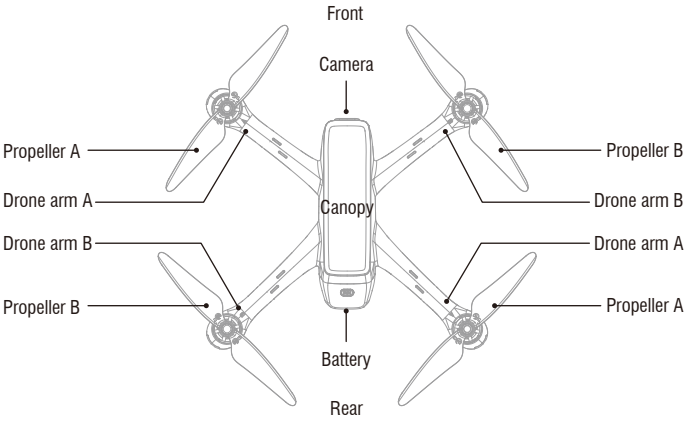
# U37
# USER MANUAL

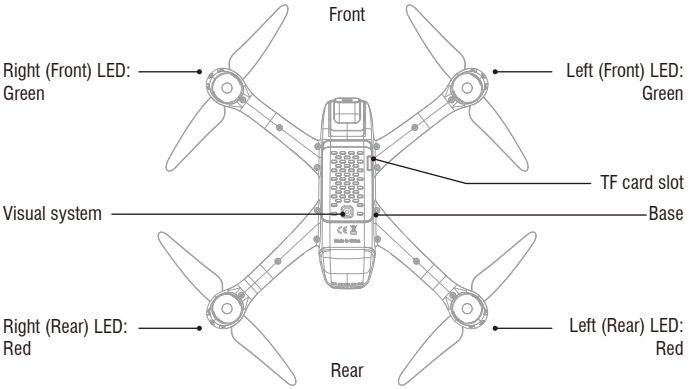
This product supports GPS positioning and is recommended for outdoor flight!!
* This wifi camera pinpoint is 5G, please confirm whether the phone is supported.

▲This product is suitable for users over 14 years old.
▲Stay away from the rotating propeller
▲Read the＜important statement and safety guidelines ＞carefully.

# Ready Before Take Off

## Drone Preparation

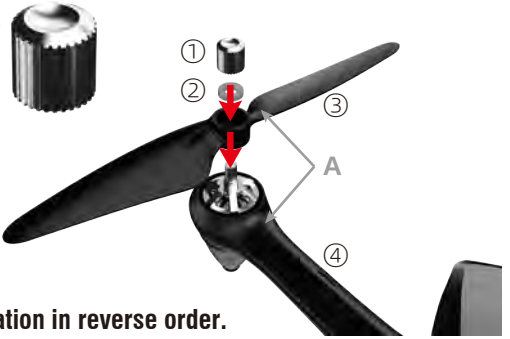


## Propeller Installation

Propeller A: Install the parts in the order shown in the picture and tighten the lock cap counterclockwise.

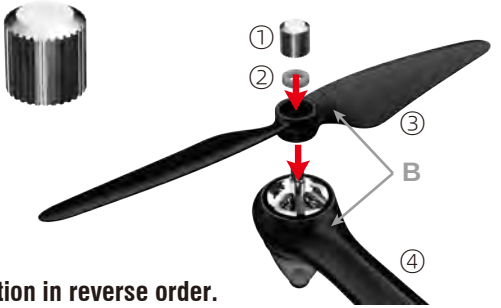
① Concave lock cap
② Silicone gasket
③ Propeller A
④ Drone arm A




**Disassembe:operation in reverse order.**

Propeller B: Install the parts in the order shown in the picture and tighten the lock cap clockwise

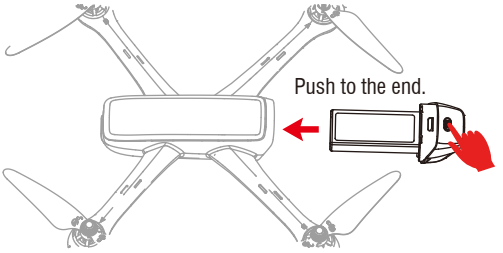
① Flat caps lock
② Silicone gasket
③ Propeller B
④ Drone arm B




**Disassembe:operation in reverse order.**

## Battery Installation and Charge

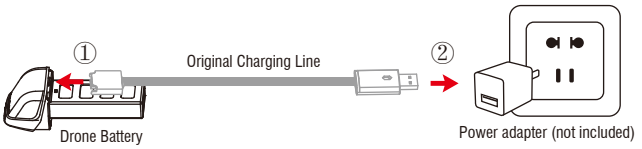
Battery power is insufficient in the original plant. It must be charged saturated before it can be used.




### Battery Charge for Drone

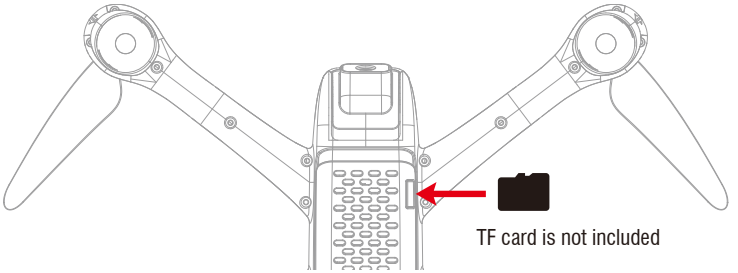
**Battery power is insufficient in the original plant. It must be charged saturated before it can be used.**

Connect the battery of the drone with the charging cable configured in the original factory, and then connect it to other USB charging ports.
When charging, the light on the charging line is red and the charge is green.



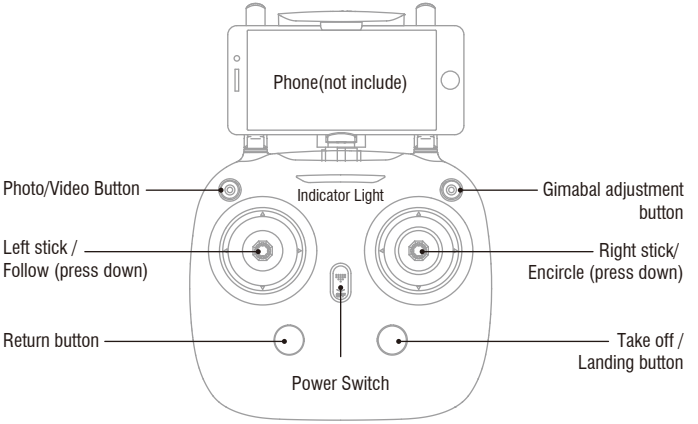

▲ **Only use the original charging line; suggest select Adapters with output current of 5V 2A .**

## Installation of TF Card



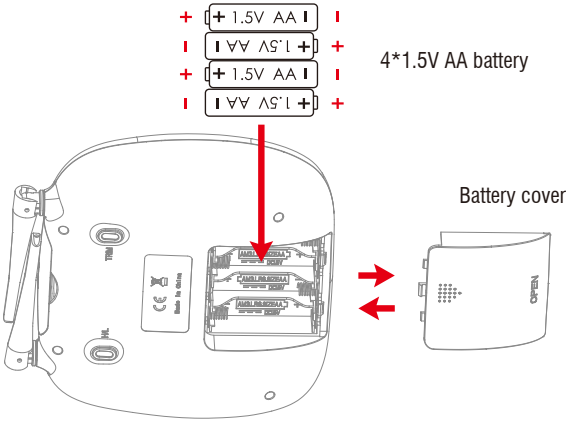

Insert the TF card into the slot on the belly of the fuselage, and pay attention to the metal contact surface orientation of the TF card.

## Transmitter Preparation

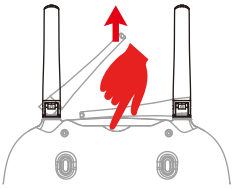



## Battery Installation

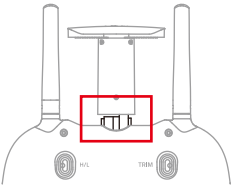
Open the battery cover of the remote controller and place the same type of battery with saturated capacity according to the'+-'electrode indication in the battery cell ( battery needs to be purchased separately ) .



## Mobile Phone Installation



Back of transmitter

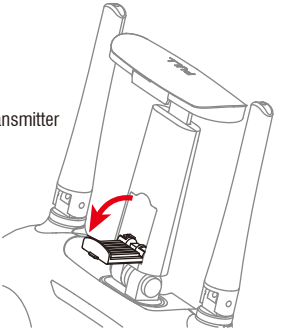


Back of transmitter

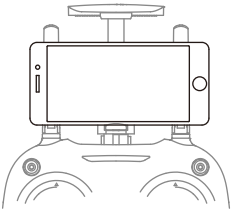
① Straighten the antenna. Gently pull up the clip from the notch.

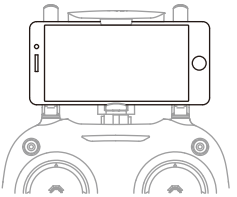
② Pull to the bottom and stop the metal shaft.

Front of transmitter



③ Open the clip of mobile phone.





Front of transmitter

④ Place the phone in the upper and lower clamps,and the clamp will automatically clamp the mobile phone.Pay attention to don't clip the buttons on the side of the phone.

# Flight Operations

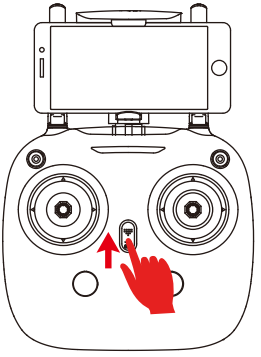
## Mobile phone connect with Drone

### Download and install APP: UDIGPS

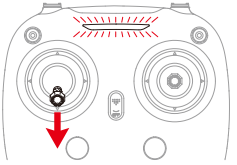
This software is suitable for mobile phones in the IOS and Android system.
For detailed operation, please check the system “HELP” of APP.

## Transmitter connect with Drone

### Frequency Pairing



① Turn on the power



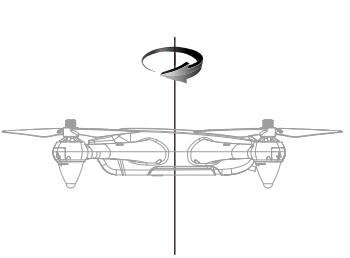
② Pull the left stick to the lowest position and let go, the indicator light changed to slow flash.it indicates the transmitter enters the frequency state.

③ After installing the batteries, the drone is placed on the horizontal ground. After the navigation light is on for 2 seconds, the fuselage lights become flash, and the drone and the transmitter are connected to each other successfully. When the left light of the drone flashes and the right light does not turn on, it is suggested that the horizontal correction of the compass is needed at this time.

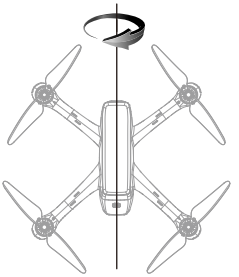
Horizontal ground

## Compass calibration

Rotate the aircraft horizontally until the transmitter says "di... "Level correction to complete. When the left light turns to long light and the right light flashes, enter vertical correction.
Rotate the vehicle vertically until the transmitter says "di... "A sound, vertical correction over. The four navigation lights are spinning and flashing.



Level Correction



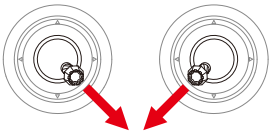
Vertical correction

**Tips: It's a must to have the right compass adjustment first each time you start the drone, or it can't work normally.**

## GPS signal search

After the frequency matching is successful, the drone automatically searches for GPS signals. When the left blue indicator light of the transmitter changes from flashing to long bright, indicating that the GPS connection is successful. But if you don't connect the GPS, the flight height defaults to about 3 meters.

## Unlocking the drone

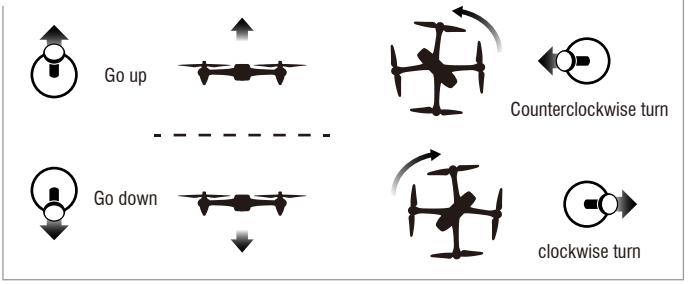


Push the left and right stick inward to the 45 degree angle simultaneously.
On standby drone, motor rotation, drone Unlocked.
When the drone is not take off, the motor stops rotating and the drone is locked.

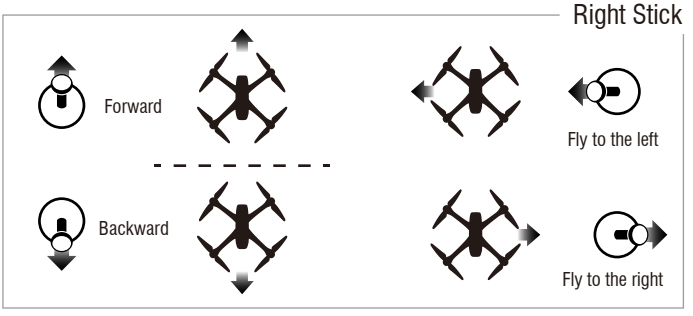
**The drone can only take off when the motor is unlocked.**

## Control stick operation

Left stick




Right Stick

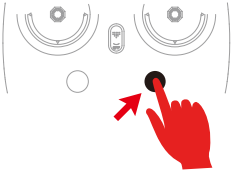



## Take off

After unlocking the motor， press the "take off" button, and the drone will automatically rise and hover at a height of about 1.2 meters .

## Landing

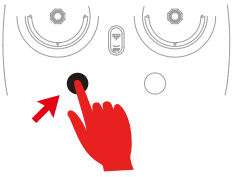
During the flight， press the“landing”button, the transmitter make a sound of “di”and the drone slowly land until landing.



**Notice**： **Don’t operate the left stick during landing, otherwise the current command will automatically fail.**

## Automatic return

During the flight, press the "return " button, and the transmitter will sound "di", and the drone will automatically return to the take off point.
(during returning, the transmitter will continuously sound "di". To stop homing, just press this button again.)

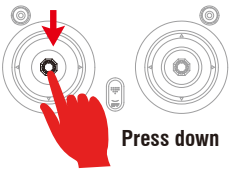


**During the automatic return, the remote stick is locked. When the drone returns to the take off point and aligns with the take off direction, the remote stick is automatically unlocked.**

## Following mode

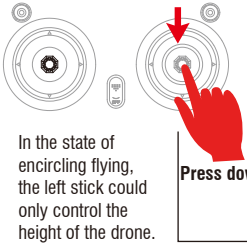
While flying, press left stick down, the transmitter sounds “di”, drone enters the function of following. Now it can be controlled by the user.

The function is standard by the mobile phone APP signal, so it’s a must to make the drone and APP connected normally, turn on the mobile location service at the same time, otherwise this function is invalid.




## Encircling flight

In flight, press the right stick down, and the transmitter will make the sound of "di". Then it goes to the function of encircling flight. The drone will fly to a default radius then it waits for the direction controlled by the user. Adjust the speed and direction of the drone by manipulating the right stick. It is the minimum radius of the default radius acquiescently ,so drone flies only in the sub range.




In the state of encircling flying, the left stick could only control the height of the drone.

Turn left, the drone flies clockwise; Move further, the flying speed will become faster.

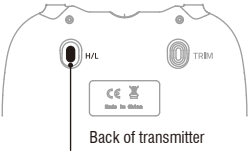
Turn right, the drone flies counterclockwise; Move further, the speed will become faster.

Go upward to narrow the radius of encircling.

Go downside to enlarge the radius of encircling.

## Speed mode switch

Press "H/L" it will make the sound"di" ,this indicates to the low speed mode"L. Press down it again, it makes the sound of 'di' for twice, it comes to the middle speed mode "M". Press down the key again, it makes "di. di. di" three times to enter high speed mode "H" .

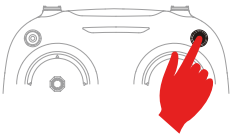



Speed switch

Low speed: suitable for beginners to practice without wind.
Medium speed: suitable for skilled operator operating in light breeze.
High speed: suitable for professional operation in outdoor wind resistance.

## Gimbal adjustment

Long or short press the adjustment button of the Gimabal to adjust the Angle of aerial photography of the camera.



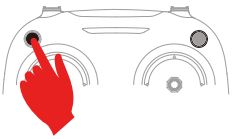
Tilting -45° to 0°.

## Photo

Short press "photo/video "once to take a picture.

When taking photos, the transmitter will send out a "di" sound.

## Video



Long press the "video" button for 1 second to enter the recording state,to repeat this action to stop r ecording and save video.

When taking video， the transmitter will send out a"di"sound a long rang.

### Notes for Filming

① Photos taken will be saved to mobile picture library and drone TF card; Video can be saved in TF card first, which can be downloaded to mobile picture library for viewing. Please download video according to APP prompt. When downloading, maintain the normal connection between the mobile phone and the flyer, and the TF card is in the card slot.
② The APP must be authorized to read the phone gallery to view the aerial photos.
③ Turn off the power supply of the drone before taking out the TF card.
④ When aerial video is read by computer,it must have corresppnding playback software.

## Intelligent Hover

Intelligent flight control can calculate the suspended height ,the visual system points the ground position,GPS coordinates allow the vehicle to stay in your desired position Buy. The drone is like a camera fixed in the air. Aerial photography and control are very convenient.

**Notice: Drone must be connected to GPS properly in order to give full play to fixed-point hovering function. Atmospheric pressure or wind force affects hovering stability.**

## Low Battery Alarm

When the battery power of the point remote is quickly exhausted, it will make the sound of “di”“di”“di” constantly to alarm you, now you should land the drone as soon as possible to charge the battery.

## Automatic Return

While flying, in case that the battery of the drone is quickly exhausted, it will make the sound of “di”.“di” to alarm you, the drone's indicator lights turn from long to bright. After alarming you, the drone automatically returned to the take-off point.

**Notice: After low-battery alarm, the drone will return home.**
**Meanwhile, its controllable range will be reached to the 20 meter**

## Out of Range Alarm

When the drone flying out of the max remote control distance, the transmitter will beep “didi...didi...didi...” to alarm the user to fly back the drone within range immediately.

## Stuck Protection

When the propeller is stuck and does not rotate, the drone will start the automatic protection function to stop the motor working.

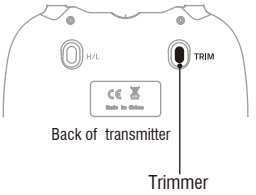
## Out of Control Protection

Out of control protection refers to the flight control system automatically controls the drone to fly back to the return point after receiving the remote control signal (ie, out of control).
The drone does not have the function of avoiding obstacles during the uncontrolled return flight. The user can set the return altitude value to avoid obstacles on the way back.

### Possibility of entry into runaway protection mode

* The transmitt is off.
* Flight distance exceeds the effective distance of remote control signal transmission.
* There is an obstacle between the transmitter and the drone.
* Transmitter signal is disturbed.

## Flying Trimmer




Forward / Backward Trimmer

When take off, if the drone tilts forward , press the trimmer button, and push the right stick down. Otherwise push it up.

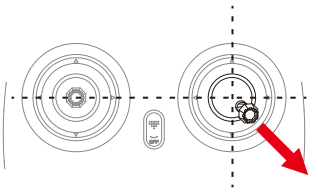
Left / Right Tilts Trimmer

When take of, if the drone tilts to the left, press the trimmer button,and push the right stick to the right. Otherwise push it to the left.

Left / Right Rotates Trimmer

When flying, if the drone head rotates to the left, press the trimmer button, and push left stick to right. Otherwise please push it to the left.

## Calibration (This action is used when flying abnormally)



After the calibration of the compass, the right control lever of the remote control is pushed to the lower right corner by 45°, and the remote control emits a sound of "di",and the aircraft light flashes and releases,indicating that the gyroscope has been calibrated.

Tips: When the drone doesn't appear to use the trim correction flight status, or being hit hard (or falling abnormally). thus cause the difficulties in controlling. Now frequency making and adjustment are needed again, drone should be placed on horizontal ground.

## Attention

① **Switching sequence. At first, turn on the power of the transmitter, then turn on the power of the drone. After the end, turn off the power of the drone first, and then turn off the power of the transmitter.**

② **Improper operation caused the crash. It is necessary to check and confirm the connection of the motor，propeller or battery of the drone and the damage degree, so that the drone can fly again. If there is damaged, please replace the new accessories or prone to accident.**

# Parameter

### Drone

| | |
|---|---|
| Weight | 410g |
| Size | 300mm (Diagonal motor shaft spacing) |
| Propeller radius | 94mm |
| Maximum ascent rate | 1.7m/s |
| Maximum descent rate | 1.7m/s |
| Maximum speed | About 24km/h |
| Flight altitude limit | 250m |
| Maximum flight time | 18 minutes (calm) |
| Maximum wind speed | Level 3 |
| Maximum tilt angle | 35° |
| Operating TemperatureRange | 0°C to 40°C |
| GNSS | GPS / GLONASS |
| Operating frequency | 2.4Ghz / 5G wifi |

### Drone Battery

| | |
|---|---|
| Capacity | 1800mAh |
| Voltage | 7.4V |
| Type of battery | LiPo |
| Energy | 13.32Wh |
| Net Weight | About 116.2g |
| Charging temperature range | 5°C to 40°C |
| Charging Time | About 7 hours. |

### Gimbal

| | |
|---|---|
| Stable | Single axis（tilt） |
| Controllable range | Tilting：-45° to 0° |

Tips: the above data are the test data of UDIRC toy lab, for reference only.

## Camera

| | |
|---|---|
| Image resolution | 1920×1080p |
| Static Photography Mode | Single shoot |
| Video Resolution | 1920×1080p |
| Image mode | RGB Mode |
| Frame Rate | 25 |
| File System Support | FAT 32 |
| Image format | JPEG format |
| Video format | MP4 Compressed format H.264 |
| TF Card | Support Class 10 Micro TF card，<br>Supreme support 64G.≥10 level Micro TF Card. |
| Operation Temperature | 0°C - 40°C |

## Transmitter

| | |
|---|---|
| Operation Frequency | 2.4Ghz |
| Maximum transmission distance | 500m (no interference and barrier-free outside) |
| Mobile device bracket | Suitable for smartphones |
| Operating Temperature | 0°C to 40°C |
| Battery | 4*1.5 AA |

## APP

| | |
|---|---|
| App Name | UDIGPS |
| Image transmission system | WiFi 5 GHz |
| Real time image transmission | 720 p@20 fps |
| Operation System | This software is suitable for mobile phones in the IOS 9.0 or later and Android 4.4 or later system. |

## Charge

Input 5V ⎓ 2A

Tips: the above data are the test data of UDIRC toy lab, for reference only.

# Troubleshooting

| NO. | Problem | Problem cause | Solution |
|---|---|---|---|
| 1 | The controller Indicator light is off. | Low battery. | Replace the controller battery. |
| | | The batteries are incorrectly. | Install the batteries following the polarity indicators. |
| | | The batteries are incorrectly positioned. | Clean the dirt between the battery and the battery contacts. |
| 2 | Failed to pair the drone with the controller. | Indicator light is off. | The same as above. |
| | | There is an interfering signal nearby. | Restart the drone and power on the controller. |
| | | Mis-operation. | Operate the drone step by step in accordance with the user manual. |
| | | The electronic component is damaged for fiercely crash. | To buy spare parts from local seller and replace damaged parts. |
| 3 | The drone is under-powered or can not fly. | The propeller is seriously deformed. | Replace the propeller. |
| | | Low battery. | Charge the drone battery. |
| | | Incorrect installation of propeller. | Install the propeller in accordance with the user manual. |
| 4 | The drone could not hover and tilts to one side. | Improper Calibration. | Please refer to the Calibration. |
| | | The propeller is seriously. | Replace the propeller. |
| | | The motor holder is deformed after violent crash. | Replace the motor holder parts. |
| | | The gyroscope did not reset after a serious crash. | Put the drone on the flat ground for about 10 minutes or restart the drone to calibrate again. |
| | | Motor is damaged. | Replace the motor. |
| | | No proofreading compass | Reproofreading the compass. |
| 5 | The drone indicator light is off. | Low battery. | Recharge the drone battery. |
| | | The battery is expired or over discharge protection. | Buy a new battery from local seller to replace the battery or charge the battery. |
| | | Poor contact. | Connect and disconnect the battery. |
| 6 | Could not see the picture. | There is an interfering signal nearby. | Practice and read the cellphone controlling instruction carefully. |
| | | Camera is damaged. | Replace Camera. |
| 7 | Hard to control by cellphone. | Not experienced enough. | Practice and read the cellphone controlling instruction carefully. |
| 8 | Can't altitude hold. | The propeller is seriously. | Replace propeller. |
| | | Motor is damaged | Replace the motor. |
| | | Atmospheric pressure is not stable. | Refer to "Altitude Hold Mode"instruction. |
| 9 | Can't position hold. | Whether the GPS has connected or not. | Search again to connect the GPS signal. |
| 10 | Searchedbut could not find the GPS signal. | GPS module is damaged. | Please replace a new one. |
| | | GPS module plug is loose. | Please check to see if it's connected normally. |

# Transmitter indicator status and description

| No. | Transmitter indicator status | Description |
|---|---|---|
| 1 | Blue lights out, red lights flash | Status after boot-up |
| 2 | Blue lights out，red light flash slowly | Enter wait for frequency comparison |
| 3 | Blue lights fast flash，red lights long bright | GPS Signal Search |
| 4 | Blue lights and red lights long bright | GPS positioned |

**Drone Battery 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.

**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.

## 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.

www.udirc.com

MADE IN CHINA