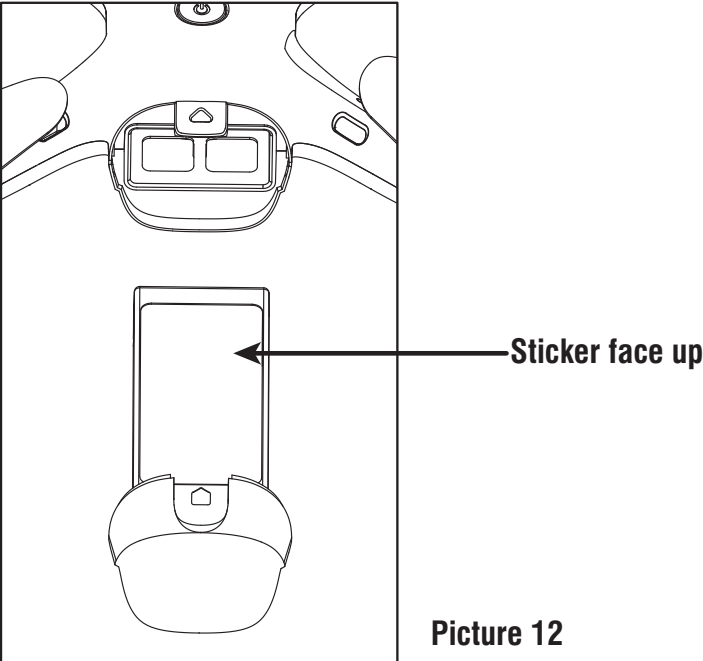When remove the propeller guard, take it out from buckles on both sides and pull out the propeller guards.
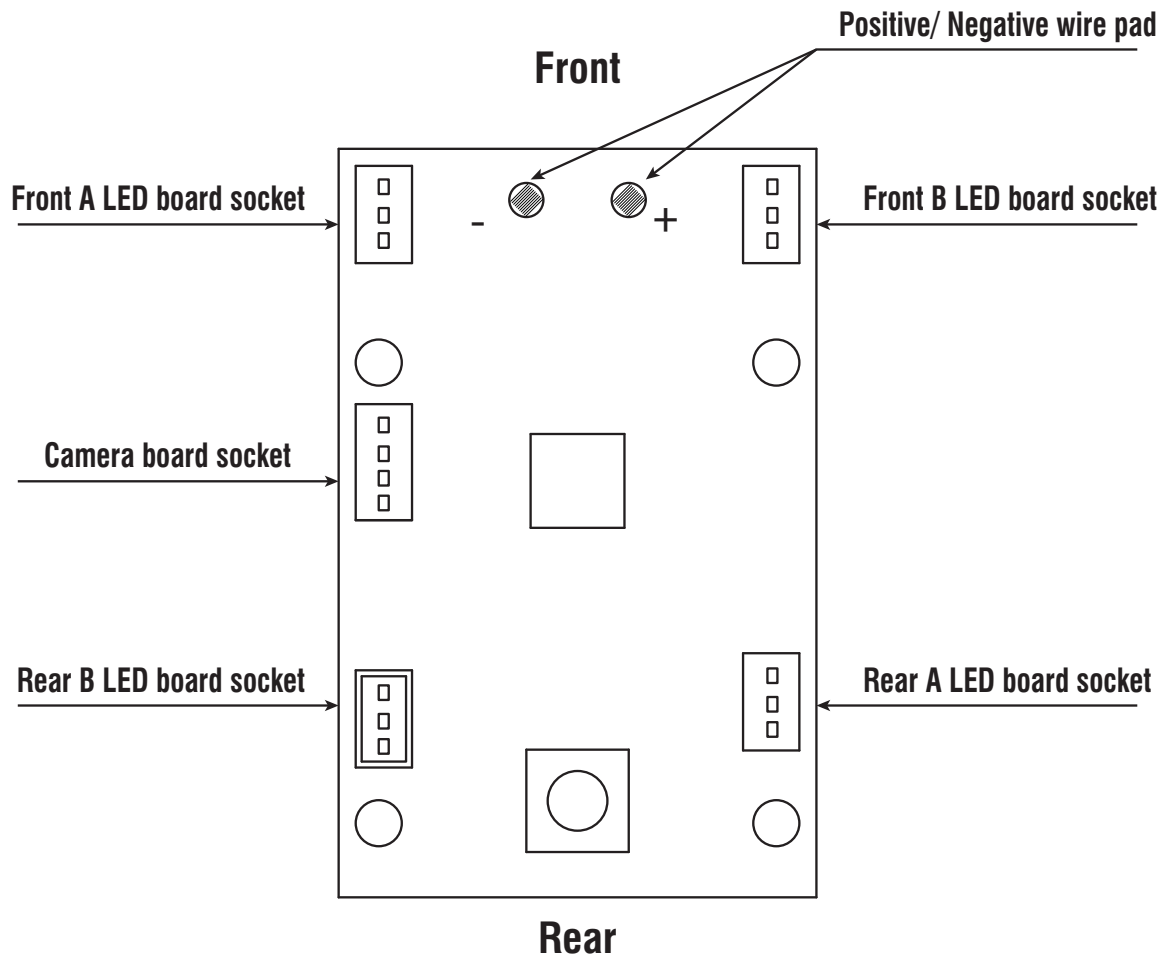
Push here
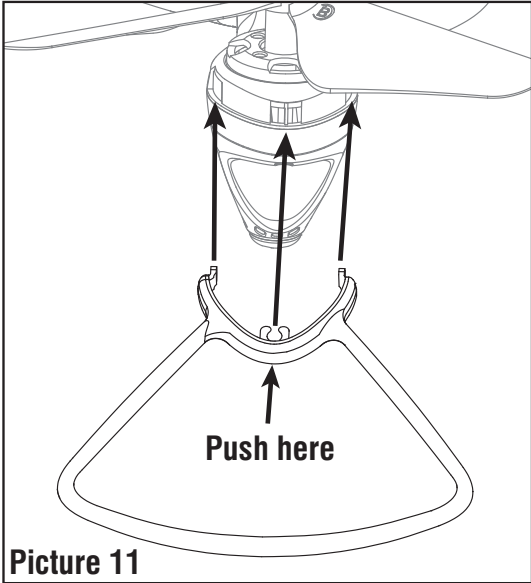
Picture 11

Battery installation diagram

When install, push the battery to the end(Picture 12);
When disassemble,you need to squeeze up and down of the battery buckle and then put out the lipo battery box is fine.

Sticker face up

Battery buckle

Picture 12

Picture 13

Receiver board wire diagram

Front

Positive/ Negative wire pad

Front A LED board socket

Front B LED board socket

−   +

Camera board socket

Rear B LED board socket

Rear A LED board socket

Rear

Pre-Flight Checklist

1. Ensure that the drone battery and controller batteries are fully charged.
2. Ensure that the left stick of the controller is in the middle position.
3. Strictly follow the instructions for the order for turning on and turning off the controller and drone. Turn on the controller power first and then turn on the drone power before flying; Turn off the drone power first and then turn off the controller power when fishing flying. Improper on/off sequence may cause the drone to fly out of control and could threaten your safety or the safety of others. Please cultivate a correct habit of turn on and turn off.
4. Ensure the connection between the battery and motor is solid. Vibration during use may cause a bad connection and the drone could become difficult to control.
5. Improper operation may cause the drone to crash, which may cause motor defects that could affect flying ability. If this occurs, visit the local distributor to buy new replacement parts,so that the drone will return to its best status.

Flight Instruction

Frequency Pairing
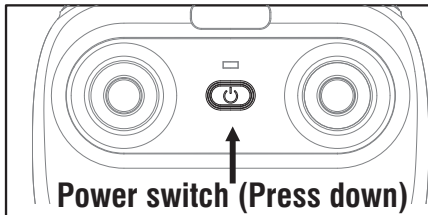
Turn on the transmitter switch and the power indicator light flashes rapidly.

Power switch (Press down)
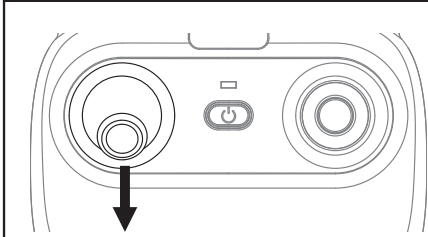
Pull the Left Stick all the way down to the lowest position and then release. The Left Stick will back to the middle position automatically. The power indicator light flashes slowly, which indicates the transmitter is ready for frequency pairing.

Press the drone power button for about 2 seconds to power on, the LED indicator changes from flashing to solid light, the drone is pairing successfully and ready to control.(Transmitter beep sound)
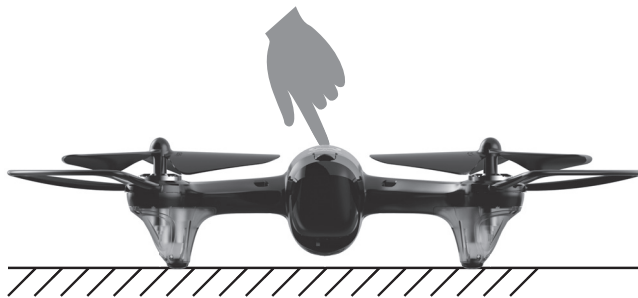
**It's a must to put the drone on the horizontal position !!!**

Drone calibration(After pairing successful)
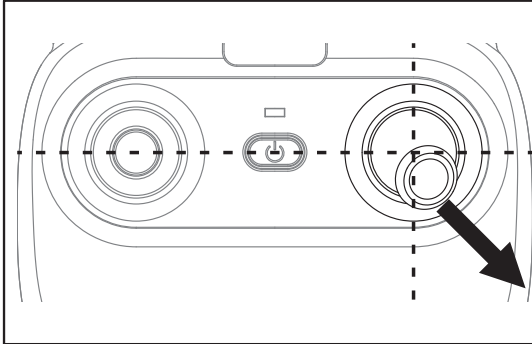
Push the right stick as picture shown. (Don't move the left stick before successful calibration), the drone body light will flash 3 times, indicating that the drone is calibrating. After successful calibration, the drone lights will become solid and ready to fly.

Tips: Crashing the drone may cause it imbalanced beyond the level that can be adjusted by the trimmer button. If this occurs, you can re-pairing & re-calibrate.

Take Off
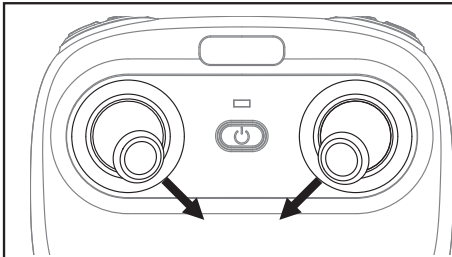
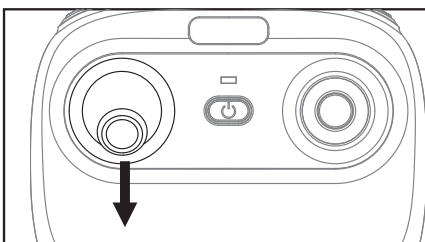Move the left stick and right stick at the same time 45 degree inward.(This operation is used for starting/locking the motors. When the motors are working, it could be used to stop the motors urgently.)
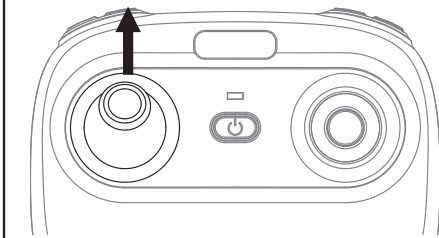
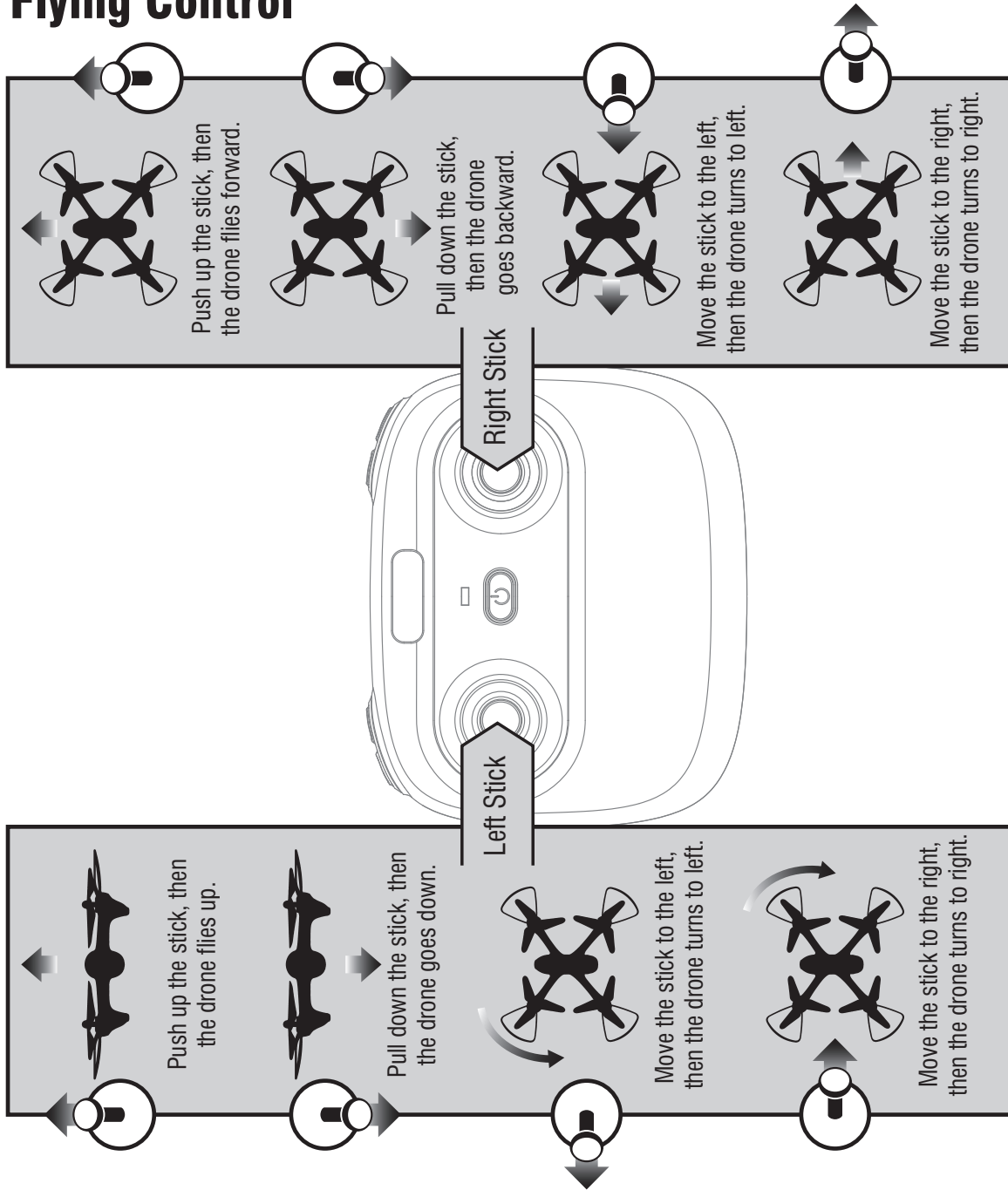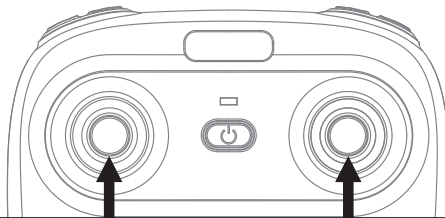Push the left stick up slowly, the drone will take off.

Landing

Pull down the left stick to its lowest position slowly to land the drone on the ground.

Repeat above steps several times to practice.

Flying Control

Push up the stick, then the drone flies forward.

Pull down the stick, then the drone goes backward.

Move the stick to the left, then the drone turns to left.

Move the stick to the right, then the drone turns to right.

Right Stick

Left Stick

Push up the stick, then the drone flies up.

Pull down the stick, then the drone goes down.

Move the stick to the left, then the drone turns to left.

Move the stick to the right, then the drone turns to right.

Trimmer mode

Forward and backward trimmer
When take off, if the drone tilts forward, press down the trimmer button, and push the right stick backwards. Otherwise push forwards.

Left and right side flying trimmer
When take off, if the drone tilts to left, then press down the trimmer button and push the right stick backwards to adjust. Otherwise push forwards.

Left and right turning trimmer
When take off, if the drone head rotates to left,then press down the trimmer button and push the left stick to right. Otherwise push to left.

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Functions Introduction

One button take off/Landing、 Emergency stop

One Button Take Off

After frequency pairing successful or motors activated, press the Take Off / Landing / Emergency Stop Button, the drone will fly up automatically and keep flying at an altitude of 1.2 meters approximately.

One Button Landing

When flying, press the Take Off / Landing / Emergency Stop Button once shortly, and the drone will land on the ground automatically.
(When using this function, you can not touch the left stick, if not, then the function will fail)

Emergency Stop

When the drone in emergency situation and going to hit the walking people or obstacle etc., press the Take Off / Landing / Emergency Stop Button immediately and hold it for more than 1s,the propellers will stop immediately.

Tip: Do not use the emergency stop function unless in emergency situation. The drone will fall down suddenly after all propellers stop.

Altitude Hold Mode

Intelligent flight control system calculates the hovering position, more stable control feature, makes it easier for beginners to control. Release the stick, the drone will keep hovering automatically to enable single hand operation and more clearly aerial photography.

Note: If the propeller is deformed or damaged, Altitude Hold Mode will fail. If the atmospheric pressure is instability or typhoon weather, Altitude Hold Mode will not work well.

High / Medium/Low Speed Mode Switch

Press down this button,then it will sound " di", it means low speed mode "L"; when it sounds " di.di",means medium speed "M"; and sounds " di.di.di" means high speed mode "H".(Low speed default)
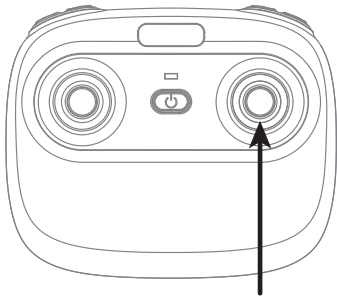
High / Medium/Low Speed button （press down）

1. Low Speed Mode(Mode 1)

Low Speed Mode is suitable for beginner.

2. Medium speed Mode(Mode 2)

Medium Speed Mode is suitable for skillful pilots to play in the gentle breeze.

3. High Speed Mode(Mode 3)

High Speed Mode is suitable for expert to experience aerial stunt outdoor.

Heading Hold Mode

Drones generally have a front and rear indicated by LED lights or colored propellers. By default, the users are required to tell the front and the rear of the drone when flying. Under heading hold mode, the users can operate the drone without worrying about the orientation (left is left and right is right all the time, regardless of where your drone is pointing at).Heading Hold Mode is designed for beginners and the users who fly the drone in daylight or at a far distance or difficult to identify the drone orientation.

The default setting is NOT Heading hold Mode.

You are allowed to activate the heading hold mode function before taking off or in flight. Fly under heading hold mode, you're required to ensure the drone front direction aligned with your front direction, DO NOT change your direction of your transmitter and keep it fly in front of you all the time.(See below picture)

WARNING: DO NOT USE HEADING HOLD MODE BEFORE YOU ARE SURE THAT THE DRONE'S FRONT IS YOUR FRONT. OTHERWISE, IT MIGHT BE OUT OF CONTROL OR FLY AWAY.

15
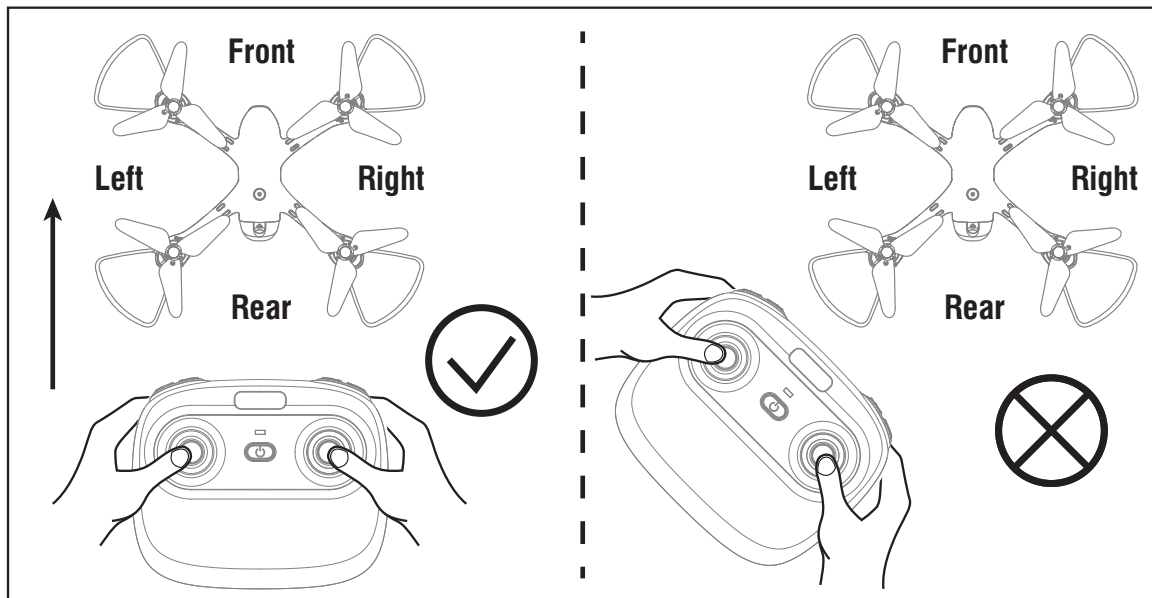
*Press the Heading Hold Mode button. The drone's LED lights will flash
 alternatively, indicating that the drone has entered Heading Hold Mode.
 To turn off Heading Hold Mode, press the Heading Hold Mode button again.
 The drone's LED lights turn solid, indicating that Heading Hold Mode is off.

Heading Hold Mode
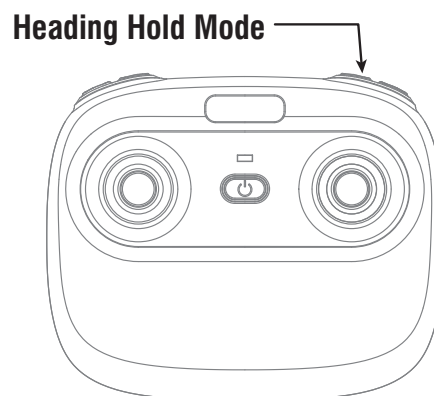
Low Battery Alarm

When the transmitter in low battery, the transmitter will beep "di...di...di..." to
remind the user to land the drone to replace the batteries as soon as possible.
Or the drone may be out of control.

When the drone in low battery, the transmitter will beep" di.di.di..." constantly to
remind the user to land the drone as soon as possible.

Out of Range Alarm

When the drone is going to fly out of the max remote control distance, the
transmitter will beep "didi...didi...didi..." to alarm the user to fly back the drone
immediately. Or the drone may be out of control and fly away.

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Motors Stuck Protection

1. When the propellers get stuck, then the drone LED will flash quickly and activate stuck protection function and the motors stop running.

2. Pull down the left stick to the lowest position, the drone LED will get a solid light and stuck protection will be released and the drone can fly again.

To know your APP

Download and Install the APP: Flyingsee

The APP is suitable for mobile phone with iOS and Android system, please download from the mobile phone software store:

1. For mobile phone with iOS system, please search Flyingsee in APP Store.

2. For mobile phone with Android system, please search Flyingsee in Google Play.

3. Scan the QR code on the right or the QR code in the box to download Flyingsee.
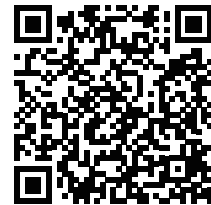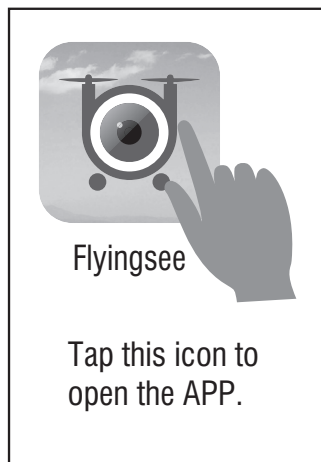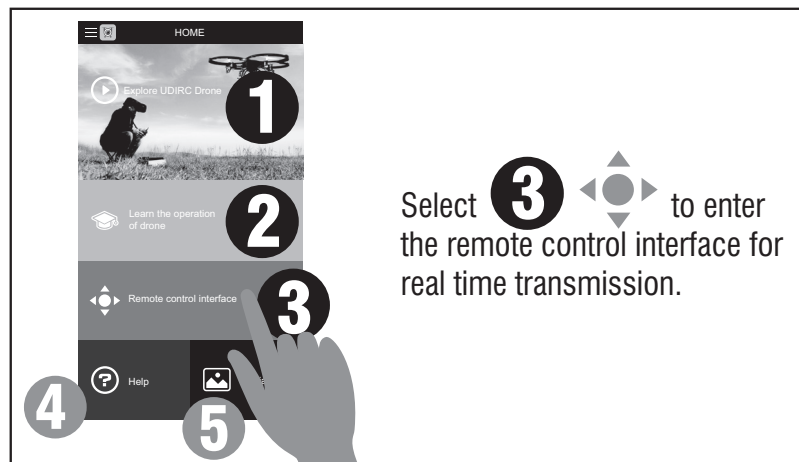
Smartphone control steps for drone

Pairing your Device with Drone

1. Install the Li-po battery into the drone and power on the drone. Put the drone on a flat surface in a horizontal position. (Very Important)

2. Enter your device's set up screen, turn on Wi-Fi (WLAN) and choose udirc-***,.Return to main screen after successful connection.
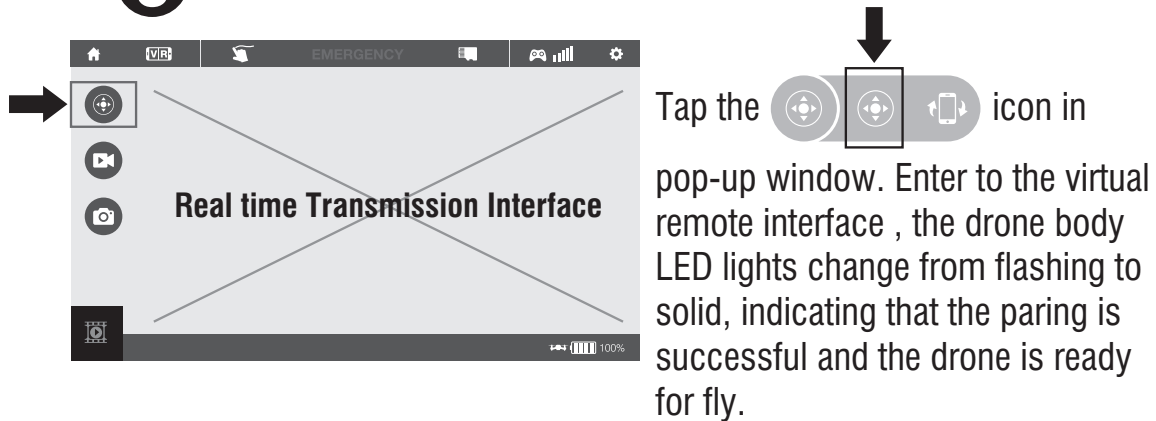
3.

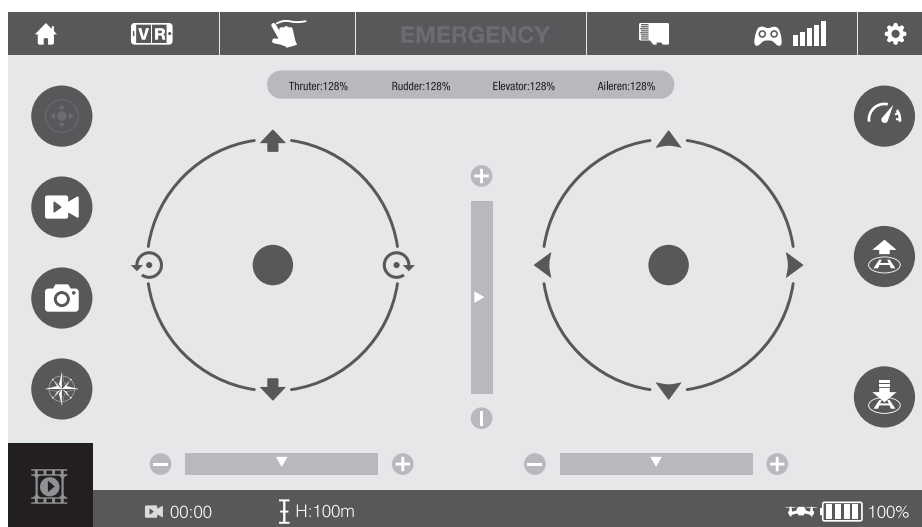Flyingsee

Tap this icon to open the APP.

4.

HOME

Explore UDIRC Drone **1**

Learn the operation of drone **2**

Remote control interface **3**

4 Help **5**

Select **3** to enter the remote control interface for real time transmission.

❶ Go to UDIRC official website for more information about our products.

❷ Download the manual and learn how to fly the drone properly.

❹ Help & Tips.

❺ View your photos or videos.

Pairing

Select **❸** to enter the remote control interface for real time transmission.

Real time Transmission Interface

Tap the icon in pop-up window. Enter to the virtual remote interface , the drone body LED lights change from flashing to solid, indicating that the paring is successful and the drone is ready for fly.

Learn all the APP icons first

Thruter:128%   Rudder:128%   Elevator:128%   Aileren:128%

00:00   H:100m   100%

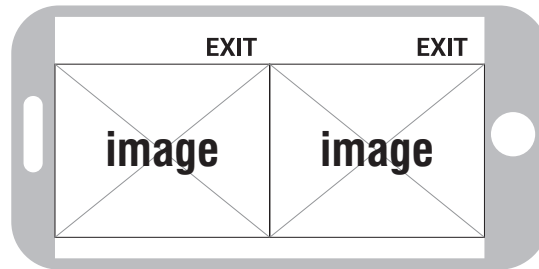**Virtual Control Interface**

Introduction Of The APP Icons

Home Page Icon

Tap to go back to the Home Page.

Virtual Reality Mode

Tap to enter virtual reality mode to experience first person view(only available when using a VR headset). Tap red icon "EXIT" to exit from virtual reality mode.

Flight Route Setting Mode

Tap this icon to go to the drawing interface, draw a flight route on the right area. The drone will fly according to the flight route. Tap again to exit from Flight Route Setting Mode.
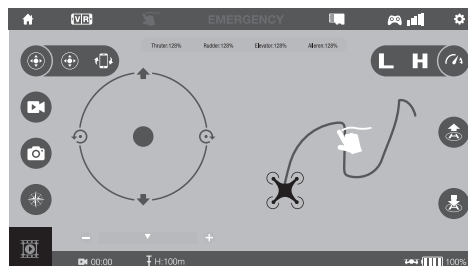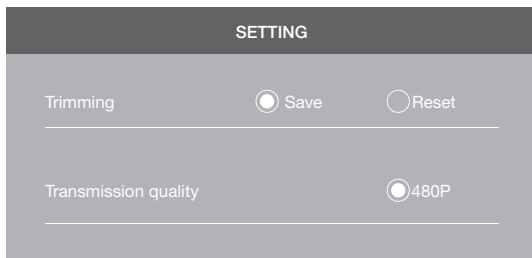

EMERGENCY   EMERGENCY STOP

This icon is red by default. Tap and the propellers will stop immediately .
The drone will fall straight to the ground.

Remote Control Signal

To show the drone's wifi signal strength.

⚙ Setting

Tap this icon to set parameters. Tap again to exit.

SETTING		
Trimming	⦿ Save	◯ Reset
Transmission quality	⦿ 480P	

Tap "Save" to save trimmer setting.
Tap"Reset" to factory reset.

Pictures transmission resolution

Remote Control mode selection

Virtual control stick

The virtual remote controller is hidden by default. Tap the icon to display the virtual remote controller.

Gravity Induction Mode

Tap this icon to enter Gravity Induction Mode. Tilt the phone to fly left / right and forward / backward. Tap again to exit from Gravity Induction Mode.
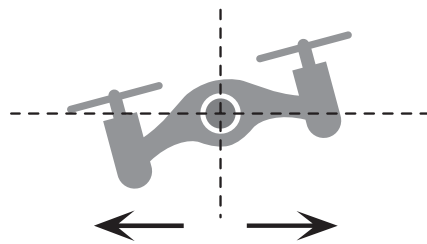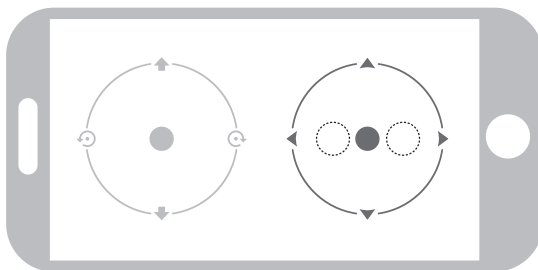
If the mobile phone tilts to the left / right, the Right Ball will move accordingly enabling the drone to fly left / right.
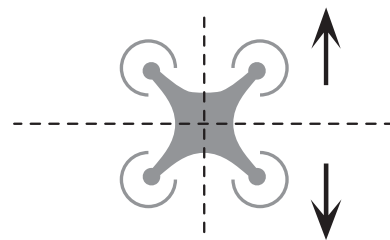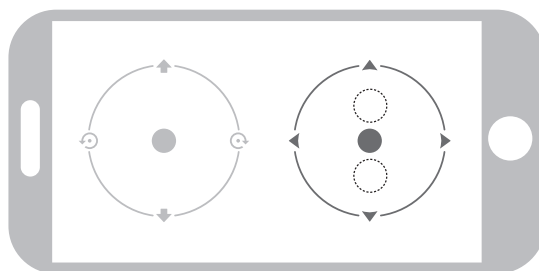
If the mobile phone tilts to forward / backward, the Right Ball will roll forward / backward enabling the drone to fly forward / backward.

▶️ Record Video

Tap to record video. The recording time will display at the bottom of the screen. Tap again to stop recording.

🎥 00:00

📷 Take Photo

Tap to take a photo.

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✸ Heading Hold Mode

Tap and it turns red, indicating that the drones has entered Heading Hold Mode. Tap again to exit from Heading Hold Mode. The icon turns highlight.

▤ Media

Click on this icon to view or delete the aerial video and photo. Click on the arrow to exit.

L H ◔ High / Low Speed Mode

By default, the drone is in Low Speed Mode "L". Click on "H" to enter High Speed Mode.

▲ One Button Take Off

Click on this icon and it turns red shortly. The drone will fly up automatically and stay flying at an altitude of 1.2 meters.

▼ One Button Landing

Click on this icon again and the icon turns red, the drone will fly down slowly and land on the ground. All propellers also will stop running.

↕ H:0.1m　Flying Altitude

The real time flying altitude(Based on the calibration altitude)

▭ 100%　Drone battery status icon

When the drone battery capacity left around 15%, the phone will vibrate to alarm that the battery is going to run out and you need to fly back and replace the battery.

Display the photos and video

The photos and videos are stored in the phone local gallery,
you can display in the phone directly. You also can display it in the APP through

shortcut icon 🖼 ▶ to enter the media interface.

Notice: App must be authorized to access the phone gallery, if not, then may be unavailable to display the video and photos.

APP CALIBRATION(After pairing successful)
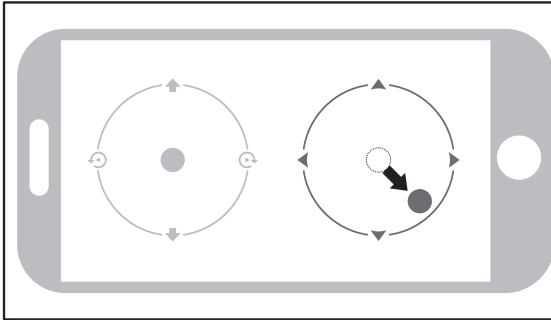
Move the right ball outward 45 degree (Do not touch the left ball). The drone body light will flash 3 times, and then become solid , indicating calibration is complete and the drone is ready to be controlled.

Tips: Crashing the drone may cause it to become imbalanced beyond the level that can be adjusted by the trimmer button. If this occurs, you can do the connection with Wi-Fi , pairing and calibration again.
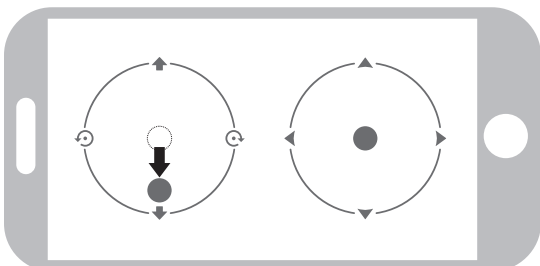
Take Off
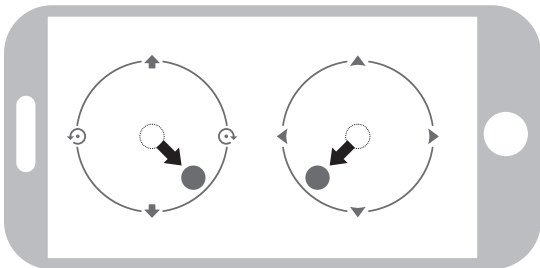
Move the left ball and right ball at the same time 45 degrees inward to active the motors. (This operation is used for starting/locking the motor. When the motor is working, it could be used to stop the motor urgently)
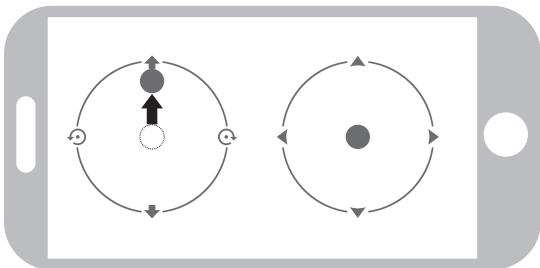
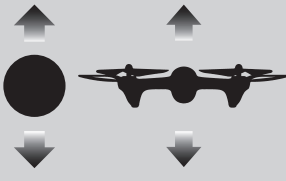Move the left ball up slowly, the drone will take off.

Landing

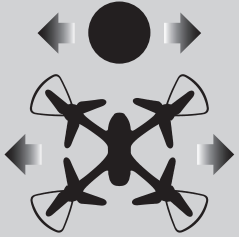Move the left ball down to the lowest position. The drone will land.

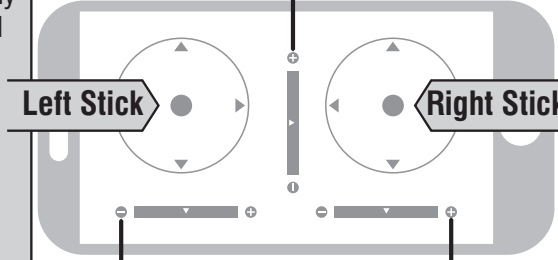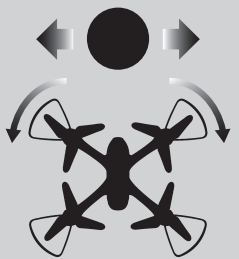**You can repeat above steps to be familiar about the APP interface.**

Flying Control

To fly up or down:

Move the Left Ball up to fly up and move the Left Ball down to fly back down. The drone will continue flying at appointed altitude after release the ball.

To rotate left or right:

Move the Left Ball to the left to rotate the drone to the left. Move the Left Ball to the right to rotate the drone to the right.

If the drone tilts forward or backward

Click the "-"of the Forward /Backward Trim to adjust the drone. If the drone tilts forward. Click the "+" to adjust the drone if the drone tilts backward.

Left Stick

Right Stick

If the drone rotates to left or right

Click the "+" of the Left/Right Rudder Trim If the drone rotates left. Click the "-"if the drone rotates right.

If the drone tilts to the left or right

Click the "+" of the left /Right Flying Trim if the drone tilts to the left Click the "-"to adjust the drone if the drones tilts to the right.
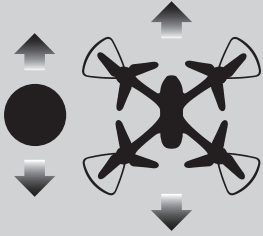
To fly right side or left side:

Move the Right Ball to the left to fly the drone to the left side, and move the Right Ball to the right to fly the drone to the right side.

To fly forward or backward:

Move the Right Ball up to fly the drone forward, and move the Right Ball down to fly the drone backwards.

Notice:

1. If you can not find the Wi-Fi signal to connect, turn off Wi-Fi and turn on again to search and connect.
2. The available Wi-Fi control radius/distance is 40m, please control the drone within this range.
3. When alternating control from mobile phone to transmitter, the transmitter left stick must be in the center position, or exit from the APP. If not then you can not control the drone alternately.

Spare Parts

For convenience, the spare parts are listed for you to choose, which can be purchased from the local seller.

U47-01
Drone Housing Cover

U47-02
Drone Bottom Housing

U47-03
A Propeller

U47-04
B Propeller
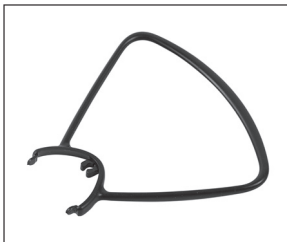
U47-05
Propeller Guard

U47-06
Landing gear
LED lampshade

U47-07
Motor Holder
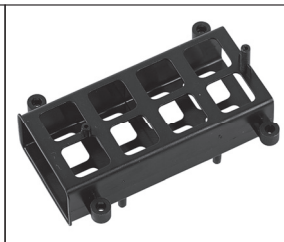
U47-08
Receiver board holder

U47-09
Power Button

U47-10
Cushion

U47-11
Steel pipe fixings

U47-12
Spindle steel pipe

U47-13
Copper ring

U47-14
Transmission gear

U47-15
A propeller motor
(Black white wire/
white connector)

U47-16
B propeller motor
(Red blue wire/
red connector)

U47-17 **Front A LED board** **(Green LED/** **white connector)**	**U47-18** **Front B LED board** **(Green LED/** **red connector)**	**U47-19** **Rear A LED board** **(Red LED/** **white connector)**	**U47-20** **Rear B LED board** **(Red LED/** **red connector)**
U47-21 **Receiver board**	**U47-22** **Camera board**	**U47-23** **Drone battery**	**U47-24** **USB cable**
U47-25 **Screw driver**	**U47-26** **smart phone holder**	**U47-27** **Transmitter**	
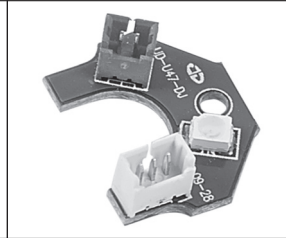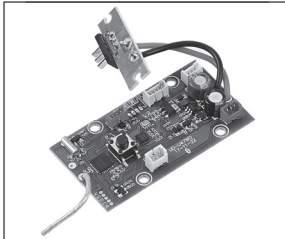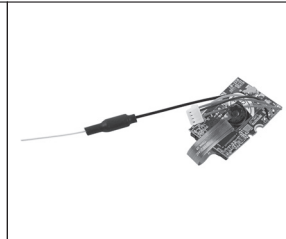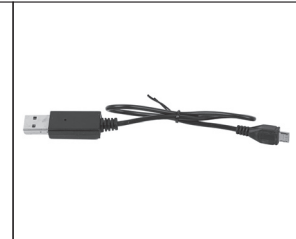
Important Notice

Our company's products are improving all the time, design and specifications are subject to change without notice.
All the information in this manual has been carefully checked to ensure accuracy, if any printing errors, our company reserve the final interpretation right.

Troubleshooting

No.	Problem	Problem Cause	Solution
1	The controller indicator light is off.	1. Low battery.	1. Replace the controller battery.
		2. The batteries are incorrectly positioned.	2. Install the batteries following the polarity indicators.
		3. Poor Contact.	3. Clean between the battery and the battery contacts.
2	Failed to pair the drone with the controller.	1. Indicator light is off.	1. The same as above.
		2. There is an interfering signal nearby.	2. Restart the drone and power on the controller.
		3. Improper operation.	3. Operate the drone step by step in accordance with the user manual.
		4. The electronic component is damaged for fiercely crash.	4. To buy spare parts from local seller and replace damaged parts.
3	The drone is under-powered or can not fly.	1. The propeller is seriously deformed.	1. Replace the propeller.
		2. Low battery.	2. Recharge the drone battery.
		3. Incorrect installation of propeller.	3. Install the propeller in accordance with the user manual.
4	The drone could not hover and tilts to one side.	1. Improper Calibration.	1. Please refer to the Calibration Instruction.
		2. The propeller is seriously deformed.	2. Replace the propeller.
		3. The motor holder is deformed after violent crash.	3. Replace the motor holder parts.
		4. The gyroscope did not reset after a serious crash.	4. Put the drone on the flat ground for about 10s or restart the drone to calibrate again.
		5. Motor is damaged.	5. Replace the motor.
5	The drone indicator light is off.	1. Low battery.	1. Recharge the drone battery.
		2. The battery is expired or over discharge protection.	2. Buy a new battery from local seller to replace the battery or charge the battery in accordance with the use manual.
		3. Poor contact.	3. Connect and disconnect the battery.
6	Could not see the picture.	1. There is an interfering signal nearby.	1. Practice and read the cellphone controlling instruction carefully.
		2. Camera is damaged.	2. Replace Camera.
7	Hard to control by cellphone.	Not experienced enough.	Practice and read the cellphone controlling instruction carefully.
8	Can't altitude hold.	1. The propeller deformed seriously.	1. Replace propeller.
		2. The motor is damaged.	2. Replace the motor.
		3. Atmospheric pressure is not stable.	3. Refer the altitude hold mode of use manual .

FCC Note

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 a ntenna.
● 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.

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

FCC Notice:

The equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. Modifications not authorized by the manufacturer may void user's authority to operate this device.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference.
(2) This device must accept any interference received, including interference that may cause undesired operation.

FCC Radiation Exposure Statement

The device has been evaluated to meet general RF exposure requirement.
The device can be used in portable exposure condition with out restriction.

MADE IN CHINA

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