

Ages 14+

**UdiRC**<sup>®</sup>

# NAVIGATOR **W**

Equipped with 120°wide-angle 720P HD WIFI Camera



## **U31W**

# **Operations Guide**

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# Important Statement

Thank you for buying UDIRC's product. Children under the age of 14 years old must not use this product. Please read this brochure carefully before using the product. The contents of the manual is deemed to be accepted once the user has flown the drone.

This product is not an ordinary toy but a piece of complicated equipment which is integrated with professional knowledge of mechanic, electronic, air mechanics, high-frequency emission etc. The user must behave responsibly when using this product and relevant APP. The drone and relevant APP must only be used for legal purposes. With the purchase of this drone, the user has agreed to obey the above rules and act within the constraints of local laws and regulations.

We do not undertake any liability for the accidents caused by environment, illegal behavior, improper operation or refitting of the drone after product sale.

We have entrusted the distributor to provide technology support and after-sale service. If you have any questions about use, operation, repair etc., please contact the local distributor.

**\* Please only use the provided spare parts or purchase original UDIRC accessories for replacement. If users have done otherwise, we, UDIRC do not assume any responsibility.**

**\* Keep the packing and user manual for future reference.**

## Safety Precautions

This drone is only suitable for experienced RC drone users aged 14 years and above. This product contains small parts, therefore, please keep out of children's reach.

### (1) Flying Area

The flying field must be legally approved by your local government. Do not fly the drone in the vicinity of the airport. Keep far away from the airport of distance more than 5km when flying a RC drone. Flying fields must be spacious and it is recommended for them to be at least 8M (length)\*8M (width)\*5M (height).

### (2) Use correctly

Improper assembly, broken main frame, defective electronic equipment or unskilled operations may all cause unpredictable accidents such as drone damage or human injury. Please pay special attention to safety operations and be knowledgeable of user responsibilities so as to prevent accidents.

### (3) Keep away from obstacles and crowds

The speed and status of a flying RC drone at times can be unpredictable and may pose a potential danger. Therefore, the user must keep away from crowds, tall buildings, power lines etc. when operating a flying RC drone. Do not fly the RC drone in rainy, storm, thunder and lightning weather conditions for the safety of user, people and their properties.

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

The drone consists of precise electronic components. Humidity or water vapor may damage the electronic components and cause accident.

#### **(5) Safe operation**

Please operate the RC drone in accordance with your physical status and flying skills. Fatigue, listlessness and improper operation may increase the rate of accident.

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

Rotating parts like propellers or motors may cause serious injury and damage. Keep the face and body away from rotating parts.

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

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

**(8) The drone should be controlled within max control distance. Do not fly the drone near tall buildings, high voltage cables or other places with signal interference. These places may cause signal interruption causing the drone to get out of control, which may result into accidents.**

**(9) Do not touch the hot motor with your bare hands in order to avoid being burnt.**

**(10) Please use the recommended charger only. Power off the drone before cleaning the RC drone. Check the USB cable, charging plug etc. regularly to ensure they are working properly. If there is any damage, stop using immediately until repair or replacement has taken place.**

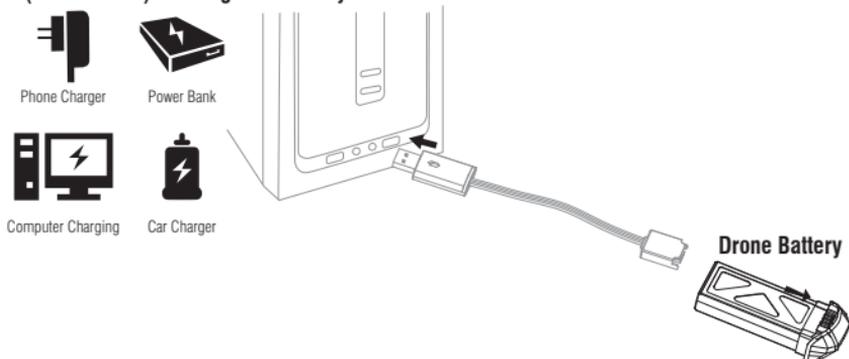
## **Safe Notice for Drone Battery**

- \* Do not expose the battery to high temperatures, such as fire or heating device so as to avoid damage or explosion.
- \* Do not use the battery to hit hard surface.
- \* Do not put the battery in water and keep it in dry place.
- \* Do not open the battery.
- \* Do not leave the battery without supervision when charging.
- \* Make sure that there is no short circuit of the power wire.
- \* Please use the recommended charger only.
- \* Check the surfaces of the charger wire and plug regularly. Do not use any broken charger.
- \* If the drone will be flown for more than a week, maintain the drone battery with about 50% power to keep its performance and working life.

# Charging Instruction for Drone Battery

1. Connect the drone battery with USB cable firstly and then choose one of the methods as shown in the pictures below to connect with USB plug.
2. The red USB indicator light keeps bright when charging and the light becomes 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.



## 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.

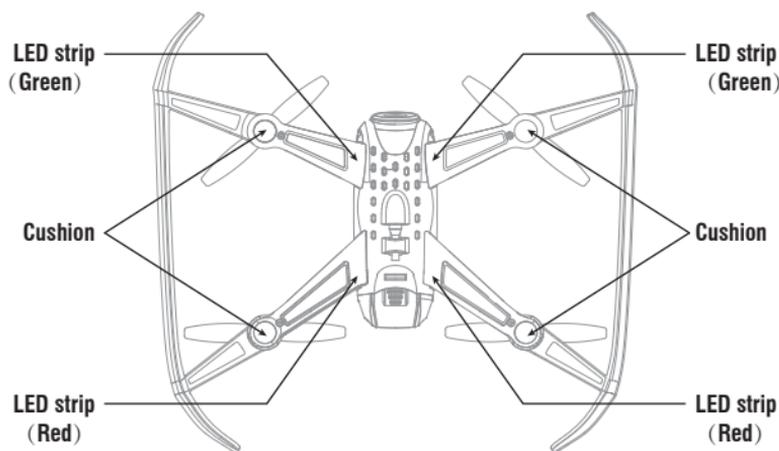
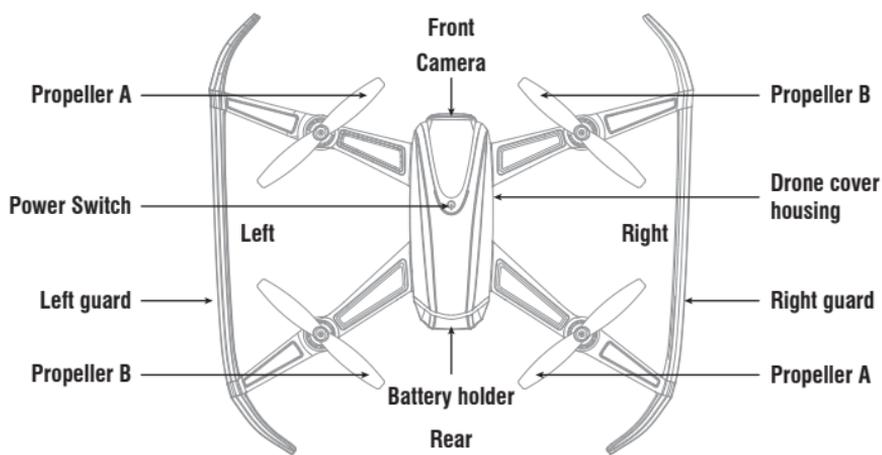


# Checklist Before Flight

1. Make sure the drone battery and transmitter battery are fully charged.
2. Make sure the left stick of the transmitter is in the middle position.
3. Please strictly obey the order of turning on and off before operation. Firstly, turn on the transmitter and then the drone before flying. When switching off, power off the drone at first and then the transmitter. Improper power on or off operation may cause the drone to get out of control and threaten people's safety. Please cultivate the correct habit.
4. Make sure the connection is secure between battery and motor etc. Persistent vibration may cause bad connection between the power terminals and make the drone control be erratic.
5. Improper operation may cause frequent drone crashes, which may arouse motor defects and noises, affect the drone flying capabilities or even cause the drone to stop flying. Please go to the local distributor to buy new parts for replacement so that the drone will return to its optimum working condition.

# Instruction for Drone and Transmitter

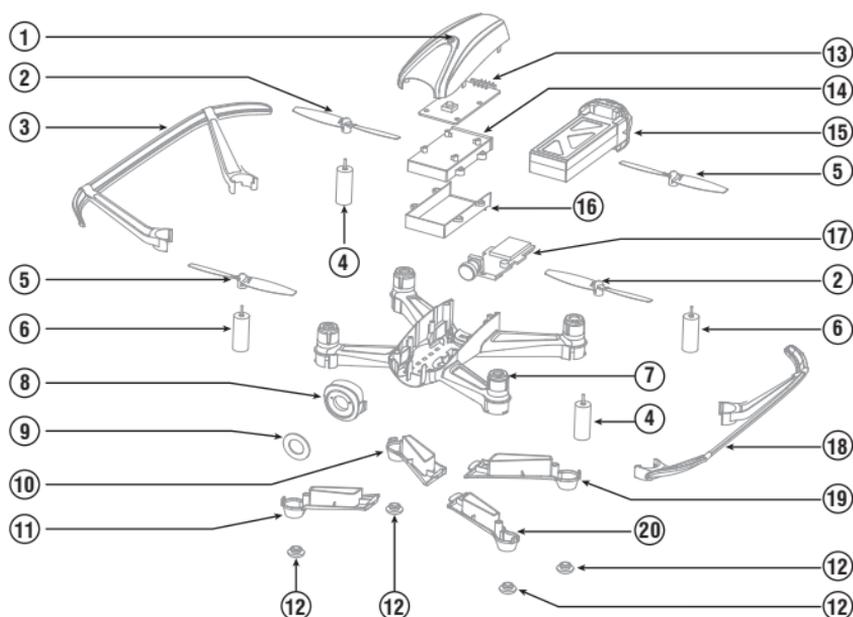
## Drone



## Specification

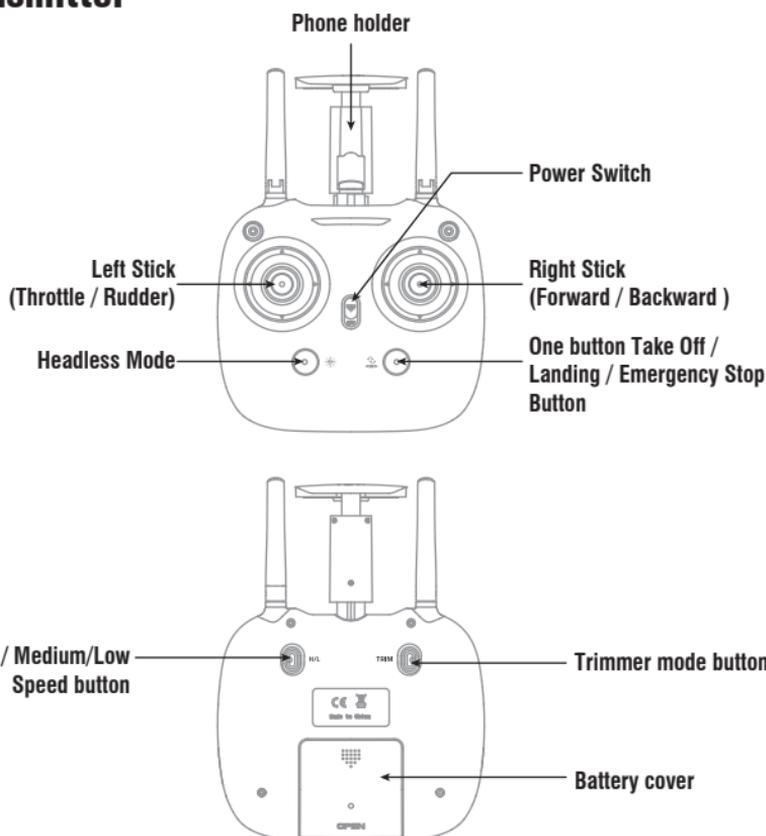
Drone size	198.5x183.2x42.8mm	Drone Battery	3.7x2 350mAh
Fly Weight	85g	Charging Time for Drone Battery	60mins
Propeller Diameter	66mm	Max Flying Distance/Radius	80m
Flying Time	5.5~6.5mins	Streaming video Range	30m
Frequency	2.4Ghz	Camera Resolution	1280x720P
Main Motor	8520x4		

## Expanded View



No.	Name	No.	Name
1	Drone cover housing	11	Right front LED hood
2	Propeller A (Clockwise)	12	Cushion
3	Right guard	13	Receiver board
4.	Clockwise Motor (Red connector)	14	Battery upper holder
5	Propeller B(Counterclockwise)	15	Drone battery
6	Counterclockwise Motor ( White connector)	16	Battery lower holder
		17	Camera board
7	Drone bottom housing	18	Left guard
8	Camera head cover	19	Left rear LED hood
9	Lens	20	Left front LED hood
10	Right Rear LED hood		

# Transmitter

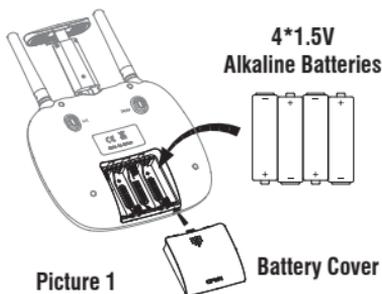


## Brief Introduction to Button Functions

Left Stick	Move the stick forward / backward / left / right to fly the drone up / down / turn left / turn right, respectively.
Right Stick	Move the stick to forward / backward / left / right to fly the drone forward / backward / left / right, respectively.
Power Switch	Push up the power switch to turn on the transmitter, and pull down to turn off.
Headless Mode	Press the button to enter heading hold mode, and press again to exit from headless mode.
High / Medium/Low Speed button	Press down this button to switch to High /Medium/ Low Speed.
Take Off / Landing / Emergency Stop Button	Press the button and the drone will fly up automatically. Press the button again and the drone will land on the ground automatically. Press and hold the button more than 1s, the propellers will stop and the drone fall immediately.
Trimmer mode Button	Press down this button and move the right stick to the required trimmer direction, then it will adjust the direction accordingly, when loose the stick, then ESC from the trimmer mode.

## Battery installation

Open the battery cover on the back side of the transmitter and put 4 alkaline batteries (AA, not included) into the cavity in accordance with the electrode instructions as shown in pictures 1 and 2

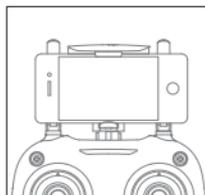
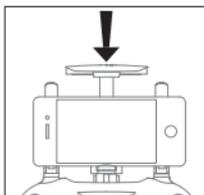
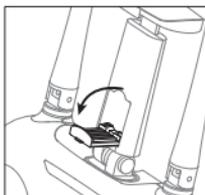
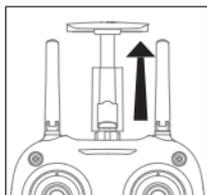


### Notice:

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

## Phone Installation Instruction:

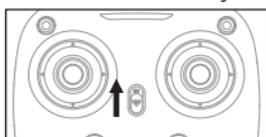
1. Pull up the phone holder( Picture 3), open the lower clamp, then pull the upper holder until the phone can be held firmly in place(Picture 4).
2. Put the phone into the holder, then release the clamp where the phone be held tightly( Picture 5/6).



# Pre-flight Operation Instruction

## Frequency Pairing

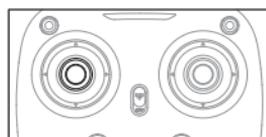
1. Turn on the transmitter switch (Picture 7) and the power indicator light will start to flash rapidly. Pull the left stick all the way down to its lowest position and then release. The left stick will return to the middle position automatically. (Picture 8 / 9) The power indicator light will start to flash slowly, indicating that the transmitter is ready for frequency pairing.



Picture 7

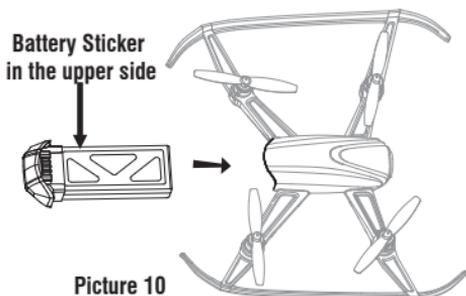


Picture 8

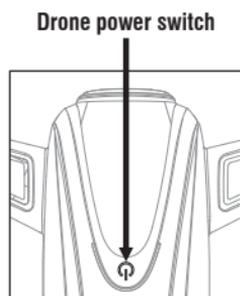


Picture 9

2. Install the Lipo battery into the drone (Picture 10), power on the drone (Picture 11). ( Press for about 2 seconds)



Picture 10



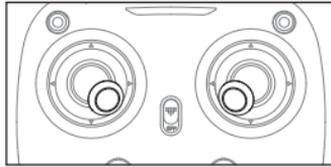
Picture 11

3. Put the drone on a flat surface, the drone body lights will stop flashing and become solid bright, indicating that the frequency pairing was successful.

**Important Notice:** Please make sure the drone is placed in the horizontal position after powering on the drone, so that the drone can work well.

## Checklist before Flight

1. The camera is at the front. Keep the front of the drone pointing away from you.
2. Power on the drone and check the direction of the rotating propellers. The left front and right rear propellers A rotate clockwise while the right front and left rear propellers B rotate counterclockwise.
3. Activate (unlock) motors: Move the left and right sticks at the same time as Picture 16 demonstrates (45 degree inward) to start the motors and repeat the process to lock the motors.



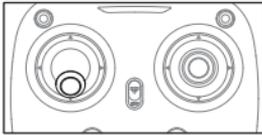
Picture 12

4. After activating the motors, push up the left stick slowly to fly the drone, and pull down the left stick slowly to its lowest position to land the drone smoothly.
5. It is recommended to repeat Step 4 for practice.
6. Adjust relative transmitter trimmer button to adjust the rudder if the drone tilts to one side when flying.

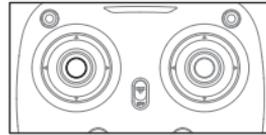
## Calibration Instruction

Please follow the below steps to calibrate the drone if its flight becomes unstable after a crash and it cannot be adjusted by using the trimmer button.

1. Power off the drone, then turn off the transmitter switch.
2. Turn on the transmitter switch, push the left stick all the way down to the lowest position (Picture 13) and then release it. The left stick will return to the middle position automatically (Picture 14). At that time, the transmitter will be ready for frequency pairing mode.

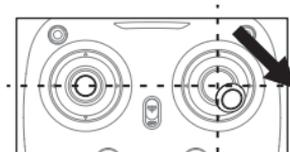


Picture 13



Picture 14

3. Power on the drone and put it on a flat surface in a horizontal position. The drone bodylights will change from flashing to solid bright, indicating a successful frequency pairing.
4. Do not move the left stick before successful calibration. Push the right stick as picture 15 below shows and then release it. The drone bodylights will start flashing, indicating that the drone is calibrating. When the drone bodylights become solid, it means that calibration has been successful.

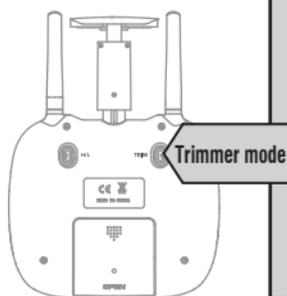
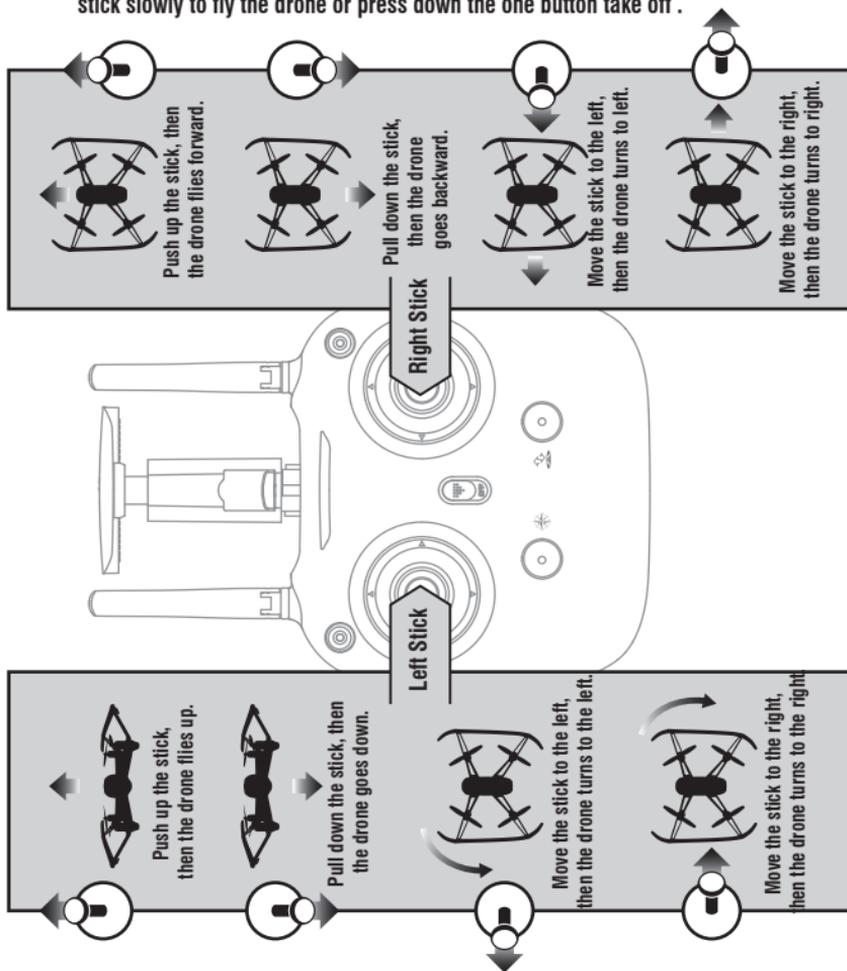


Picture 15

**Notice:** When the drone has experienced a severe crash, and the gyro recovery is impossible causing control difficulties; the drone should be switched off and the calibration process repeated

# Flying Control

**Notice:** Every time before the drone is flown, move the left and right stick at the same time as Picture 16 shows below (45 degree inward) to start the motors. Push up the Left stick slowly to fly the drone or press down the one button take off.



## Forward and backward trimmer

When flying, if the drone tilts forward, press down the trimmer button, and push the right stick backwards. If otherwise, push forward.

## Left and right side flying trimmer

When flying, if the drone tilts to left, press down the trimmer button and push the right stick backwards to the right. If otherwise, push it to the left.

## Left and right turning trimmer

When flying, if the drone head rotates to left, press down the trimmer button and push the left stick to right. If otherwise, push to the left.

# Functions Introduction

## Take off/ One button take off/Landing modes

1. Method 1 (Take off): After frequency pairing is successful, push down the left and right sticks as picture 12 illustrates to start the motor and then release them. To fly the drone to a certain altitude, push up the left stick and then release it.
2. Method 2 (One Button Take Off): After frequency pairing is successful or the motors activated, press the Take Off / Landing / Emergency Stop Button (Picture 16), the drone will fly up automatically and keep flying at an altitude of approximately 1.2 meters.



Take Off / Landing /  
Emergency Stop Button  
Picture 16

## Landing Methods

1. Method 1 (Landing): When flying, push the left stick all the way down to the lowest position (Picture 13) and hold it until the motors have stopped and the drone landed slowly to the ground.
2. Method 2 (One Button Landing): When flying, press the Take Off / Landing / Emergency Stop Button once (picture 16), and the drone will land on the ground automatically. (When using this function, the left stick SHOULD not be used or the function will fail).

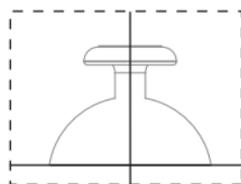
▲ **Emergency Stop:** In an emergency situation, such as the drone being in danger of colliding with a person or obstacle etc., press the Take Off / Landing / Emergency Stop button immediately and hold it for more than 1s (picture 16) and the propellers will stop immediately.

**Tip:** Do not use the emergency stop function unless an emergency situation arises. The drone will fall down suddenly after all propellers are stopped.

## Altitude Hold Mode

Altitude hold mode allows the drone to maintain a consistent altitude while the roll, pitch, and yaw can be controlled normally. It makes drone control much easier for beginners and stabler for aerial photography.

Push the left stick up (down) to fly the drone up (down) at a certain altitude and then release the stick. The stick will return to the center position (Altitude Hold Center) as shown in picture 17. The drone will continue to fly at the specified altitude until the above steps are repeated, so as to change to another altitude (Default mode).

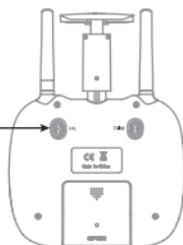


Altitude Hold Center  
Picture 17

## High / Medium/Low Speed Mode Switch

Press down the button indicated below, and a “di” tone will be sounded signifying that the low speed mode is activated. In the event that a “di.di” or a “di.di.di” tone is sounded, this means that the medium or high speed mode has been activated, respectively.

High / Medium/  
Low Speed  
Mode Switch  
(Press Down)



### Low Speed Mode (Mode 1)

1. Low Speed Mode is suitable for beginner.

### Medium speed Mode (Mode 2)

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

### High Speed Mode (Mode 3)

3. High Speed Mode is suitable for experts to perform aerial stunts outdoor.

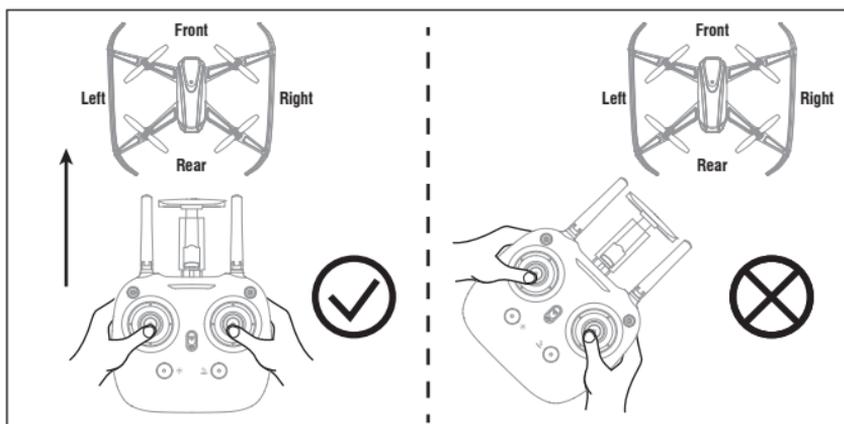
## Headless Mode

The front and rear positions of a drone are generally indicated by LED lights or colored propellers. By default, the users are readily able to identify the front and the rear of the drone when flying. However, under headless mode, the users can operate the drone without worrying about the orientation (left is left and right is right at all times, regardless of the direction to which the drone head is pointing). This mode is designed for beginners and also the users, who fly the drone in daylight or at a far distance when it is difficult to identify the drone orientation.

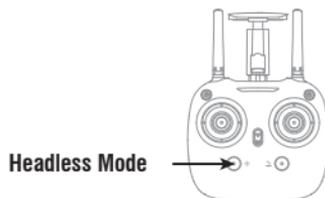
The default setting is NOT Headless Mode.

You are allowed to activate the headless mode function before taking off or in flight. To fly under headless mode, you are required to ensure that the drone front direction is aligned to your front direction, DO NOT change the orientation of your transmitter and keep it in front of you at all times. (See below picture)

**WARNING: DO NOT USE HEADLESS MODE BEFORE YOU ARE SURE THAT THE DRONE'S FRONT IS YOUR FRONT. OTHERWISE, CONTROL MAY BE LOST AND THE DRONE FLIES AWAY.**



- \* Press down the headless mode button, the drone's left and right LED will start flashing alternately, signifying that the drone has entered headless mode, press the button again, then the LED will become solid as the drone exits headless mode.



## Low Battery Alarm

When the drone is in low battery mode, the transmitter will send out a constant beeping sound to remind the user to land the drone as soon as possible.

When the transmitter goes into low battery mode, the transmitter will continuously beep to remind the user to land the drone and replace the batteries as soon as possible or the drone may go out of control.

## Out of Range Alarm

When the drone is going to surpass the max remote control distance, the transmitter will beep "didi...didi...didi..." continuously so as to alarm the user to return the drone within the control range immediately or the user stands the risk of the drone being flown away

## Motors Stuck Protection

1. When the propellers is jammed/stuck, then the drone LED will flash quickly and the stuck protection function activated where the motors will stop running.
2. To deactivate the stuck protection, pull down the left stick to the lowest position, the drone LED will become solid and the drone can be flown again.

# To know your APP

## Download and Install the APP: Flyingsee

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

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 below QR code to download Flyingsee App.



## Frequency Pairing between Mobile Phone and Drone WiFi:

1. Install the Lipo battery into the drone and power on the drone. Put the drone on a flat surface in a horizontal position.
2. Enter the settings of the mobile phone, turn on WiFi (WLAN) and choose udirc-\*\*\*, return to desktop after successful connection.
3. Click on the icon Flyingsee and click on  to enter remote control interface to experience the real time transmission.



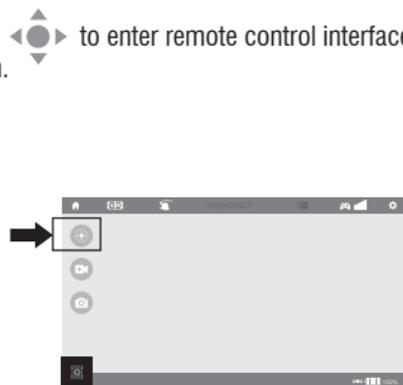
Flyingsee



Click on the icon



Home Page

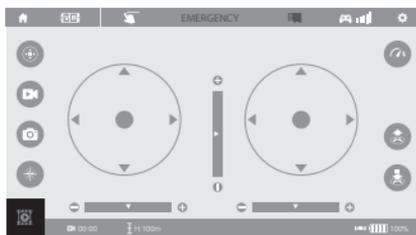


Real time Transmission Interface



4. Click on  to enter the Virtual Control interface. At this moment, the drone LED lights will stop flashing and become solid bright, indicating successful frequency pairing, where the drone will be ready to be controlled via APP.

## Virtual Control Interface



**Important Tip:** Ensure that the drone is put on a flat surface in a horizontal position so that the drone can work properly or the user may experience difficulty in drone control.

## Introduction for APP Icons

### Home Page Icons



Explore UDIRC Drone



Help



Learn the operation of Drone



Media



Remote control interface

### Remote Control Interface



**Home Page Icon**

Click on the icon and return to the home page.



**Virtual Reality Mode**

Click on the icon to enter the virtual reality mode to experience first person view (only available when using with a VR headset). Click on the icon again to exit the virtual reality mode.



**Flight Route Setting Mode**

Click on this icon and it will become red. Draw a flight route in the right area. The drone will fly according to the flight route drawn. Click on the icon again to exit the Flight Route Setting Mode. The icon turns white.

## Emergency Stop

The icon is red by default. Click this icon and the propellers will stop immediately. The drone will fall instantaneously to the ground .

**Tip: Do not use the emergency stop function unless it is an emergency situation.**

## TF Card

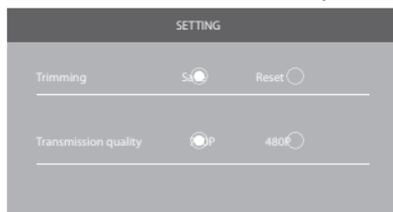
When the TF card has not been inserted into the drone camera, then this icon  will be on display. When the TF card is in, then the  icon is shown.

## Remote Control Signal

To show the drone WiFi signal strength.

## Setting

Click on this icon to set some parameters as indicated below, and click again to exit.



Click on "Save" to save trimming setting. Choose "Reset" for factory reset. Select "720P" transmission quality.

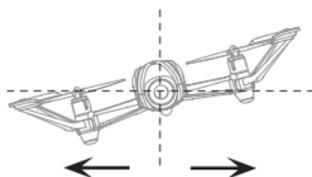
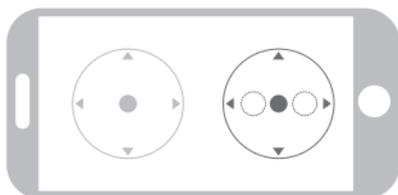
## Remote Control

### Virtual Control Stick

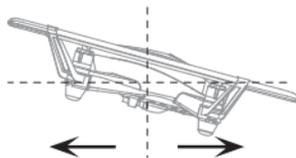
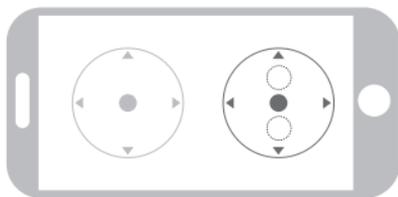
The virtual control stick is hidden by default. Click on the icon to turn on the virtual control stick.

### Gravity Induction Mode

Click on this icon to enter gravity induction control mode. (only available for flying left / right and forward / backward). Click on the icon again to exit from gravity induction control mode.



**If the mobile phone is tilted to the left / right, the right ball will move accordingly causing the drone to fly left / right.**



If the mobile phone is tilted to the forward / backward direction, the right ball will roll forward / backward, causing the drone to fly forwards / backwards.



### Video

Click on this icon to record a video. The recording time will be shown at the bottom of the screen. Click on this icon again to finish recording.



### Photo

Click on this icon to take a photo.



### Headless Mode

Click on this icon which will become red, as the drone enters Headless Mode. Click again to exit headless mode and the icon will become white.



### Media

Click on this icon to view or delete the aerial videos and photos. Click on the arrow to exit.



### 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 and it will change to red, as the drone flies down slowly and land on the ground. All the propellers will stop running at this moment.



### Altitude hold icon

It indicates the drone's altitude position (As per calibration level).



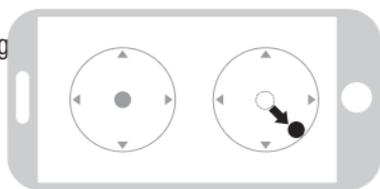
### Drone battery status icon

When the drone battery capacity is around 15%, the phone will vibrate to alarm the user that the battery is almost exhausted. Kindly fly back the drone for battery change.

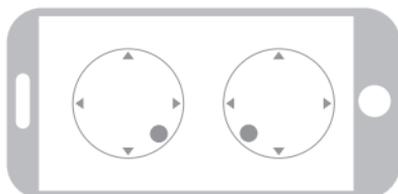
## APP Calibration Instruction

If the drone becomes difficult to operate or hover, you need to re-calibrate the drone .

1. Please refer to "Frequency Pairing between Mobile Phone and Drone WiFi".
2. Do not push the left ball before successful calibration. Move the right ball as the picture on the right shows. The drone body front light will start flashing, indicating that the drone is calibrating. When the drone light becomes solid, this indicates a successful calibration and the drone is ready for normal flight.

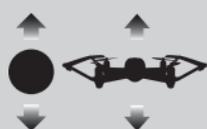


## APP Flying Control



Hold both the left and right balls and push them inward at a 45 degree angle to activate the motors (refer to the picture on the left) or press one button take off to activate the motors .

**To fly up or down:**  
Move the left ball up/down to fly the drone upward/ downward respectively

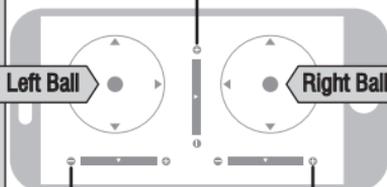


**To rotate left or right:**  
Move the left ball to the left /right to rotate the drone to the left/right, respectively.



### If the drone tilts forward or backward

Click the "-" of the Forward / Backward Trimmer to adjust the drone for balance if the drone tilts forward. Click the "+" to adjust the drone for balance if the drone tilts backward.



### If the drone rotates to left or right

Click the "+" of the Rotation Trimmer for balance if the drone rotates to the left. Click the "-" to adjust the drone for balance if the drone rotates to the right.

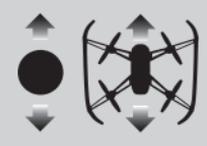
### If the drone tilts to the left or right

Click the "+" of the Left / Right Trimmer for balance if the drone tilts to the left. Click the "-" to adjust the drone for balance if the drone tilts to the right.

**To fly right or left:**  
Move the right ball to the left/right to fly the drone to the left/right respectively



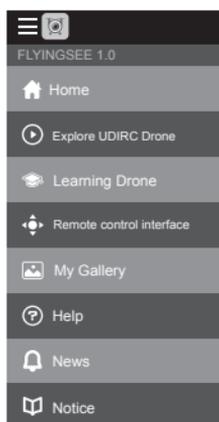
**To fly forward or backward:**  
Move the right ball up/down to fly the drone forwards / backwards respectively.



**Notice:**

1. If you cannot detect the WiFi signal , turn on and off the WiFi function and try to connect again
2. The available WiFi 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 the APP exited from. If not, then you cannot control the drone alternately.

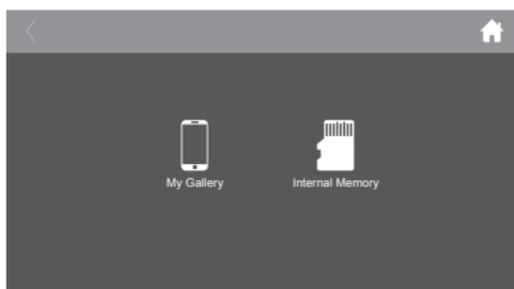
## Display the photos and video



**Main menu**



To view the photos and videos.



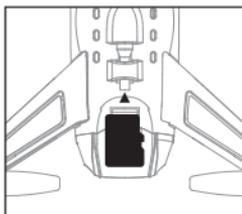
**Media interface**

**Notice:** The APP must be authorized to access the phone gallery. If not, then it may be unavailable for displaying the videos and photos.

The photos are stored in the local phone gallery and on the TF card. The videos are only stored on the TF card, therefore, you need to download the video to the phone gallery in order to display it. Please download the video as per APP instruction.

## To take photo and record video

1. Insert the TF card into the slot in accordance with Picture 18. Ensure that the metal side of the card faces up as shown in picture 18.



Picture 18

2. The aerial photo will be saved on both your mobile phone and the TF card, while the video will only be saved onto the TF card. Additionally, you can only download the video to the mobile phone when the mobile phone is connected to the drone WiFi and the TF card .

**Tip:** Click on the video icon to save a video when ending recording, or the video cannot be saved.

3. Power off the drone at first when finished with the aerial photography. Take out the TF card and insert it into a card reader. Connect the card reader with computer USB port. After a while, view the aerial photography data from "my computer"- "mobile disk".

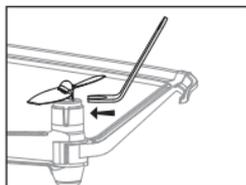
**Tip:** Please try playing a video or photo after coping all aerial photography data to the computer to ensure that the media software can support the AVI format.

Basic parameter for aerial camera: Video DPI 1280\*720P;  
Image Size 1280\*720P.

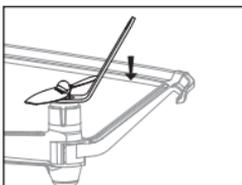
## Spare Parts Installation Instruction

### Propeller Installation Diagram

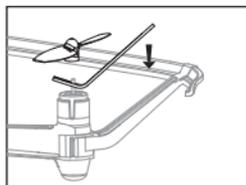
1. To disassemble for a new propeller installation, insert the lever between propeller and motor( picture 19) and press down on it. Once the propeller is dislodged, pull it up in the vertical direction ( Picture 20/21).



Picture 19

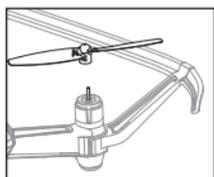


Picture 20

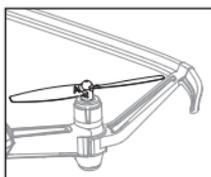


Picture 21

- When assembling, place and align the propellers to the hole located on the motor shaft and press down onto the propeller to fully install it( picture 22). Installed propellers should be in contact with the surface of the motor housing( picture 23). (Please make sure that the correct propellers are installed according to their rotating directions)



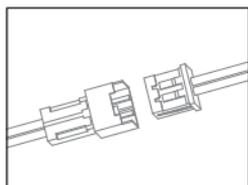
Picture 22



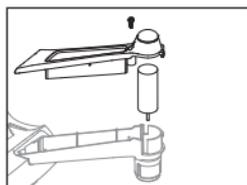
Picture 23

## Motor replacement diagrams

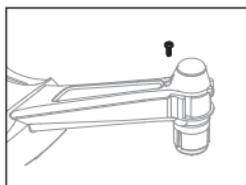
- When disassembling as per pictures 19/20/21 above: Remove the propeller, unwind and remove the screw of motor holder( picture 25), pull out the motor holder, unplug the motor connector and remove the motor.
- When re-assembling , plug the required motor connector into the motor socket ( Picture 24),and place the motor within the protective holders as displayed (Picture 25) and tighten the screw ( Picture 26). Finally, reinstall the propeller as aforementioned.



Picture 24



Picture 25



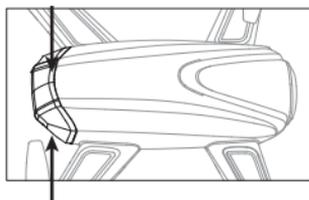
Picture 26

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

## Battery installation diagram

For battery installation/change, you need to squeeze the bottom of the battery buckle and then pull out the battery( picture 27). Place the new battery inside the slot until is fixed tightly within.

**Notice:** When installing, please ensure that the LiPo battery sticker is on the upper side indicating that that battery is being installed correctly.



Picture 27

# Spare Parts

For convenience, the spare parts are listed for your perual, which can be purchased from the local seller.



**U31W-01**  
Drone cover housing

**U31W-02**  
Drone bottom housing

**U31W-03**  
A propeller

**U31W-04**  
B propeller



**U31W-05**  
Left guards

**U31W-06**  
Right guards

**U31W-07**  
Battery upper holder

**U31W-08**  
Battery lower holder



**U31W-09**  
Camera head cover

**U31W-10**  
Cushion

**U31W-11**  
Right front LED hood

**U31W-12**  
Right rear LED hood

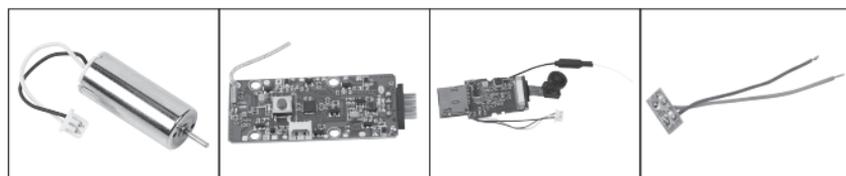


**U31W-13**  
Left Front LED hood

**U31W-14**  
Left rear LED hood

**U31W-15**  
Lens

**U31W-16**  
Clockwise motor  
( Red and blue wire)



**U31W-17**  
Counter-clockwise motor  
( Black and white wire)

**U31W-18**  
Receiver board

**U31W-19**  
Camera board

**U31W-20**  
Front LED board  
( Green)



**U31W-21**  
**Rear LED board(Red)**

**U31W-22**  
**Drone battery**

**U31W-23**  
**USB Cable**

**U31W-24**  
**TF card**



**U31W-25**  
**Card reader**

**U31W-26**  
**Wrench**

**U31W-27**  
**Hex wrench**

**U31W-28**  
**Screw driver**



**U31W-29**  
**Transmitter**

## Important Statement

Due to the continuous improvement of products, the design or technical parameters will be modified without prior notice.

All content in this user manual have been checked carefully. If there is any question of printing or mistake, the company reserves the rights of final explanation.

Thank you again for your choice and your trust!

# Troubleshooting Guide

No.	Problem	Problem Cause	Solution
1	The transmitter indicator light is off	1. Low battery.	1. Replace the transmitter battery.
		2. The battery positive pole and negative pole are in reverse order.	2. Install the battery in accordance with the user manual.
		3. Poor Contact.	3. Clean the dirt between the battery and the battery slice.
2	Fail to pair the drone with transmitter	1. Indicator light is off.	1. The same as above 1.2.3.
		2. There is an interfering signal nearby.	2. Restart the drone and power on the transmitter.
		3. Improper operation.	3. Operate the drone step by step in accordance with the user manual.
		4. The electronic component is damaged from frequent crashes.	4. To buy spare parts from local seller and replace damaged parts.
3	The drone is under-powered or cannot fly.	1. The propeller is severely 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. The propeller is severely deformed.	1. Replace the propeller.
		2. The motor holder is deformed.	2. Replace the motor holder.
		3. The gyro did not reset after a violent crash.	3. Place the drone on a flat surface for about 10s or restart the drone to calibrate again.
		4. The motor is damaged.	4. Replace 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.
		3. Poor contact.	3. Disconnect the battery and then reconnect it with the plug .
6	Could not see the picture.	1. Did not connect the wire of camera box or poor contact.	1. Check the wire and connect well.
		2. There is an interfering signal nearby.	2. Disconnect the wire and re-connect.
		3. Damaged camera.	3. Buy a new camera box from local seller to replace.
7	Hard to control by cellphone.	1. Not experienced enough.	1. Practice and read the cellphone controlling instruction carefully.

## FCC Information

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 residential protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency therefore, 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 other particular circumstances. If this equipment does cause harmful interference to radio or television receptions, 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 the circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## FCC WARNING:

The equipment may generate or use radio frequency. 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, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.



**MADE IN CHINA**