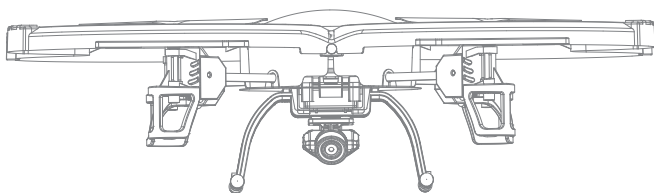


**UDI R/C**<sup>®</sup>

# DISCOVERY WiFi

**U818A WIFI HD CAMERA**

## Instruction Manual



Remote Control



Photo



Video



USB Charger



6 Axis Gyro



360° Flips



Wifi Camera



Low Voltage Alarm



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## **IMPORTANT NOTICE:**

### **Important Statement:**

- (1) This product is not a toy but a piece of complicated equipment which is integrated with professional knowledge by mechanic, electronic, air mechanics, high-frequency emission etc. It should be installed and adjusted correctly to avoid accidents. The user must always operate in a safe manner. We undertake no liability for human injury or property damage caused by improper operation, as we have no control over setup, use and operation of this drone.
- (2) This drone is suitable for experienced RC drone users aged 14 years or above.  
Not safe for users under the age of 14 to use.
- (3) The flying field must be legally approved by your local government.
- (4) UDI RC has entrusted the distributor to provide technical support and after-sale service. If you have any questions about use, operation, repair etc., please contact your local distributor.

### **Safety Precautions:**

Improper assembly, broken main frame, defective electronic equipment, or unskilled operation may cause unpredictable accidents such as drone damage or human injury. Please pay special attention to the following safety procedures:

#### **(1) Keep away from obstacles and crowds**

The speed and status of a flying RC drone is uncertain and it may cause potential danger. The user must keep away from crowds, tall buildings, power lines etc. when operating a flying RC drone. Do not fly a RC drone in wet or storm/thunder conditions

#### **(2) Keep away from humid environment**

The drone is made of precise electronic components. Humidity or water vapor may damage electronic components causing accidents.

#### **(3) Safe operation**

Please operate the RC drone in accordance with your flying skills. User fatigue, listlessness, and improper operation may increase the rate of accidents.

#### **(4) Keep away from rotating parts**

Rotating parts can cause serious injury and damage. Keep face and body away from rotating motors.

#### **(5) Keep away from heat**

The RC drone is made of metal, fiber, plastic, electronic components etc. Keep away from heat and direct sunshine to avoid distortion and damage.

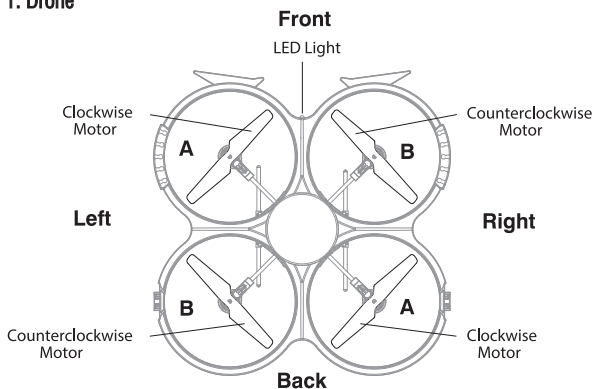
#### **(6) If you're about to crash into something, turn the throttle down to zero.**

#### **(7) If you're a beginner learning to fly indoors, tie the drone down or surround it by a cage.**

Due to the size of the drone it is not advisable to fly it indoors unless there is sufficient open space that allows for unobstructed operation of the drone.

# DRONE AND TRANSMITTER OVERVIEW

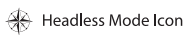
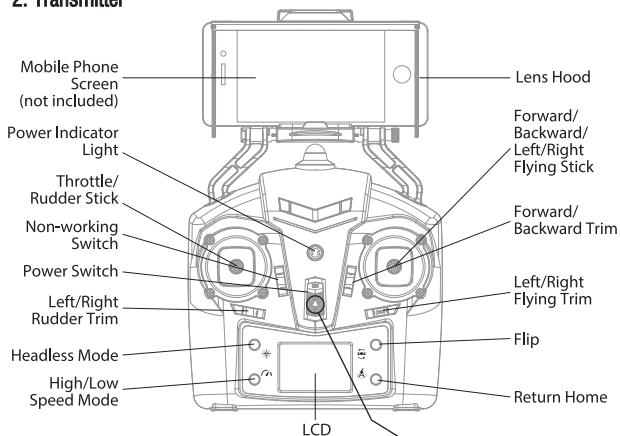
## 1. Drone



Picture 1

NOTE: (Red LED lights for the two back motors)  
(Blue LED lights for the two front motors)

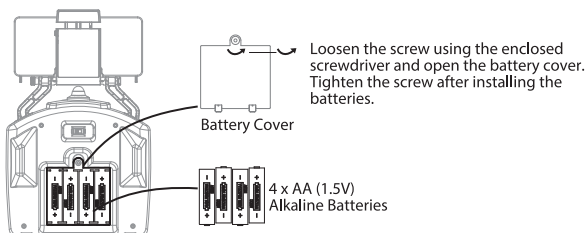
## 2. Transmitter



Picture 2

## TRANSMITTER SETUP

**Battery Installation:** Open the battery cover at the back of the transmitter and install 4 AA alkaline batteries (not included) in accordance with electrode instructions.



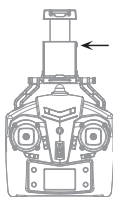
Picture3

### Caution:

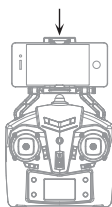
1. Make sure the batteries are installed correctly by matching the electrodes.
2. Do not mix new and old batteries.
3. Do not mix different kinds of batteries.

## Attaching your Mobile Phone to Transmitter

1. Press the self-locking switch on the top right side of the mobile holder and push the holder to a fully open position (Picture 4).
2. Place the mobile phone facing frontward position, pull the mobile phone holder down, and press tightly as possible to secure the mobile phone and transmitter. (Picture 5)

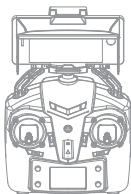


Picture 4



Picture 5

3. Insert the lens hood into the slot and make sure the lower edge of the lens hood is as close to the mobile phone as possible (Picture 6).



Picture 6

## CHARGING INSTRUCTIONS

1. Connect the USB charging cable to any available USB port, then connect the drone battery to the USB charging cable.
2. After connecting the USB charging cable to the USB port, the USB indicator light will turn green. After connecting the USB charging cable to the drone battery, the USB indicator light will turn red.
3. When fully charged, the light will switch to a solid green.
4. Average charging time: about 50 minutes

### Note:

- \* To avoid damage and explosions, never place the batteries on a high temperature surface or close to fires or heating devices.
- \* Never use the batteries for any purpose other than with the drone.
- \* Never place batteries in water. Keep in a dry place only.
- \* Never attempt to open the batteries
- \* Never leave the batteries unsupervised during charging.

## Charging Methods



Phone Charger



USB



Portable Charger



Computer



Car Charger



Power Bank

NOTE: For faster charging, it is recommended to use a 5V 2A AC Adapter (not included) to charge the battery.



USB Charging Cable Drone Battery



### Li-Po Battery Disposal & Recycling

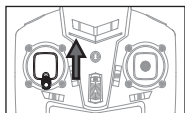
Wasted Li-Po batteries must not be placed with household trash. Please contact your local environmental or waste agency or your nearest Li-Po battery recycling center.



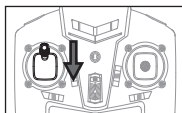
## CALIBRATION INSTRUCTIONS

To ensure control of your drone, it is important to always calibrate your drone with your transmitter before flying. Re-calibrating is necessary in the case of difficult operation after take off.

1. Turn off the drone switch and then turn off the transmitter power switch.
2. Turn on the transmitter switch, push the Throttle Stick all the way up, then all the way down (Picture 7 and 8), and the transmitter enters pairing mode.



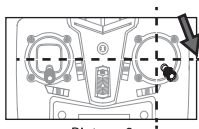
Picture 7



Picture 8

3. Power on the drone and place it on a flat surface in a horizontal position. The back of the drone should face the user and the front of the drone should face forward. You will hear a “di, do, di” beeping noise three seconds later, which indicates successful code pairing. The drone light will turn solid.

4. Do not move the Throttle Stick before successful calibration. Push the Forward/Backward/Left/Right Stick as shown below (See Picture 9). The drone light will flash, which indicates that the drone is calibrating. When the drone light remains solid, your drone is ready to fly.



Picture 9

## IMPORTANT PRE-FLIGHT INSTRUCTIONS

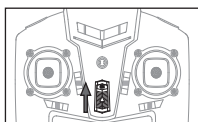
Checklist Before Flight:

- (1) Flying area must be spacious. We suggest at least 26Ft (length)\*8M (width)\*5M (height) of flying space.
- (2) Make sure the battery of the drone and the transmitter are fully charged.
- (3) Make sure the Throttle Stick of the transmitter is in the lowest position.
- (4) Make sure your transmitter and drone are calibrated.

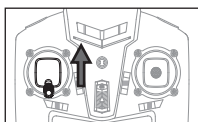
### Pre-Flight Operations:

1. Turn on the transmitter switch (Picture 10), it's indicator light will flash quickly. Push the Throttle Stick all the way up then all the way back down (shown Picture 11/12). The indicator will slowly flash which indicates the transmitter entered frequency pairing.
2. Put the battery into the drone battery box, and then connect the battery with the drone. The front light will flash slowly. (Picture 13)
3. Place the drone on a flat surface. The indicator light will turn solid which indicates successful frequency pairing and the drone is ready to be controlled.

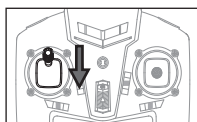
**Important :** For better flight control, please make sure the gyro of the receiving board is placed in a horizontal position after powering the drone for better flight control.



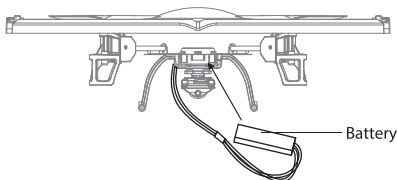
Picture 10



Picture 11



Picture 12



Picture 13

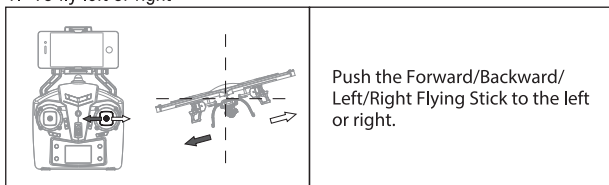
## TAKE OFF INSTRUCTIONS

To get your drone in the air, the only control you need is the Throttle Stick.

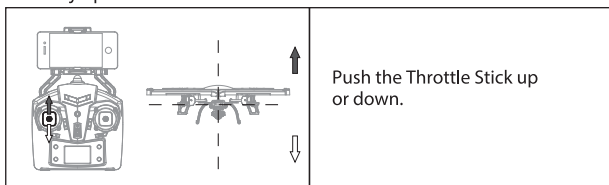
1. Slowly push the Throttle Stick up further than before until the drone lifts up. Pull the throttle back down to zero to land the drone.
2. To get comfortable with the Throttle Stick's sensitivity, repeat the first step a couple of times.

## BASIC FLIGHT CONTROLS

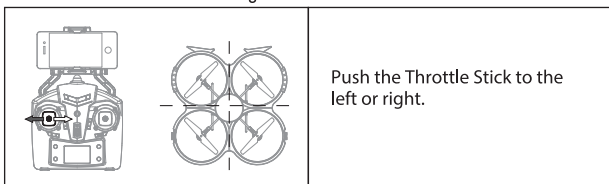
1. To fly left or right



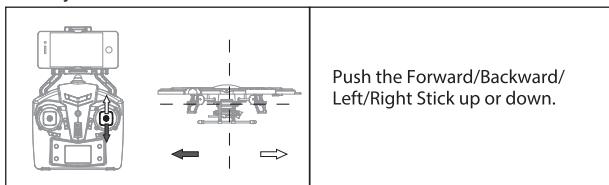
2. To fly up or down



3. To rotate the drone left or right

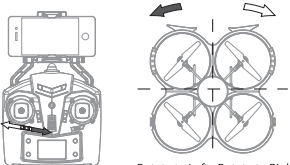


4. To fly forward or backward

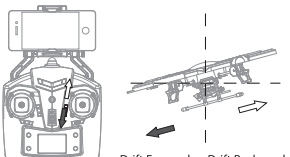




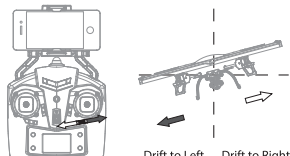
## 5. If the drone rotates to the left or right when taking off

 <p>Rotate to Left   Rotate to Right</p>	<p><b>Left/Right Rudder Trim</b> Adjust the Left/Right Rudder Trim to the right if the drone rotates to the left when taking off, and adjust trim to the left if drone rotates to the right.</p>
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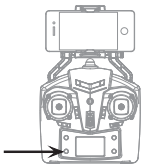
## 6. If the drone drifts forward or backwards when taking off

 <p>Drift Forward   Drift Backward</p>	<p><b>Forward/Backward Trim</b> Adjust the Forward/Backward Trim backwards if the drone drifts forward when taking off, and adjust trim forwards if drone drifts backwards.</p>
---	---

## 7. If the drone drifts to the left or right when taking off

 <p>Drift to Left   Drift to Right</p>	<p><b>Left/Right Flying Trim</b> Adjust the Left/Right Flying Trim to the right if the drone drifts to the left when taking off, and adjust to the left if drone drifts to the right.</p>
--	---

## 8. High/Low Speed Mode

	<ol style="list-style-type: none"><li><b>1. MODE 1: Low speed mode.</b> Suitable for beginners to practice in windless conditions.</li><li><b>2. MODE 2 : High speed mode.</b> Suitable for experienced drone users.</li></ol>
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# GETTING TO KNOW YOUR DRONE FEATURES

## HEADLESS MODE

Drones generally have a front and back indicated by LED lights or colored propellers. Before take off, users are instructed to position the head of the drone away from the user. When flown in daylight or at a far distance, determining which side is the front or back becomes difficult.

### What is Headless Mode?

The Headless Mode feature allows the user to operate the drone without worrying about the orientation. This feature is great for beginners as it reduces the steepness of learning curve. By default, drone's are in Non-Headless Mode.

### How does Headless Mode work?

The algorithms inside of the drone's micro-controller ensure that every turning change is compensated. For example, with Headless Mode turned ON, after proper take off, if the user turns the drone 90 degrees to the left, it'll still go forward when you push the flying stick (right stick) forward. NOTE: When headless mode is OFF, this would make the drone go left.

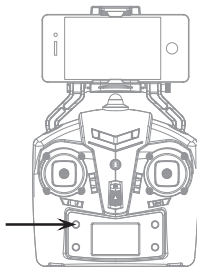
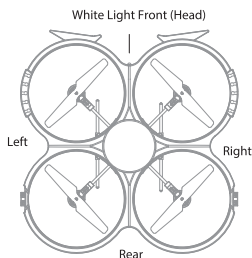
### To turn on Headless Mode:

Prerequisite: Position your drone so it's front is your front.

- Press the Headless Mode button. The LED light of your drone will flash signaling that the Headless Mode is ready.

### To turn off Headless Mode:

- Press the Headless Mode button again. The LED light of your drone will turn solid, signaling the Headless Mode is now off.



NOTE: When the Headless Mode is on and the direction and angle of the drone is imbalanced, you can turn off the headless mode, restart it, and the direction and angle will recover to its normal status.

## RETURN HOME FUNCTION

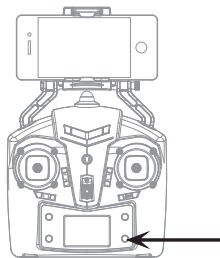
### What is the Return Home Function?

The Return Home Function allows users to bring their drone back home automatically by pressing the Return Home button.

**IMPORTANT:** The Return Home Function is only available when the drone is in Headless Mode.

### How Does the Return Home Function Work?

When the Return Home button is held down, the drone will recognize the signal from the transmitter and start making its way back toward the transmitter.



### How to use the Return Home Function?

**Prerequisites:** Put the drone in Headless Mode (front white light flashes) and make sure when flying, the drone is within range of the transmitter. Do not move from the launch point.

- To automatically bring home your drone home, press the Return Home button until your drone has returned.
- To stop the drone from returning, move the sticker forward/backward and left/right.

## GRAVITY INDUCTION MODE

Gravity Induction Mode is a feature available on the udirc-FPV app that allows you to fly your drone without touching your mobile screen. Turning on Gravity Induction Mode will allow you to fly the drone forward/backward left/right in correspondence to the angle of the mobile phone. For example, if you tilt your mobile phone forward, the drone will fly forward, if you tilt your mobile phone to the left, the drone will fly left. Refer to page 16 for additional instructions

## 360° STUNTS

Whenever your drone is about 10 feet or higher in the air, you can push the flying stick and hit the Flip Button and push the flying stick and the quadcopter will do a flip to corresponding direction in air. Be ready to use your Throttle Stick right after, otherwise it will run itself into the ground.

**NOTE:** Drone tricks and stunts can take time and practice before mastering. Please familiarize yourself with basic flying techniques before attempting tricks.

**DO NOT ATTEMPT ANY STUNTS INDOORS OR WHEN THERE ARE OTHER PEOPLE CLOSE BY**