Radio Controlled
Mini Drone

User Manual

Safety & Warnings:

This drone is suitable for RC drone user aged 14 years or above. This product contains small parts with the risk of choking, please keep it out of child's reach.

(1)Flying Area

The flying field must be legally approved by your local government. Do not fly the drone near in the airport. Keep far away from the airport more than 5km when flying RC drone. Flying field must spacious enough and we suggest at least 8M (length)*8M (width)*5M (height).

(2) Use correctly

Improper assembly, broken main frame, defective electronic equipment or unskilled operation all may cause unpredictable accidents, such as drone damage or human injury. We suggest beginner learning the operation skill from experienced people at first flight. Please pay special attention to safety operation and have good knowledge of accident responsibility that the user may cause.

(3) Keep away from obstacles and crowds

The speed and status of RC drone is uncertain and it may cause potential danger. So the user must keep the drone away from crowd, tall building, power lines etc. Meanwhile, do not fly a RC drone in rainy, storm, thunder and lighting weather for the safety of user, around people and their property.

(4) Keep away from humid environment

The drone inside is consisted of precise electronic components and mechanic components. Humidity or water vapor may damage electronic components or mechanic components and cause accident.

(5) Safe operation

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

(6) Keep away from high-speed rotating parts

Please keep the drone in your sight when flying. Rotating parts like propellers or motors may cause serious injury and damage. Keep this rotating parts away from people, obstacle and ground, etc.

(7) Keep away from heat

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

(8) Control range

The drone should be controlled within max control distance. Do not fly the drone near tall building, high voltage cable or other place with signal interference. Or may cause signal interruption and the drone will be out of control, which may result in unpredictable accident.

(9) Do not touch the hot motor to avoid being burnt.

(10) Only use the recommended charger. Power off the drone before cleaning the RC drone. Check the USB cable, charging plug, housing and other parts regularly to ensure they can work well. If there is any damage, stop using it immediately till it's fixed well.

Battery Safety & Warnings:

* Keep the battery away from children.
* Discontinue charging if the battery is swollen.
* Do not charge the battery once it crashes or damages.
* After the crash, check the battery to ensure it can work well.
* Do not overcharge the battery.
* Keep the battery away from flammable material or liquid.
* Do not put the battery on high temperature place, store it in a proper container to avoid fire or explode.
* Do not put the battery into your pocket or bag to avoid short circuit and not be scratched by sharp objects or metal.
* Do not disassemble, refit and repair the battery.
* Do not use the battery to crash or hit hard surface.
* Do not put the battery in water and keep it in dry place at ambient temperature.
* Do not leave the battery without supervision when charging.
* Make sure that there is no short circuit of the power wire.
* Only use the recommended charger.
* Check the charger's wire, plug, surface regularly. Do not use any broken charger.
* If the battery is not used more than one week, maintain the drone battery with about 50% power to keep its performance and working life.

Charging Instructions:

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

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

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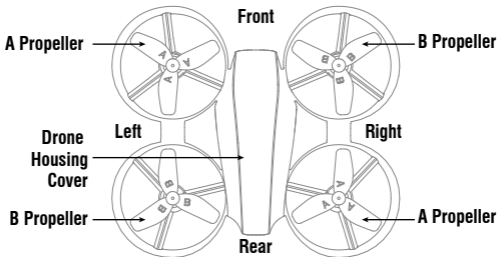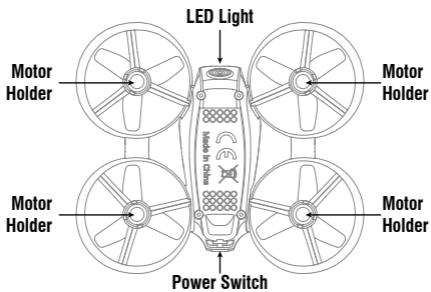
Phone Charger   Power Bank

Computer Charging   Car Charger
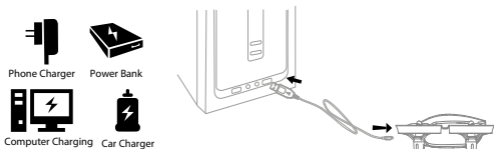
Pre Flight Checks:

1. Make sure the drone battery are fully charged.
2. Make sure the Left Stick of the transmitter is in the middle position.
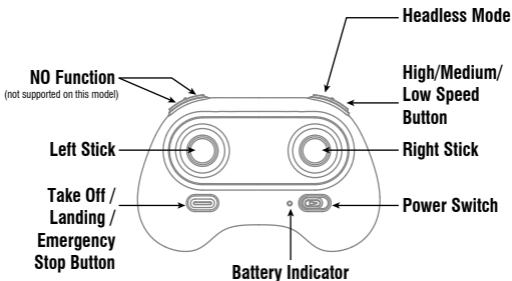
3. Please strictly obey the order of turn on and turn off before operation. Turn on the drone power first and then turn on the transmitter power before flying. Turn off the drone power first and then turn off the transmitter power when finish flying. Improper turn on and turn off order may cause the 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, 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 effect 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.
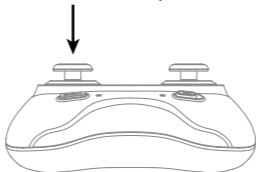
Drone Diagram:

LED Light

Motor Holder

Motor Holder

Motor Holder

Motor Holder

Power Switch

Made In China

Remote Control Diagram:

Headless Mode

NO Function
(not supported on this model)

**High/Medium/
Low Speed
Button**

Left Stick

Right Stick

**Take Off /
Landing /
Emergency
Stop Button**

Power Switch

Battery Indicator

**Trim Button
(Press down the left stick)**

Brief Introduction for Button Functions

Left Stick	Move the Stick forward / backward / left / right to fly the drone to up / down / turn left / turn right.
Right Stick	Move the Stick forward / backward / left / right to fly the drone to forward / backward / left / right.
Power Switch	Push right the power switch to turn on the transmitter, and pull left to turn off.
Headless Mode	Press the button to enter Headless 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. Long press down the button, the drone propellers will stop and fall down immediately.
Trim Button	Press down this button, 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 3 alkaline batteries (AAA, not included) into the box in accordance with electrode instructions, as picture shown.

Battery Cover

**3×1.5V Alkaline Battery**
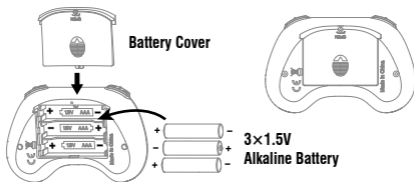
| **Notice:**	1. Make sure the polarity is correct. 2. Do not mix new with old batteries. 3. Do not mix different kinds of batteries. 4. Do not charge the non rechargeable battery.

Pre Flight Operation:

Frequency Pairing

1. Turn on the transmitter switch (Picture 1) , place the drone on the flat surface, the drone rear light will flash quickly, when the flashing became slow, which indicates the transmitter is ready for frequency pairing.
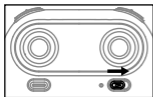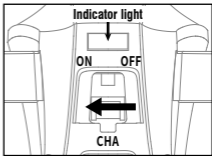

Picture 1
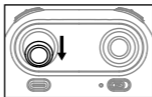
Picture 2
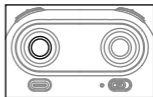
Picture 3

2. Turn on the switch of the transmitter(Picture 2), the transmitter indicator light is flashing quickly , pull the left stick down to the lowest position and then release (Picture 2/4), the transmitter indicator light will flash slowly. When the transmitter sound "di.di" one time and the drone rear light is solid , which indicates the frequency pairing is successful.


Picture 4

Note: When the transmitter sounds but the drone rear light is still flashing, that means frequency pairing fails. Please turn off the transmitter and repeat the steps of frequency pairing until it is successful.

Pre Flight Checklist

1. The white LED is in front of the drone. Keep the drone front away from operator.
2. Check the direction of the rotating propellers. The left front and right rear A propellers rotate clockwise while the right front and left rear B propellers rotate counterclockwise.
3. Activate(unlock) motors: Move the Left Stick and Right Stick at the same time (45 degree inward) to start the motors and repeat previous step again to lock the motors (Picture 5).

4. After activate the motors, push up the left stick slowly to fly up the drone, and pull down the left stick slowly to the lowest end, then the drone will land on the ground slowly.
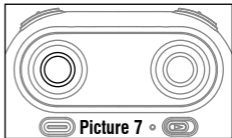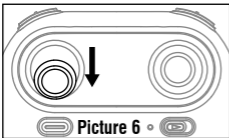

Picture 5
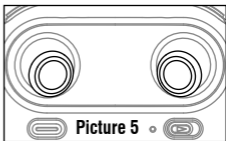
5. It's recommended to repeat above step 4 to practice.
6. Adjust relative transmitter trimmer button to adjust the rudder if the drone tilts to one side when flying.

Calibration Instruction:

Please follow below steps to calibrate the drone if the drone becomes imbalance after crashing during the flight, and can not be adjusted by trimmer button and cause difficult operation.

1. Power off the drone, then turn off the transmitter switch.
2. Turn on the switch of drone, then place the drone on the flat surface, the drone rear light will flash quickly at first , and then turn to slow down.

Picture 6

Picture 7

3. Turn on the switch of transmitter, pull the left stick all the way down to the lowest position and then release (Picture 6), the left stick will be back to middle position automatically (Picture 7), the transmitter is in the process of frequency pairing. When the transmitter sound "di.di" one time (The power indicator light is solid at the same time) , that indicates the frequency pairing is successful.
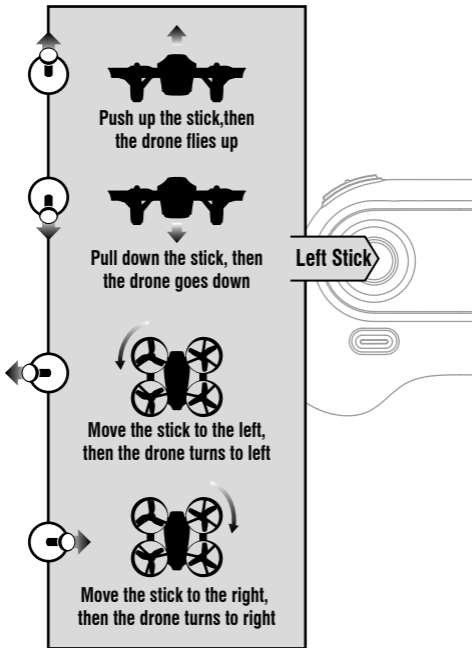
4. Do not move the left stick before successful calibration. Push the right stick (45 degree outward) as Picture 8 shown and then release. The drone body lights flash, which indicates that the drone is calibrating. When the drone body lights become solid, which indicates successful calibration.
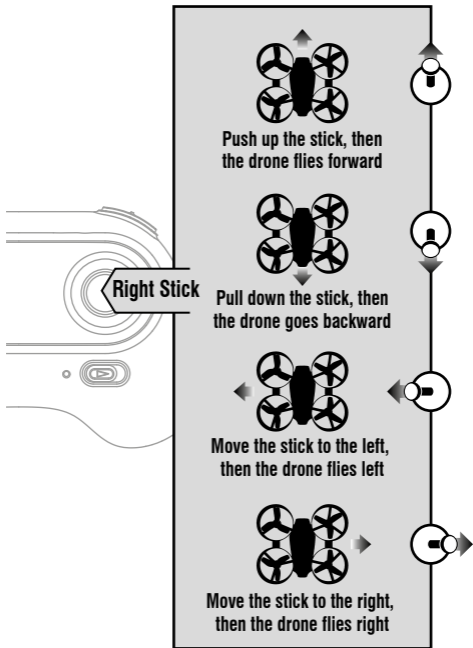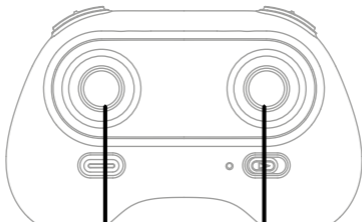
Picture 8
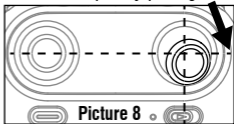
Notice: When the drone is fiercely impacted or crashed, it may cause the gyro can not recover and cause difficult control, if so, then you need to power off and power on again to calibrate.

Flight Controls:

Notice: Every time before the drone takes off, moves the left stick and right stick at the same time (45 degree inward) as Picture 5 shown to start the motors. Push up the left stick slowly to fly up the drone or press down the one button take off.

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Push up the stick,then
the drone flies up

Pull down the stick, then
the drone goes down

Left Stick

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

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

Right Stick

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 flies left

Move the stick to the right,
then the drone flies right

Forward and backward trim

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

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Left and right turning trim

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

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Left and right side flying trim

When take off, if the drone tilts to left, press down the left stick and push the right stick to right to adjust. Otherwise push left.

Functions:
Take off/ One button take off/Landing modes

1. Take off: After frequency pairing successful, push the left stick and right stick (45 degree inward) as Picture 5 shown to start the motor. Then push up the left stick to fly up the drone to certain altitude and then release the stick.

2. One Button Take Off: After frequency pairing successful or motors activated, press the Take Off / Landing / Emergency Stop Button (Picture 9) , the drone will fly up automatically and keep hovering at an altitude of 1.2 meters approximately.

3. Landing: When flying, push the left stick all the way down to the lowest position(Picture 2/6) and hold it till the motors stop and the drone will land on the ground slowly.

4. One Button Landing: When flying, press the Take Off / Landing / Emergency Stop Button once shortly(Picture 9), 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)

5. 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(Picture 9).
The propellers will stop immediately.

Take Off / Landing / Emergency Stop Button

Picture 9
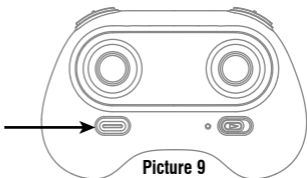
Altitude Hold Mode:

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 as Picture 10 shown. And the drone will keep flying at current altitude. Repeat above steps if you want to change the drone altitude (default mode).
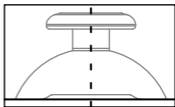
Altitude Hold Center Picture 10

Note: The Altitude Holding Mode can not be used when the blades are accidentally deformed or damaged.

High / Medium/Low Speed Mode Switch:

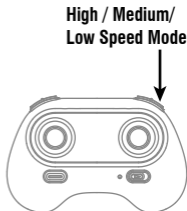### 1. Low Speed Mode (Mode 1):
Low Speed Mode is suitable for beginner.

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.

High / Medium/ Low Speed Mode

Headless Mode:

Drone generally has 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 headless 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).Headless 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 Headless Mode.

You are allowed to activate the headless mode function before taking off or in flight. Fly under headless 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.(Shown below picture)

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

Picture 1

Picture 2
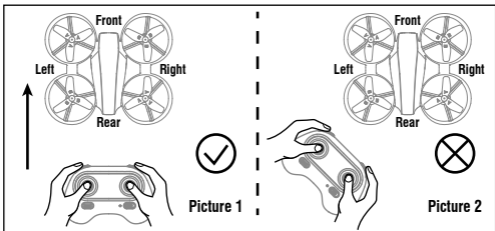
* Press down headless mode button, the drone's left and right LED will start flashing alternately, it shows the drone enters Headless Mode, press the button again, then the LED gets solid and the drone ESC from headless mode.

Headless Mode
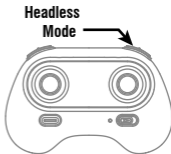
Low Battery Alarm:

When the remote control in low battery, the remote control will beep twice 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 battery is low power, the drone rear indicator LED will continuously show "flash once and power off for 1s" to alarm the user to fly back the drone immediately.

Out of Range Alarm:t

When the drone is going to fly out of the max remote control distance, the drone rear indicator LED will continuously show "flash twice and power off for 1s" to alarm the user to fly back the drone immediately. Or the drone may be out of control and fly away.

Propeller Installation:
Propeller Installation Diagram

When disassemble, hold the propeller and pull out in vertical direction.
When assemble, put the propeller hole aim at the motor shaft and press down as Picture 12 shown.
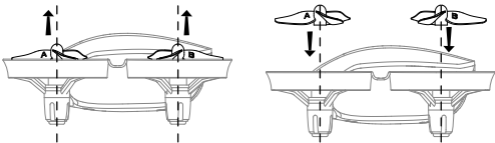
Troubleshooting Guide

No.	Problem	Problem Cause	Solution
1	The remote control indicator light is off	1. Low battery.	1. Replace the remote control 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 remote control	1. Indicator light is off.	1. The same as above 1.2.3.
		2. There is interfering signal nearby.	2. Restart the drone and power on the transmitter.
		3. Mis-operation.	3. Operate the drone step by step in accordance with the user manual.
		4. The electronic component is damaged for frequent crash.	4. To buy spare parts from local seller and replace damaged parts.
3	The drone is under-powered or can not fly.	1. The propeller deformed seriously.	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 deformed seriously.	1. Replace propeller.
		2. The motor holder deformed.	2. Replace the motor holder.
		3. The gyro did not reset after violent crash.	3. Put the drone on the flat ground for about 10s or restart the 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 or charge the battery in accordance with the use manual.

Specifications:

Frequency: 2.4GHz
Remote Control Range: Up to 15m
Play Time: Up to 7 Minutes
Charging Time: Up to 40 Minutes
Batteries:
    Drone: 3.7V Li-po, 180mA (Included)
    Remote: 3 x AAA (Not Included)
Dimensions: 92(L) x 80(W) x 32(H)mm

Warranty Information: