



产品说明书 User Manual



## 重要提示

- 1、本产品采用陀螺仪技术且能在较小的空间及室外飞行的4轴飞行器,只要室外风力不大于4级,都可以满足您对飞行的渴望。
- 2、飞行器采用2.4G频段,遥控距离远,可实现多人同时操作而互不干扰。通过遥控器控制能使此飞行器有前进、后退、左侧飞、右侧飞、左右转向等4通道基本功能及翻滚等特技功能。
- 3、为了您更容易、熟练、更安全的操作此飞行器,使用前请您仔细阅读完此说明书,包装及说明书中含有重要信息,应保留。

## 安全守则

- 1、请将飞行器较小零部件放置于小孩不能触及的地方,避免发生意外。
- 2、本飞行器动力强劲,首次飞行时应慢慢推高遥控器左手变速操纵杆,避免飞行器急速上升而导致碰撞损坏。
- 3、飞行结束后,应先关闭遥控器电源,再走近飞行器关闭其电源。
- 4、切勿将电池放在高温、受热的地方(如火中或电热装置附近)。
- 5、注意飞行器飞行时与使用者或其他人保持2-3米的距离,避免飞行器飞行降落时撞向他人的头部、脸部或身体等。
- 6、儿童操作飞行器时应由成年人在旁指导并确保飞行器控制在操纵者(或指导者)的视线范围内,方便控制。
- 7、非充电电池不可充电,安装或更换电池时请注意特性;不可混用新旧或不同类型的电池。
- 8、不使用时应关闭遥控器及飞行器电源,并取出遥控器与飞行器内的电池。
- 9、电源端子不得短路。
- 10、激光辐射,请勿直视光束。

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# 产品参数

轴距:117mm 螺旋桨:58mm

电机:8620有刷(44000rpm)

电池:3.7V 850mAh 50c

充电器:单路4.2V/4.35V

重量:72-88g 续航:7mins 可遥控距离:50m

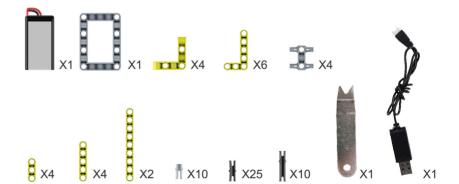


# 产品清单





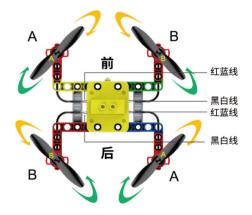




# 遥控器介绍

■ 按键功能介绍





### ■遥控器安装说明







### 飞行器充电:

先把电池从飞行器中拔出,将USB充电线一端连接电脑USB接口处,另一端连接电池充电插口,充电时USB灯亮,充满时USB灯灭,充电时间约60分钟。(注:禁止使用1A以上电流充电)



# 起飞准备事项

### ■ ①对频

飞机出厂前已设置好对频,无需再次对频。如出现无法连接,请按如下操作进行对频:

- 1.遥控器先按住"1",再按"2",LED灯闪烁进入对频模式,然后松开。
- 2.无人机接上电池,无人机LED快闪。
- 3.将遥控器"3"操纵杆推向高点,"嘀"一声,再拉 至最低点,"嘀"一声,无人机和遥控器的LED均由闪 烁变成常亮,对频成功。

#### 对频示意图





### ■ ②一键校准

请保持飞行器水平



★ 无人机放置水平,长按遥控器右上角键, "嘀"响一声,同时飞行器前部LED闪烁,直至 LED停止闪烁,校准完成。

### ■ ③解锁

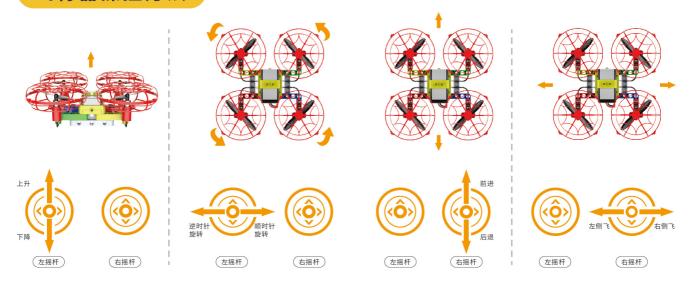
请保持飞行器水平





★ 在对频成功的情况下,保持飞行器水平, 键遥控器油门操纵杆推至高点,电机怠速转动,表示解锁成功。再次推至高点,正常起飞。

# 飞行器操控方法



注:以上左手油门操控方法

## 电机安装方式



★ 正转动力套: 桨叶标识为A对应红蓝线 电机

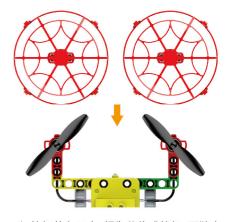


★ 反转动力套:桨叶标识为B对应黑白线 电机



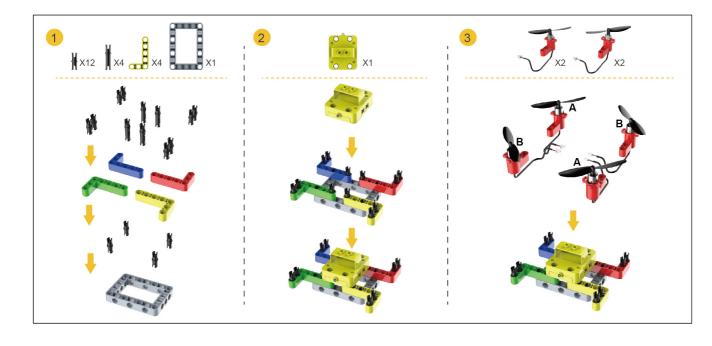
★ 电机采用了空心杯电机,可以 快捷拆卸及安装。

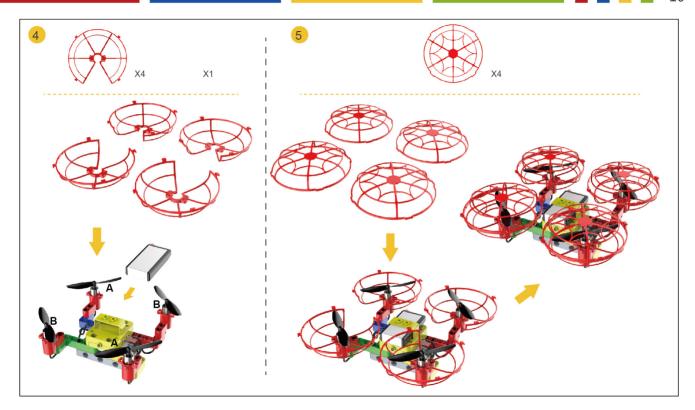
### ■ 保护环安装方式



★ 护架共有四个,都为分体式护架,可独立 进行安装,没有尺寸限制护架安装无需螺丝, 可快捷拆卸及安装。

# A形态





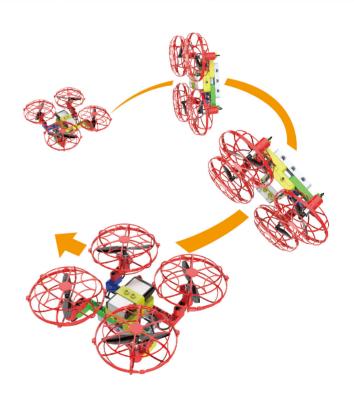
# 功能介绍

### ■ 360° 一键翻滚

使用翻滚功能时,请与飞行器保持一定的安全距离,避免发生割伤的危险。

保持飞行器悬停状态,短按翻滚按键,当听到遥控器发出"嘀嘀"响声时,推动操纵杆(除上升、下降、左转、右转操纵杆外),飞行器将按照摇杆推动的方向360度翻转。





### ■ 手动抛飞

飞行器水平放置于手掌中间,待飞行器 前部LED灯常亮,保持飞行器水平向上抛起 20-30厘米,完成抛飞起飞后,立即使用遥控 器进行操控飞行。

注意:飞行器前部LED灯必须为常亮状态,并且顶部朝上水平抛起,飞行器顶向至少需要2米空间,切勿朝向人员或障碍物水平抛出,避免发生意外。



### - 无头模式

启动与设置:开机对频时的飞行器前方默认为 无头模式的前方;如果撞击后或飞行前方偏,请重 新开机调整到您所需要的方向,按下无头模式 按键,遥控器发出"嘀"一声,飞行器前端LED灯闪 烁,无头模式启动。

退出无头模式:再一次按下无头模式按键(\*遥控器)发出"嘀"一声,指示灯常亮,退出无头模式。





#### 三档控谏

慢中快档按键中起飞的默认挡位为最慢档;短按遥控器左上角的慢中快档按键,当遥控器"嘀"一声响,表示进入慢速档飞行模式,此时飞行器的飞行速度为最慢。

短按遥控器左上角的慢中快档按键,当遥控器"嘀嘀"两声响,表示进入中速档飞行模式,此时飞行器的飞行速度较快。

再次短按遥控器左上角的慢中快档按键,当遥控器"嘀嘀嘀"三声响, 表示进入快速档飞行模式,此时飞行器的飞行速度最快。

注意:在不熟悉飞行器的操控下,建议在慢挡位进行控制飞行,以免发生碰撞。



### ■ 气压定高

本产品使用气压辅助定高,轻松操控飞行器高度,享受飞行的乐趣。

注意:气压传感器容易受环境影响,当气流环境不稳定时,飞行器的高度容易发生变化。

# 低电压报警及充电

### ■ 低电压报警

飞行器在飞行过程中,当电池电压过低时,飞行器前部的LED灯会闪烁提示,同时遥控器会连续发出"滴"声。当遥控器的电池电压过低时,遥控器的电源指示灯会闪烁提示。出现以上情况请停止飞行并对飞行器电池进行充电,或更换遥控器电池。

#### ■ 电池充电

从飞行器中取出电池,将USB充电线一端连接电脑或充电器USB接口,另一端连接电池充电插口,充电状态USB LED指示灯为常亮状态。

# 产品常见故障及注意事项

常见故障	解决方法
完成组装不能起飞	1.检查正转反转电机及A.B桨叶是否安装正确 2.电池电量不足需充电
飞行器推油门乱飞	检查正转反转电机及A.B桨叶是否安装正确
飞行器推油门飞不高	1.电机需冷却后再飞行 2.电池电量不足需充电 3.检查电机外壳与桨叶底部之间是否有干涉, 毛发缠绕之类的
飞行器通电无反应	检查电池接口及飞行器电源接口是否有异物堵 住导致接触不良
单个电机自转或不转	1.可以拆下其他正常工作的电机对换,确定故障点 2.电机工作受阻导致飞控MOS击穿,需返厂维修
飞行器升空后偏飞	1.需校准飞行器再起飞,使用微调功能 2.检查电机外壳与桨叶底部之间是否有干涉 3.A.B桨叶是否破损变形 4.所有结构件安装牢固,电池需在飞控中心位置

#### 注意:

运动物体贴近地面运动时,地面对物体产生的空气动力干扰。当飞行器接近地面飞行或运行时,地面影响到空气绕飞行器的流动特性,简称地面效应。受地面效应的影响飞行器将不稳定,建议将飞行器操控至距离地面30cm以上飞行。

### ■ 注意事项

使用时请与飞行器保持安全距离,以免发生绞伤、割伤危险。

小心激光辐射,勿直视光束。

遥控器或飞行器的电量不足时,遥控距离受影响,同时会出现飞行高度不够及起飞困难。

若飞行器出现破损,变形请及时修理,严重者如旋翼断裂破损切勿飞行,否则会导致受伤。

长期不使用请将遥控器电池取出,以免漏液造成对本产品的损坏。

切不能让飞行器高空坠机或严重碰撞,这样会损坏飞行器或缩短飞行器寿命。

#### ■ 特别提醒

慢慢推动油门操纵杆,当飞行器离开地面至空中时,若飞行器在空中打转或倾向不同方向,可使用微调修正动作。 禁止使用1A以上电流适配器进行充电,否则可能影响电池寿命,及电池虚电、燃烧等意外情况。

## 产品注意事项

#### ■ 锂电池的使用及相关注意事项

锂电池的使用存在一定风险,可能对人身或财产造成重大损失使用者应当自行承担,所有的相关责任制作商和经销商不对电池的使用(充电、放电和存储)等进行控制,也不对其人身和财产造成的损失承担责任;

如果电池发生漏液,请避免液体与皮肤和眼睛接触,若接触到皮肤,请立即使用香皂和清水进行清洗;若接触到眼睛,请立即以大量清水冲洗并立即就医;

如果充电器出现可疑的异味噪声或烟雾,请立即断开电源;

请严格遵守锂电池使用要求,否则将引起火灾、电击或爆炸。

### ■ 使用与存储

禁止幼童接触电池,严禁使用塑料包装已损坏的电池或发出异味的电池;

当产品开启时,请勿插入或取出电池;

请勿让电池受到过度物理撞击,请勿将产品放置在发热源附近;

请勿将电池放入火中,避免电池与液体发生接触,电池保存不得置于潮湿处;

请勿将产品放置在发热源附近,请勿将电池放入微波炉或压力罐中;

请勿对电池进行拆卸钻孔变形或者切割电池,充电器严禁承载重物,严禁摔打电池;

请勿使用溶剂工业酒精或者其他易燃溶剂对电池进行清洁;

防止发生短路,避免与电池中的电解质发生直接接触电解液,电解物质和电解蒸汽对身体有害。

#### ■ 充电器及充电

锂电池充电请使用原厂推荐的充电器,请勿对膨胀泄漏或破损的电池进行充电;

请勿对电池进行过度充放电,切勿在产品使用后立即对电池充电;

当电池完全充满后请立刻拔出充电器,充电结束后请勿对电池进行重复充电,避免发生过热情况;

不要在靠近易燃物或易燃(地毯,木板,实木家具等)或导电的物体表面上充电,充电时要随时对电池进行观测;

电池充电的环境温度应该介于15度到30度之间。

禁止使用1A以上电流适配器进行充电,否则可能影响电池寿命,及电池虚电、燃烧等意外情况。

### ■ 回收

请勿将损坏或者无法使用的电池当做日常垃圾处理,应该放置在特殊的指定用途的容器中;

二次产品由电子元件和电子构成,关于电子电器垃圾请特殊的要求进行处理;

熟悉当地垃圾集中处理办法。

# 免责声明

本产品是一款多旋翼飞行器,建议8岁以上的儿童使用。未满8岁儿童须在家长的陪同和监督下使用本产品,在有儿童出现的场景操作时请务必特别小心注意。

使用本产品之前,请仔细阅读本文档。本声明对安全使用本产品以及您的合法权益有着重要指导作用。在 电源正常工作及各部件未损坏的情况下将提供轻松自如的飞行体验。务必在使用产品之前仔细阅读本文档,了 解您的合法权益、责任和安全说明并清楚使用本产品过程中可能带来财产损失、安全事故和人身安全隐患。

一旦使用本产品,即视为您已理解、认可和接受本声明全部条款和内容。使用者承诺对自己的未按规定操作行为及因此而产生的所有后果负责。使用者承诺仅出于正当目的使用本产品,并且同意本条款及我司可能制定的任何相关政策或者准则。

我司不承担因不按照本安全指引使用本产品所造成的任何直接或间接的人身伤害及财产损失的相关赔偿责任。

### 警告:



不适合3岁以下儿童 使用,内含细小部件, 慎防小孩吞食。

## **ATTENTION**

- 1. The product is equipped with a gyroscope, which allows the drone to fly in a small space or outdoor when the wind is lighter than a fresh breeze.
- Adapting the 2.4GHz, the drone can be controlled within a longer distance without interference. By the controller, the drone has the basic function of 4 channels: fly forward/backward, roll left/right, yaw CW/CCW, and flip.
- 3. For an easier, skillful, safer operation, please read the instruction manual carefully before the flight, and it's better to keep the manual.

## SAFETY GUIDELINES

- 1. To avoid an unexpected accident, please place the small part out of the baby's reach.
- 2. With powerful motors, it's better to push the throttle lightly on the first flight, avoiding the possible damage caused by rockets.
- 3. After the flight, turn off the controller first, then turn off the drone.
- 4. Do not put the battery in a hot environment(such as a fire, electric heater).
- 5. Keep 2-3 meters away from the drone, to avoid a possible crash on the human body.
- 6. For safety, there must be an adult accompanied when the drone is controlled by a child.
- 7. Do not charge the non-rechargeable batteries. Pay attention to installing and replacing the battery, and don't use the old and new batteries at the same time, or use the battery of a different type.
- 8. Please turn off the controller and drone, meanwhile, take the battery out when they are not in use.
- 9. To avoid any short circuit of the devices.
- 10. Do not look straight at the light ray.

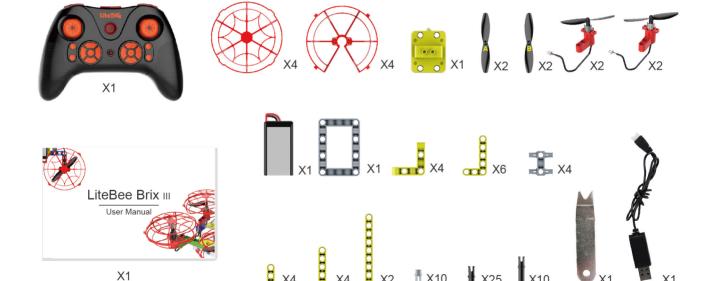
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### **SPECIFICATIONS**

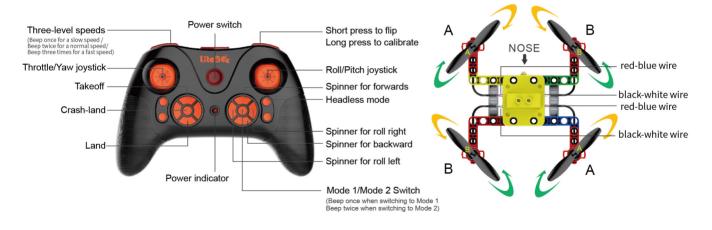


### **PACKING LIST**



### **ABOUT THE CONTROLLER**

About the function keys



#### Instructions for the controller







### Charging:

Take the battery out from the drones, connect the battery to USB power with the charging cable. The light is red when charging; the light is off when fully charged. Charging time:60 mins. (Attention: The adapter for charging must be less than 1A current.)



### STEPS FOR TAKE-OFF

### 1 Binding

The drone has been set up for frequency binding before leaving the factory, and there is no need for frequency binding again.

If the connection fails, perform the following operations for frequency binding

- 1. Remote control first press "1", then press "2", LED light flashing into the pair frequency mode, then release.
- 2. Battery on the drone, the drone LED flash fast.
- 3.Push the "3" to highest point, there was a beep, and pull again at the lowest point, there was a beep, the leds of both the drone and the remote control flash fast turns to steady on, and the frequency binding is set successfully.

#### Frequency binding





### ②Calibration

#### Please keep the drone on level



★ Long press the button on the right top of the controller(as the picture shows) until the front LED of the drone stop flashing.

#### 3Unlock

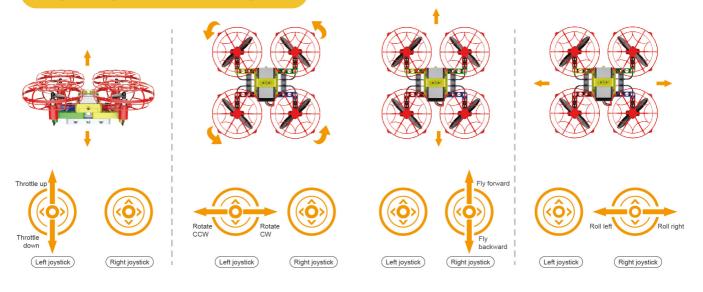
#### Please keep the drone on level





★After binding ,place the drone in level ,then push the throttle up to its end. The drone is unlocked when the motors start to rotate. Drone is taking off when pushing again the throttle up to its end.

# **HOW TO FLY THE DRONE**



Ps: Here we take mode 2 as an example. Please operate the drone as needed.

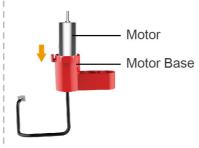
## **HOW TO INSTALL THE MOTOR**



★ A: CW motor with blue&red wire

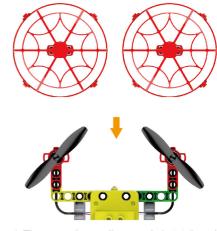


★ B: CCW motor with black&white wire



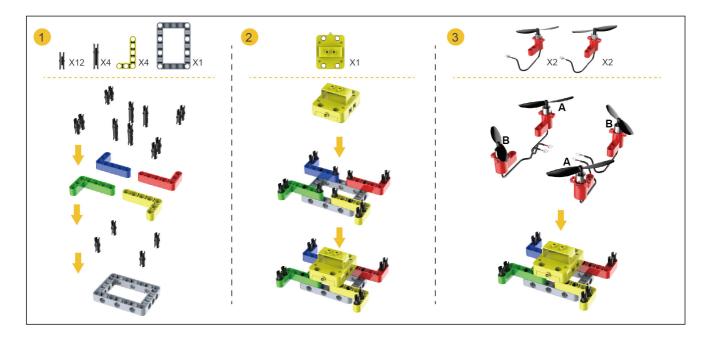
★ The motor can be installed and replaced easily.

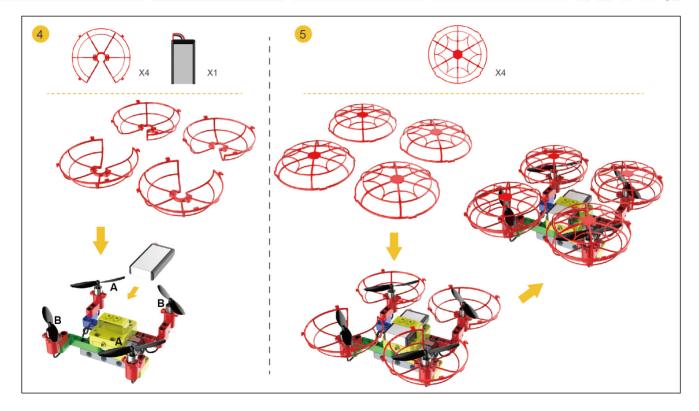
#### Install the propeller guard



★ There are 4 propeller guards in total, and they can be installed without any screw.

# **TYPE A**





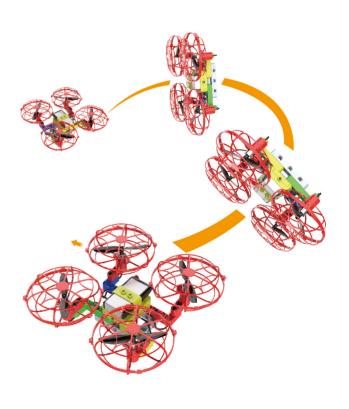
# **FUNCTIONS**

## One key to flip

Please keep away from the drone when flipping it, avoiding the dangers.

Short press the flip button(as the picture shows) when the drone hovers in the air. Push/pull the right joystick in any direction after the drone makes a sound of "beep", and the drone will flip.





#### Throw & Go

After binding, hold the drone on a level and then throw it up vertically about 20-30cm, it will take off automatically. In this way, we enable the drone to fly without the limit of plate ground.

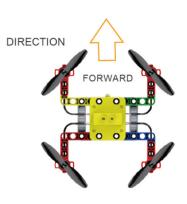
Attention: Make sure that the drone has bound with the controller(the front LED of the drone is on, not flashing), and throw it up vertically, within a space at least 2m high above the start point of throwing. Ensure there is no barriers surrounding.



#### Headless mode

Setting: By default, the headless mode is off. The nose of the drone is always forward. Press the button(as the picture shows) for switching to headless mode(you can hear the sound "beep"). The drone will take the default direction as the original direction. For example, if the drone faces forward to east at the moment for switching to headless mode, the drone will always take east as its forward on the headless mode, no matter which direction the nose is towards.

Turn off: Press the same button(when hearing the sound "beep")again to turn off the headless mode





#### 3 Level speeds(slow,normal,fast)

By default, the drone fly at slow speed; Short press the button on the left top of the drone(as the picture show), when the controller sounds once, the drone flies at the slow speed.

Press the button again, when the controller sounds twice, the drone flies at the normal speed.

Continue to press the button, when the controller sounds 3 times, the drone flies at the fast speed.

Attention: It's advised that fly the drone at the slow speed if you are new to the drone.



#### Altitude hold

The drone applied a barometer as the ancillary device for altitude holding. It is easier for beginners to fly it.

Attention: The barometer will be affected by the air pressure, so do not fly the drone in an environment with unstable airflow.

# THE COMMON FAULTS

Common fault	Solution		
Fail to take off after assembling	1.Check whether the motors are installed correctly 2.Check the power of the battery		
Drone flying around	Check whether the motors are installed correctly		
Drone cannot fly high	The motor needs to cool down then flying again     The battery is low and needs to be charged     Check if there is any interference between the motorhousing and the bottom of the propeller, hair entanglement and the like		
Drone unresponsive	Check whether the battery interface and the drone power interface are blocked by foreign objects		
Individual motors spin or do not spin	Remove other normal working motors and replace them to determine the fault point     The flight control MOS breaks down due to the obstruction of the motor, needs to be returned to the factory for repair.		
Drone liftoff, deflected	Need to calibrate the drone before taking off, use the fine-tuning function     Check if there is any interference between the motor housing and the bottom of the propeller     Whether the A.B. propellers are damaged and deformed     All structural parts are installed firmly, and the battery must be at the center of the flight control		

Attention: There will be a recoil airflow impact on the drone when the drone flies too much close to the ground. For a better experience, it's advised that fly the drone above the ground by at least 30 cm.

#### Cautions

To avoid any possible injury, please keep away from the drone when flying the drone.

The low battery of the controller or drone will lead to a low flight height or fail to take off.

Please fix it if the drone is broken or distorted; do not fly the drone if it is broken badly.

Please take the battery out if don't use it for a long time, to avoid the damage caused by the battery leakage.

To maintain the drone for long service life, do not let the drone fall from a high altitude or crush it.

#### Attention

Push the throttle joystick slowly, we can apply the trimming button to adjust its movement when the drone is in the air. The adapter for charging must be less than 1A current. Otherwise, the battery will be damaged with short battery life, battery voltage mismatch, burning, etc.

# **BATTERY CHARGING**

#### Common faults and cautions

When the battery of drone is low ,the frone LED light of drone is flashing ,meanwhile remote controller is making "Beep" sounds.Pls stop the flight and charge the battery. When the battery of controller is low ,the LED light of controller is flashing.Pls stop flight and replace the new batteries for the controller.

## Battery charging

First, take the battery out from drones. Then connect the battery to USB power with the charging cable. There is an indicator light on the wire, light on when charging; light off when fully charged.

# **PRECAUTIONS**

#### About lithium battery

Please charge the battery with the original charger, do not charge the swollen, leaky, or broken battery.

Do not overcharge or over-discharge the battery, do not charge the battery immediately after use.

Please cut off the power when the battery is fully charged, do not charge the battery repeatedly after charging to avoid overheating.

Do not charge the battery on the surface of flammable materials such as carpet, board, and wood furniture.

Please charge the battery in the environment with a temperature between 15-30 degrees.

Attention: The adapter for charging must be less than 1A current. Otherwise, the battery will be damaged with short battery life, battery voltage mismatch, burning, etc.

#### Use and store

Keep the battery away from children, do not pack the broken or smelly battery with plastic.

Do not install or pull out the battery when the device is working.

Do not strike the battery badly, do not put it close to a heat source.

Do not put the battery in fire or liquid, do not keep the battery in humid condition.

Do not put the battery in microwave or pressure tank.

Do not disassemble, drill, reshape or cut the battery, do not load the weight with the charger.

Do not wash the battery with industrial alcohol, or other flammable liquid.

Avoid any short circuit, it may cause some harmful materials

### Charger

Please charge the battery with the original charger, do not charge the swollen, leaky, or broken battery.

Do not overcharge or over-discharge the battery, do not charge the battery immediately after use.

Please cut off the power when the battery is fully charged, do not charge the battery repeatedly after charging to avoid overheating.

Do not charge the battery on the surface of flammable materials such as carpet, board, and wood furniture.

Please charge the battery in the environment with a temperature between 15-30 degrees.

Attention: The adapter for charging must be less than 1A current. Otherwise, the battery will be damaged with short battery life, battery voltage mismatch, burning, etc.

## Recycling

Do not throw the battery along with the normal waste, put it in the special recycle bins.

## DISCLAIMER

This product is a multi-rotor aircraft. We recommend it for children over 8 years old. Children under the age of 8 are required to be accompanied by adults. Please be careful when handling this product in the presence of children.

Please read this document carefully before using this product. This statement has important guidance for your safe usage of this product and your legal rights. This product provides an easy flight experience when the power supply is working properly and the components are not damaged. Be sure to know your legal rights, responsibilities, and safety instructions before using this product, and also be clear that using this product may bring property damage, safety accidents, and personal safety hazards. By using this product, you are deemed to have read, recognized, and accepted all terms and conditions of this statement. The user is committed to being responsible for his non-compliant operations and the consequences thereof; the user undertakes to use the product solely for legitimate purposes and agrees to these terms and any relevant policies or guidelines that may be developed by us. We are not liable for any direct or indirect personal injury or property damage caused by failure to use this product following the safety guidelines.

# <u>!</u>

#### Warm:

Not suitable for children under 3 years old,Small parts contained,Beware of swallowing by children.



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