Ages 14+

udiR/C

neon

Colorful lights drone

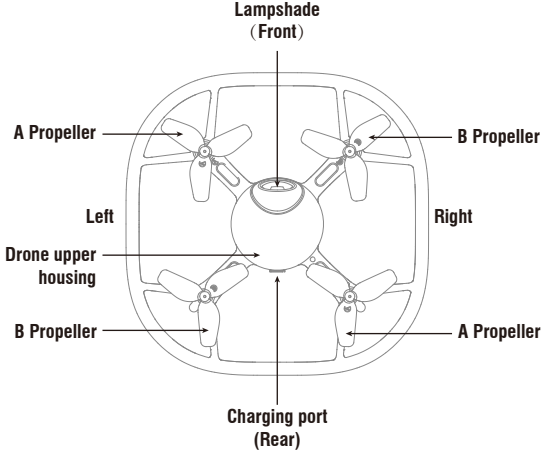
U51

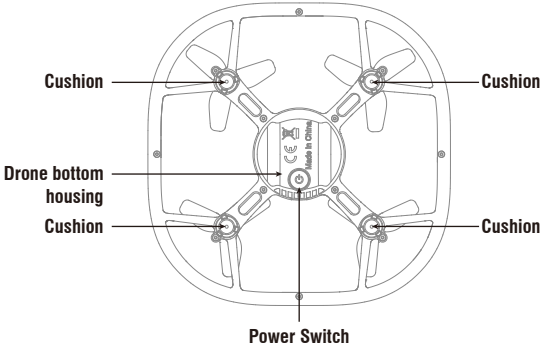
Operations Guide

Catalog

Instruction for Drone and Transmitter

Drone

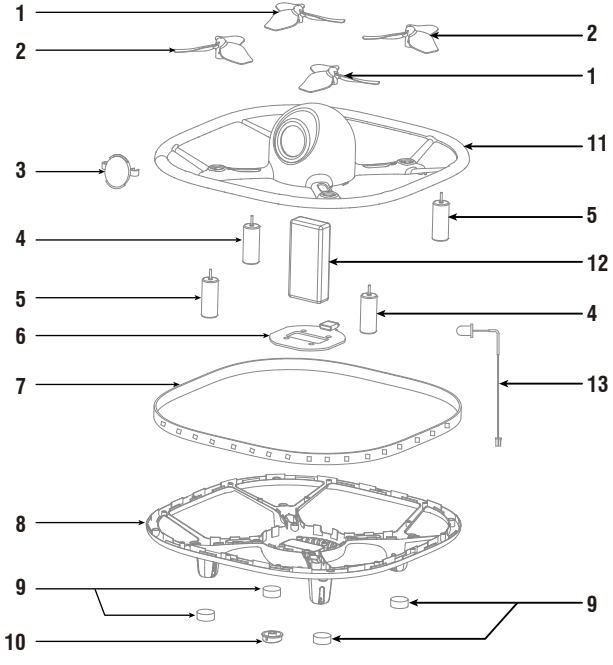




Specification

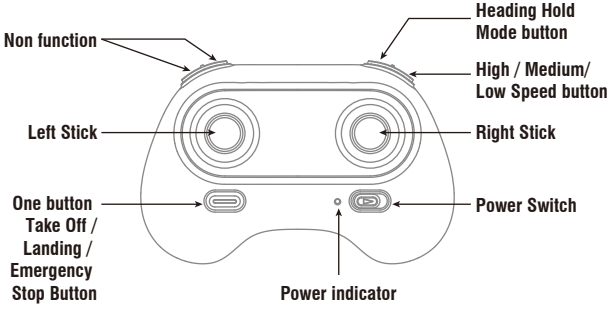
Drone size	150x150x59mm	Flying Time	6～7 mins
Fly Weight	63.2g	Motor	8520x4
Propeller Diameter	Ø50mm	Remote Frequency	2.4Ghz
Drone battery	3.7Vx500mAh	Max Flying Distance/Radius	30 m
Charging Time for Drone Battery		90 mins	

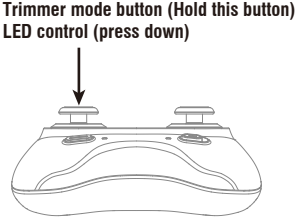
Exploded View



NO.	Name	NO.	Name
1	A Propeller	8	Drone bottom housing
2	B Propeller	9	Cushion
3	Propeller	10	Power switch button
4	Clockwise motor(Red blue wire)	11	Drone upper housing
5	Counterclockwise motor(White black wire)	12	Drone battery
6	Receiver board	13	Front LED
7	LED strip		

Transmitter



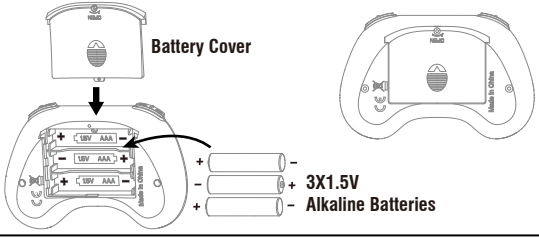


Brief Introduction for Button Functions

Left Stick	Move the Stick to forward / backward / left / right to fly the drone to up / down / turn left / turn right.
Right Stick	Move the Stick to forward / backward / left / right to fly the drone to forward / backward / left / right.
Power Switch	Push up the power switch to turn on the transmitter, and pull down to turn off.
Heading Hold Mode	Press the button to enter heading hold mode, and press again to exit from heading hold mode.
High / Medium/ Low Speed Button	Press down this button to switch between High /Medium/ Low Speeds
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 drone propellers will stop and fall down immediately.
Trimmer Mode Button	Press down this button,move the stick to the required trimmer direction, then it will adjust the direction accordingly, when loose the stick, then ESC from the trimmer mode.
LED control button	When flying, press down this button to switch the LED color continuously.

Transmitter Battery installation

Open the battery cover on the back side of the transmitter and put 3 alkaline batteries (AAA, not included) into the box in accordance with electrode instructions, as below picture shown.



Notice:

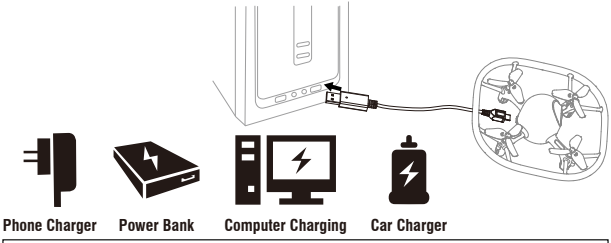
1. Make sure the electrodes are correct.
2. Do not mix new with old batteries.
3. Do not mix different kinds of batteries.
4. Do not charge the non rechargeable battery.

Parts installation

Charging Instruction for Drone Battery

1. Connect the drone battery with USB cable first and then choose one of the method as below picture shown to connect with USB plug.
2. The red USB indicator light keeps bright when charging and the light turns green when fully charged. (When charging, you must power off the drone first to make sure successful charge.)

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

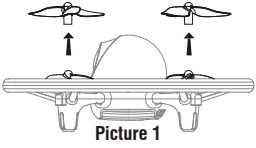


Li-Po Battery Disposal & Recycling

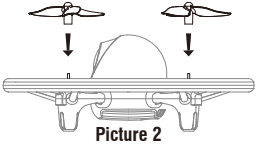
Wasted Lithium-Polymer batteries must not be placed with household trash. Please contact local environmental or waste agency or the supplier of your model or your nearest Li-Po battery recycling center.

Propeller installation diagram

When disassemble, hold the propeller and pull out in vertical direction(picture 1). When assemble, put the propeller hole aim at the motor shaft and press down (picture 2).



Picture 1



Picture 2

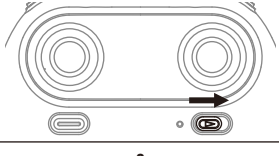
Check List Before Flight

1. Make sure the drone battery and transmitter battery are fully charged.
2. Make sure the Left Stick of the transmitter in the middle position.
3. Please strictly obey the order of turn on and turn off before operation. Turn on the transmitter power first and then turn on the drone power before flying; turn off the drone power first and then turn off the transmitter power when finish flying. Improper turn on and turn off order may cause the drone out of control and threaten people's safety. Please cultivate a correct habit of turn on and turn off.
4. Make sure the connection is solid between battery and motor etc. The ongoing vibration may cause bad connection of power terminal and make the drone out of control.
5. Improper operation may cause drone crash, which may arouse motor defective and noise, and then affect the flying status or even stop flying. Please go to the local distributor to buy new parts for replacement so that the drone will return to its best status.

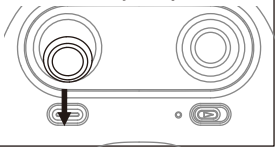
Pre-flight Operation Instruction

Frequency Pairing

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



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

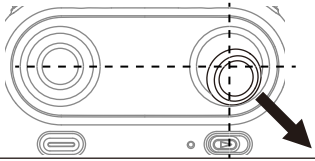


Press the drone power button for about 2 seconds to power on, the LED indicator changes from flashing to solid light, the drone is pairing successfully and ready to control. (Transmitter beep sound)

It's a must to put the drone on the horizontal position!

Drone calibration(After pairing successful)

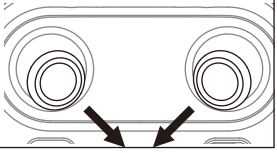
Push the right stick as picture shown.(Don't move the left stick before successful calibration), the drone body light will flash 3 times, indicating that the drone is calibrating. After successful calibration, the drone lights will become solid and ready to fly.



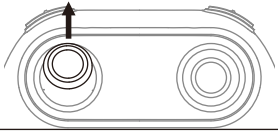
Tips: Crashing the drone may cause it imbalanced beyond the level that can be adjusted by the trimmer button. If this occurs, you can re-pairing& re-calibrate.

Take Off

Move the left stick and right stick at the same time 45 degree inward. (This operation is used for starting/ locking the motors. When the motors are working, it could be used to stop the motors urgently.)

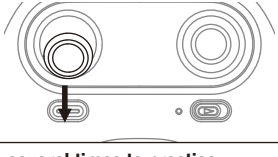


Push the left stick up slowly, the drone will take off.



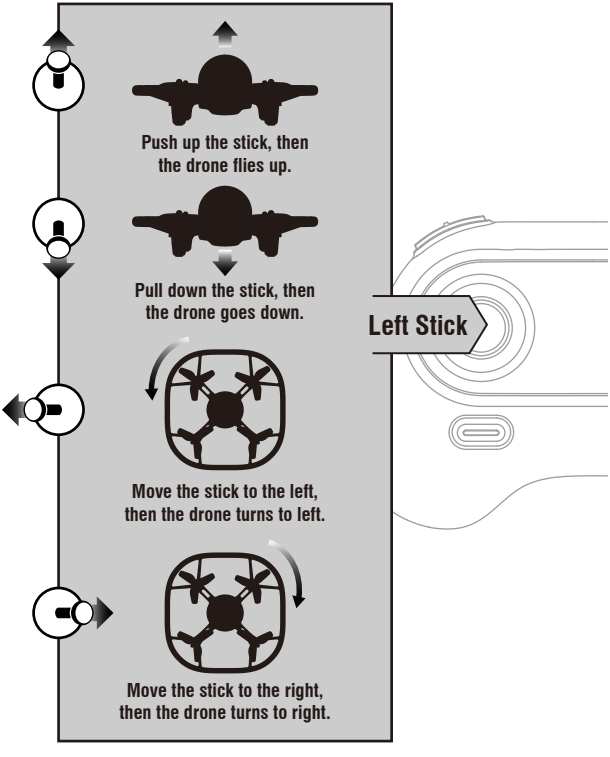
Landing

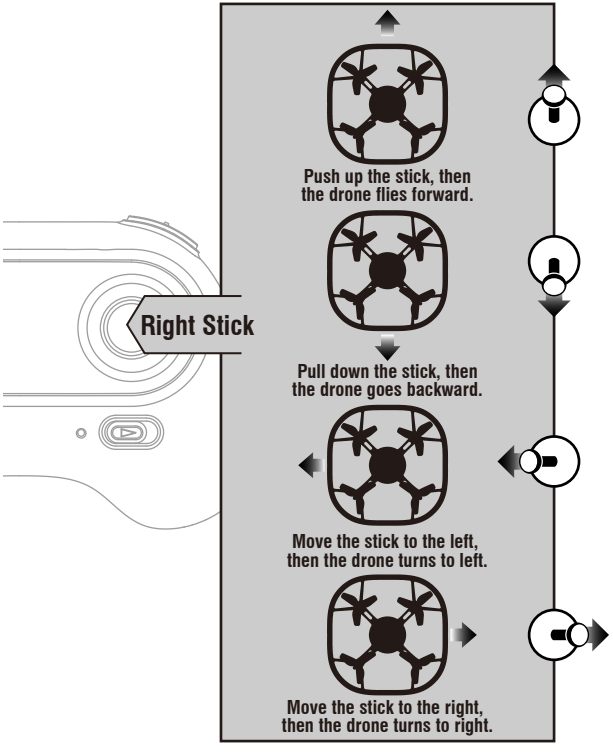
Pull down the left stick to its lowest position slowly to land the drone on the ground.

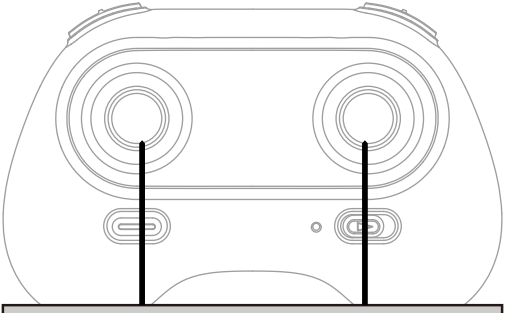


Repeat above steps several times to practice.

Flying Control




Right Stick
Push up the stick, then
the drone flies forward.
Pull down the stick, then
the drone goes backward.
Move the stick to the left,
then the drone turns to left.
Move the stick to the right,
then the drone turns to right.



Forward and backward trimmer

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

Left and right turning trimmer

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

Left and right side flying trimmer

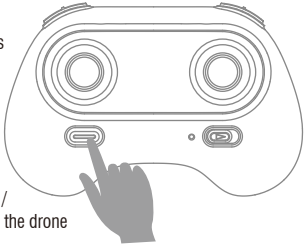
When take off, if the drone tilts to left, then press down the trimmer button and push the right stick backwards to adjust. Otherwise push forwards.

Functions Introduction

One button take off/Landing、Emergency stop

One Button Take Off

After frequency pairing successful or motors activated, press the Take Off / Landing / Emergency Stop Button, the drone will fly up automatically and keep flying at an altitude of 1.5 meters approximately.



One Button Landing

When flying, press the Take Off / Landing / Emergency Stop Button once shortly, and the drone will land on the ground automatically.

(When using this function, you can not touch the left stick, if not, then the function will fail)

Emergency Stop

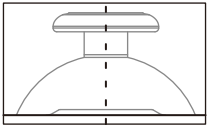
When the drone in emergency situation and going to hit the walking people or obstacle etc., press the Take Off / Landing / Emergency Stop Button immediately and hold it for more than 1s,the propellers will stop immediately.

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

Altitude Hold Mode

Altitude hold mode indicates that the drone maintains a consistent altitude while allowing roll, pitch, and yaw to be controlled normally. It makes easier to control the drone for beginner and more stable for aerial photography.

Push the Left Stick up (down) to fly the drone up (down) at certain altitude and then release the Stick. The Stick will back to the center position (Altitude Hold Center) as Picture 3 shown. And the drone will keep flying at current altitude. Repeat above steps if you want to change the drone altitude(Default mode).



Altitude Hold Center

Picture 3

Notice: If the propeller is deformed or motor is damaged, Altitude Hold Mode will fail.

If the atmospheric pressure is instability, Altitude Hold Mode will fail.

High / Medium/Low Speed Mode Switch

1. Low Speed Mode(Mode 1)

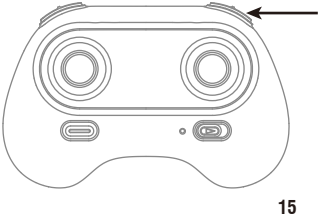
Low Speed Mode is suitable for beginner.

2. Medium speed Mode(Mode 2)

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

3. High Speed Mode(Mode 3)

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



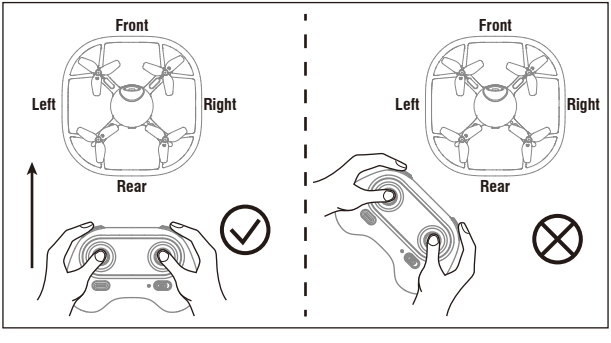
Heading Hold Mode

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

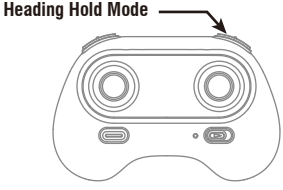
The default setting is NOT Heading hold Mode.

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

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



* Press down Heading hold mode button, the drone's LED ring will start flashing alternately, quick flash 3 times and stop,it shows the drone enters Heading hold mode, press the button again, then the LED gets solid and the drone ESC from heading hold mode.



Low Battery Alarm

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

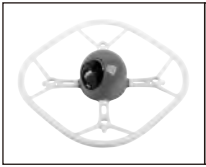
When the drone in low battery, the drone front LED will keep flashing once and stop 1s to alarm, the transmitter will beep" didi-didi" constantly to remind the user to land the drone as soon as possible.

Out of Range Alarm

When the drone is going to fly out of the max remote control distance, the drone rear LED will keep flashing twice and stop 1s to alarm, the transmitter will beep "didi-didi" to alarm the user to fly the drone back to control range immediately. Or the drone may be out of control and fly away.

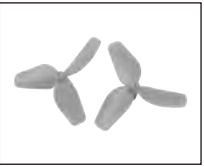
Spare Parts

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

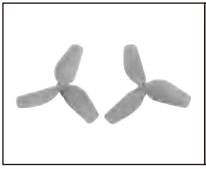


U51-01
Drone upper housing

U51-02
Drone bottom housing



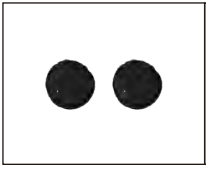
U51-03
A Propeller



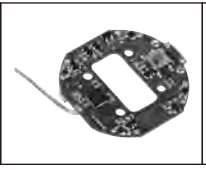
U51-04
B Propeller

U51-05
Lampshade

U51-06
Power switch button



U51-07
Cushion



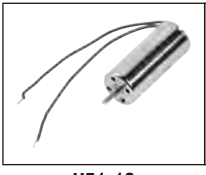
U51-08
Receiver board

U51-09
Front LED

U51-10
LED strip

U51-11
Drone battery

U51-12
USB cable



U51-13
Clockwise motor
(Red blue wire)

U51-14
Counterclockwise motor
(White black wire)

U51-15
Transmitter

Important Notice

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

Troubleshooting Guide

No.	Problem	Problem Cause	Solution
1	The controller indicator light is off.	1. Low battery.	1. Replace the controller battery.
		2. The batteries are incorrectly positioned.	2. Install the batteries following the polarity indicators.
		3. Poor Contact.	3. Clean between the battery and the battery contacts.
2	Failed to pair the drone with the controller.	1. Indicator light is off.	1. The same as above.
		2. There is an interfering signal nearby.	2. Restart the drone and power on the controller.
		3. Improper operation.	3. Operate the drone step by step in accordance with the user manual.
		4. The electronic component is damaged for fiercely crash.	4. To buy spare parts from local seller and replace damaged parts.
3	The drone is not powerful enough or can not fly.	1. The propeller is seriously deformed.	1. Replace the propeller.
		2. Low battery.	2. Recharge the drone battery.
		3. Incorrect installation of propeller.	3. Install the propeller in accordance with the user manual.

4	**The drone could not hover and tilts to one side.**	1. The propeller is seriously deformed.	1. Replace with new propeller.
		2. The drone bottom housing is deformed after violent crash.	2. Replace with new drone bottom housing.
		3. The gyroscope did not reset after a serious crash.	3. Put the drone on the flat ground for about 10s or restart the drone to calibrate again.
		4. Motor is damaged.	4. Replace with new motor.
5	**The drone indicator light is off.**	1. Low battery.	1. Recharge the drone battery.
		2. The battery is expired or over discharge protection.	2. Buy a new battery from local seller to replace the battery or charge the battery in accordance with the use manual.

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.

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