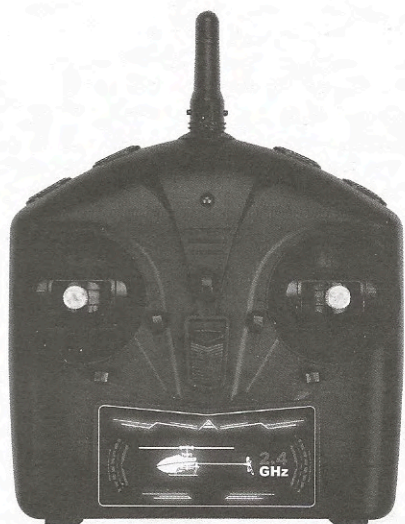


14+

INSTRUCTION K170 MANUAL

使用说明书



6 axis gyro mode, flying very stable,
especially suitable for beginners flight
6轴陀螺仪模式，飞行超稳定，特别适合初学者飞行

K-170

Product Introduction 产品简介

1. 4-channel remote control, free switching between left and right hands, airplane, remote control low voltage prompt and other functions.
2. The Black Hawk UH-60L has a reduced proportion of actual aircraft, with a refined appearance and high simulation of four propellers without ailerons.
3. Design propeller blades based on aerodynamic principles to provide strong power and self stability of the aircraft.
4. The 6G mode uses a 6-axis gyroscope for stable flight, making it particularly suitable for beginners to fly.
5. Equipped with a dedicated USB charger, it effectively protects the battery from overcharging.
6. The remote control adopts an independent locator joystick seat, which has a more delicate touch and more accurate centering, making customer operation more precise and comfortable.
7. Using high-efficiency 2G digital servos, with fast response, high precision, and precise return, the aircraft has a good flying feel and longer lifespan.
8. Simple 4-channel design, using 6-axis gyroscope, with high pressure function for more stable flight; Remote control functions such as one key takeoff, one key landing, ascent and descent, forward and backward, left and right steering, and left and right side flight; Make the product easier to operate and more suitable for beginners.
9. The use of a 1106 external brushless motor provides stronger power, and comes standard with a 3.8V 800mAh 20C high rate high-voltage battery. The flight time is about 8 minutes.
1. 4通道遥控器，左右手随意切换，飞机、遥控低电压提示等功能。
2. 黑鹰UH-60L真机比例缩小，精细外观、四桨无副翼高仿真。
3. 引用空气动力学原理设计桨叶，提供强劲动力及机体自稳性。
4. 6G模式使用6轴陀螺仪，飞行稳定，特别适合初学者飞行。
5. 配有专用USB充电器，更有效保护电池不过充。
6. 遥控器采用独立的定位器摇杆座，手感更佳细腻，回中更精准，使客户操作起来更加精准舒适。
7. 使用高效率2G数字舵机，响应快、精度高、回中精确，让飞行器飞行手感好、寿命更长久。
8. 简单4通道设计，采用6轴陀螺仪，带有气压定高功能飞行更稳定；遥控一键起飞、一键降落、上升下降、前进后退、左右转向、左右侧飞等功能；使产品更容易操控，更适合新手操作。
9. 使用1106外转无刷马达动力更强劲，标配3.8V 800mAh 20C大倍率高压电池，飞行时间约8分钟。

Important Instruction 重要说明

■ Please read the entire manual to understand the function of the product. Failure to operate the product properly may result in product damage, causing serious damage to personal property. This is a model product, not a children's toy. Not only to operate carefully, but also need to have the operation of common sense and operational basis. Failure to use the product safely may damage the product or cause damage to the person or other property. This product is not intended for the direct use of children without adult supervision. This manual covers safety, operation and maintenance. Therefore, before assembling, installing, or using the product. We must read and follow all the tips and warnings in this manual in order to operate correctly and avoid causing loss and serious injury.

■ 操作前，请阅读整个说明书以便了解产品的功能。未能正确地操作本产品可能会导致产品损坏，对人身财产造成严重损害。这是模型产品不是儿童玩具。不仅要谨慎操作，还需要具备操作常识和操作基础。若未能安全使用该产品，会损坏该产品或者对人身，或者对其他财产造成损失。本产品不提供没有成人监督下的儿童直接使用。本手册内容包括安全、操作、维护。因此，在装配，安装或使用产品前。我们必须阅读并遵守本手册中所有的提示和警告，以便正确操作，避免造成损失和严重伤害。

Additional Safety Precautions And Warnings 附加安全措施防范和警告

1. Recommended age of users: Not suitable for children under 14 years old.
2. Don't view the beam of the light emitting diodes, it would effect the eyesight.
3. Don't operate the model if the transmitter's battery is in low voltage.
4. In order to avoid causing damage, please do not touch the high-speed rotating blades.
5. Operate it in an open space, away from the traffic and people.
6. It has to stay away from chemicals. Small parts and electric equipment must be out of the reach of children.
7. Do not put any parts in the mouth, it will cause injury or death.
8. Keep away from water because this product has no waterproof function.
9. Obey the instructions and warnings, includes the use of optional equipment.
10. The motor and electric equipment will be heat after flight. Please do not touch them to avoid scald.
1. 年龄建议：不适合14岁以下的儿童，这不是一个玩具。
2. 请勿直视发光二极管的光束，以免影响眼睛。
3. 当遥控器电池电压过低的时切勿操作你的模型。
4. 请勿触碰高速旋转的螺旋桨，以免造成损伤。
5. 始终在开放的空间操作你的模型，远离车辆、交通和人。
6. 始终保持远离所有的化学品，细小部件跟用电设备需远离儿童接触。
7. 切勿将模型的任何部件放在嘴里，因为它可能会导致严重受伤甚至死亡。
8. 应避免与水接触，尤其此设备的设计不具备防水功能；水汽也会导致电子产品损害。
9. 必须仔细地遵循操作说明和警告，包括可选设备的使用方法。（充电器，可选充电电池等）
10. 飞行器在飞行中和飞行后，马达及电子元件会产生高温，请勿触摸，以免发生烫伤危险。



Note: The K170 comes with a charger that can safely charge the battery. It is recommended to use the original USB charger. Using other chargers may damage the battery and cause property damage!

注意: K170 附带充电器可以安全的给电池充电, 建议使用原厂的USB充电器。使用其它充电器有可能将电池充坏导致财产损失!

Warnings! The battery will fire, explode or leak if not strictly observing this item described below.:

1. Do not immerse the battery in water or seawater, and keep the battery in a cool dry environment during stands by period.
2. Never disassembling the battery in any way.
3. Do not directly solder the battery.
4. Do not strike or throw the battery against hard surface.
5. Do not unpack the battery with a nail or other sharp object.
6. Do not transport or store the battery together with metal objects such as necklaces, hairpins etc
7. Do not short-circuit the battery by directly connecting the positive (+) and negative (-) terminals with metal objects such as wire.
8. Do not reverse the positive (+) and negative (-) terminals.
9. Use the battery charger specifically for that purpose when recharging.
10. Do not connect the battery to an electrical outlet.
11. Do not dispose the battery in fire or heat.
12. Do not use or leave the battery near a heat source such as fire or heater.
13. Keep all batteries out of the reach of little children. Consult a doctor immediately if a battery is swallowed.

警告! 不仔细阅读下述事项可能导致电池泄露、爆炸或起火:

1. 不能把电池进入水中, 长时间不用时把电池放在阴凉和干燥的地方保存。
2. 禁止以任何方式分解电池。
3. 禁止直接焊接电池端子。
4. 禁止撞击、投掷电池, 使电池受到硬物撞击。
5. 禁止用钉子或其它尖锐物体刺穿电池壳体, 禁止锤击或脚踏电池。
6. 禁止将电池与项链、发夹或其它金属物体一起运输或贮存。
7. 禁止用导线或其它金属物体将电池正负极短路。
8. 请勿将正负极接反。
9. 充电时必须使用符合规格的充电器。
10. 请勿将电池直接连接到墙上插座或车载点烟式插座上。
11. 请勿将电池投入火中或给电池加热。
12. 不能在产热源的附近使用或存放电池, 比如火源或加热炉。
13. 电池应放在小孩接触不到的地方, 如果小孩不小心吞咽电池应立即寻求医疗救助。

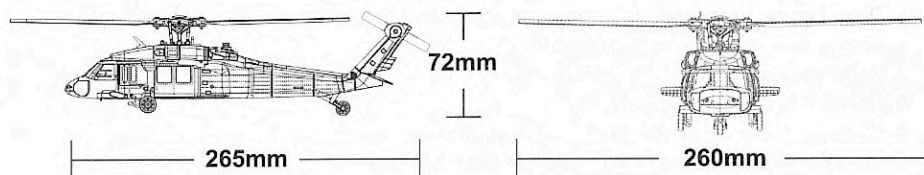
Note: The battery can not be placed for a long time under full power and low power.

Otherwise, the battery will not be charged or the battery will be wrapped. For long-term storage, please charge the battery to 3.7V and store it in a dry and safe place.

注意: 电池不能在满电和低电状态下长期放置, 否则会造成电池不能充电或者电池鼓包, 长期放置请将电池充至3.7V电压, 并在干燥安全的地方存放。

Helicopter Parameters 飞机参数

Length about	长度约	265mm
Height about	高度约	72mm
Weight about	重量约	98g (including battery 含电池)
Propeller length about	主桨长度约	260
Tail rotor diameter about	尾桨直径约	56 mm
Battery Specification	电池规格	3.8v 800mah 20c
Flight time approximately	飞行时间约	8 min
Main Motor	主马达	1106
Tail motor	尾马达	720



Packaging List 包装清单

NO	PART NAME	零件名称	QUANTITY
1	Gift box	包装彩盒	1
2	Instruction	使用说明书	1
3	Helicopter	直升机	1
4	Transmitter	遥控器	1
5	USB charger part	USB充电器	1
6	lithium battery	锂电池	1
7	Main pulp	主桨	4
8	Big Gear	大齿轮	1
9	Tail slurry	尾桨	1
10	Screwdriver	螺丝刀	1
11	Allen wrench	内六角扳手	1

Left hand throttle

左手油门

Emergency stop

急停

Power LED

电源指示灯

Speed conversion

速度转换

Throttle/directional rocker

油门/方向摇杆

Long Press to the right to boot,
right and left hand switch

往右长按开机,
左右手转换

Power switch

电源开关

Antenna

天线

A key take-off

A key landing

一键起飞

一键降落

Left/right/front/rear joystick

左右/前后摇杆

Fine-tune before and after

前后微调键

Fine-tune keys around

左右微调键

Right-hand throttle

右手油门

Emergency stop

急停

Power LED

电源指示灯

Speed conversion

速度转换

Front/rear/directional joystick

前后/方向摇杆

Fine-tune before and after

前后微调键

Long Press to the right to boot,
right and left hand switch

往右长按开机,
左右手转换

Power switch

电源开关

Antenna

天线

A key take-off

A key landing

一键起飞

一键降落

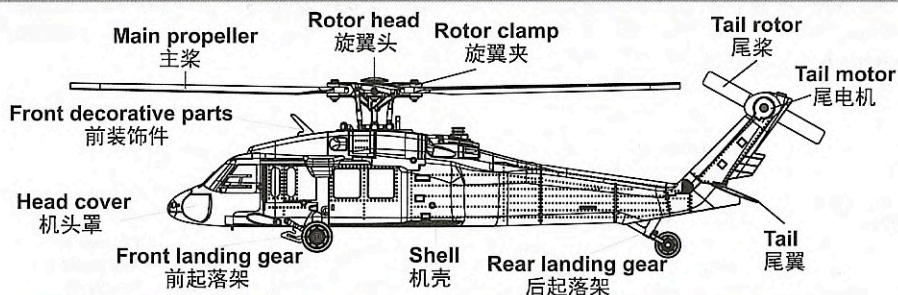
Left/right/throttle rocker

左右/油门摇杆

Fine-tune keys around

左右微调键

Name of helicopter parts 直升机零件名称



Battery charging operation 电池充电操作

Charging operation 1: Charging battery by power bank

充电操作1: 使用手机充电宝给电池充电

1. Connect the phone power bank to the standard USB charger, and the green light will remain on when the battery is not connected and powered on.
 2. Connect the battery to a USB charger. If the red light stays on, it means the battery is charging. If the red light goes out and the green light stays on, it means the battery is fully charged.
1. 使用标配的USB充电器连接手机充电宝, 没接电池通电绿灯长亮。
2. 将电池连接到USB充电器, 红灯常亮表示正在充电, 红灯熄灭绿灯长亮表示电池已经充满。

Charging operation 2: Charge the battery with a mobile phone power adapter

充电操作2: 使用手机电源适配器给电池充电

1. Connect the phone power adapter to the standard USB charger. If the battery is not connected, the green light will remain on.
 2. Connect the battery to a USB charger. If the red light stays on, it indicates that the battery is charging. If the red light goes out and the green light stays on, it indicates that the battery is fully charged.
1. 使用标配的USB充电器连接手机电源适配器没接电池通电绿灯长亮。
2. 将电池连接到USB充电器, 红灯常亮表示正在充电, 红灯熄灭绿灯长亮表示电池已经充满。

Charging operation 3: Charge the battery using the computer USB port

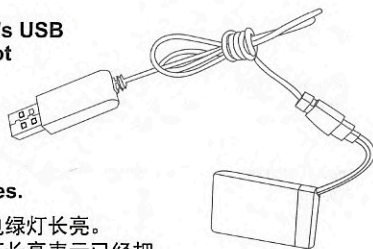
充电操作3: 使用电脑USB端口给电池充电

1. Connect the standard USB charger to the computer's USB port. The green light stays on when the battery is not connected and powered on.
2. Connect the battery to the charger. When the red light is on, it indicates charging. When the red light is off and the green light is on, it indicates that the battery is fully charged.

Note: Standard 5V 2A charging takes about 120 minutes.

1. 使用标配的USB充电器与电脑USB端口连接。没接电池通电绿灯长亮。
2. 将电池连接到充电器, 红灯亮表示在充电, 红灯熄灭绿灯长亮表示已经把电池充满。

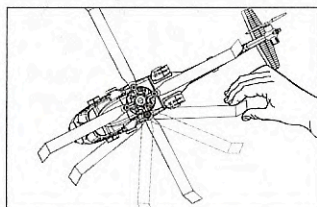
备注: 标准5V 2A充电时约120分钟。



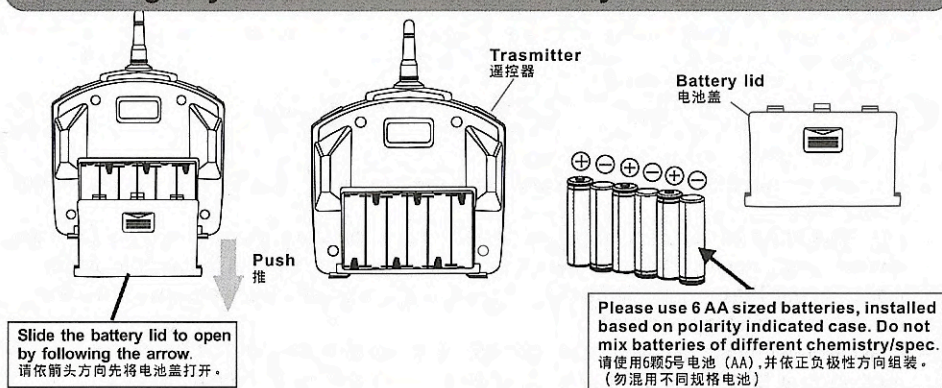
First Flight Preparation CAUTION 飞前注意事项

1. Make sure the remote control battery is full and the helicopter battery is full.
2. Before the operation, turn on the power switch of the remote control, then take off the hood of the machine and connect the battery to the power plug of the receiving board (note that the red and black wires are not inserted incorrectly). At this time, the remotecontrol and the receiving indicator light are flashing, push and pull the throttle lever up and down, and then the power supply of the remote control and receiving board will be connected, the indicator lamp is long-lit on the frequency successfully.

3. Unplug the Battery at the end of the flight, then turn off the remote control, if the remote control does not operate for a long time recommended to remove the battery, to avoid consumption or damage.
4. Find a suitable place to fly, away from people, cars. High-voltage power towers, reservoirs, etc., before the safe and pleasant flight.
5. The main rotor fixed screw can not be locked too tight, to keep the rotor can fold, too tight will cause rotor can not swing straight and produce vibration of the body.
1. 确认遥控器电池电压充足, 直升机电池电压充足。
2. 操作前先打开遥控器电源开关, 然后取下机头罩将电池连接接收板电源插头(注意红黑线不要插错), 此时遥控、接收指示灯闪烁, 上下推拉一下油门摇杆, 指示灯长亮对频成功。
3. 飞行结束先拔掉飞机电池, 然后在关掉遥控器, 如果遥控长时间不操作建议把电池取出, 避免消耗电量或损坏。
4. 寻找一个合适飞行的场地, 远离人群、车。高压电塔、水塘等, 方可进行安全愉快的飞行。
5. 主旋翼固定螺丝不可锁过紧, 要保持旋翼能顺叠收折, 过紧时会造成旋翼无法用直而产生机体震动。



Installing way of remote controller battery 遥控器电池安装方式

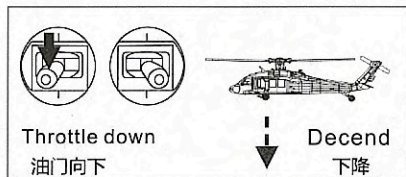
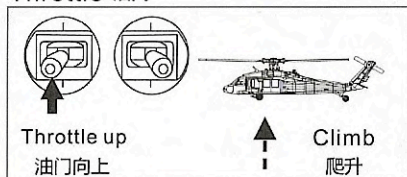


Operational Guidance 操作指导

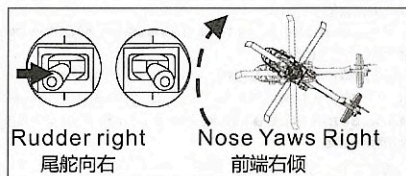
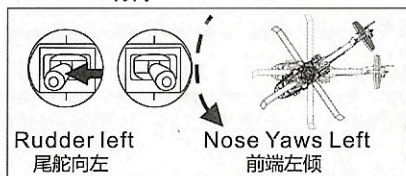
If you are unfamiliar with the control of the K170, take time to familiarize it before your first flight.

如果你不熟悉 K170 的控制, 花几分钟熟悉它们, 然后尝试你的第一次飞行。

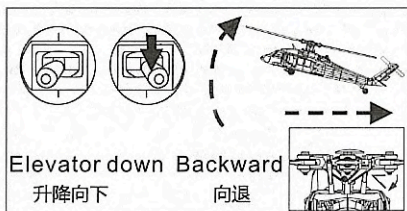
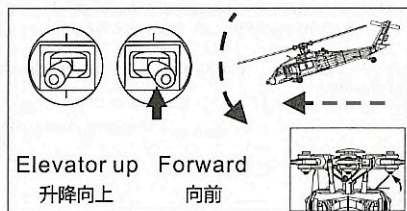
Throttle 油门



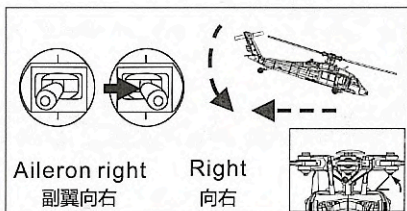
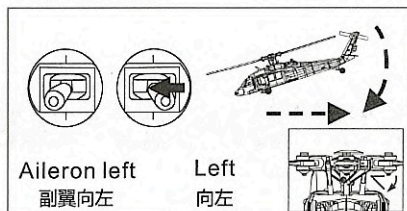
Rudder 方向



Elevator 升降



Aileron 副翼



Flight Operation Steps 飞行操作步骤

1. Turn on the power switch of the remote control.
2. Remove the hood from the aircraft and place the battery in a battery tank and attach the power cord
3. The lights of the aircraft and the remote control flash at the same time. At this time, push the remote control throttle stick up to the end and pull it down quickly, and the remote control makes a beep. The indicator lights of the aircraft and the remote control are always on, and the code matching is completed.
4. First calibrate the aircraft gyroscope, then unlock the outer eight and start the aircraft (Both manual takeoff and one key takeoff can only be operated after the aircraft indicator light flashes and becomes longer.)
5. Keep the aircraft's head aligned with the front and maintain a safe distance of 2-3 meters from the helicopter.
6. When the helicopter is manually operated, please keep the joystick down for 2-3 seconds, and then release the joystick after the propeller stops rotating completely.
(This action is not required for landing with one key)

1. 打开遥控器电源开关。
2. 将飞机机头罩取出，然后把电池装入电池槽并接上电源线。
3. 飞机和遥控器灯光同时闪烁，此时将遥控器油门摇杆向上推到底并迅速拉下来，遥控器滴一声响，飞机和遥控器指示灯常亮，对码完成。
4. 先校准飞机陀螺仪，然后外八解锁启动飞机
(手动起飞、一键起飞都要等飞机指示灯闪烁变长亮才可操作)
5. 保持飞机头部对准前方，与直升机保持2-3米安全距离。
6. 当手动操作直升机降落后，请保持油门摇杆向下位置2-3秒钟，等螺旋桨完全停止转动后再松开摇杆
(使用一键降落不需此动作)

Note: 1. After the helicopter flies up, the eye must not look at with the helicopter, so as to avoid accidental injury.

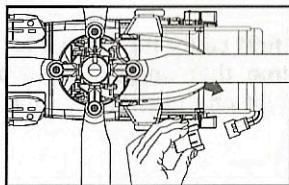
2. Please make sure that there is no remote control of the same model to open, so as not to affect the code.

3. Recalibrate the plane when you change the environment to operate it. Operation Steps: the plane placed on the horizontal ground, remote control of the lower right-hand side of the rocker at the same time a click, the aircraft indicator flashing release rocker, the length of light calibration completed.

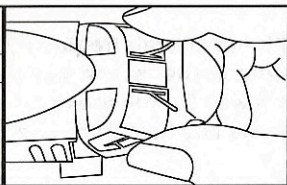
注意: 1. 直升机飞起来后，眼睛切勿与直升机平视，以免误伤。

2. 对码时请确定周围没有同一型号遥控器打开，以免影响对码。

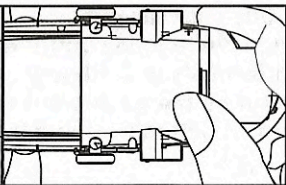
3. 当换新环境操控的时候，要重新校准一下飞机水平。操作步骤：飞机放置水平地面，遥控左右摇杆同时往右下角滴一声，飞机指示灯同时闪烁松开摇杆，变长亮校准完成。



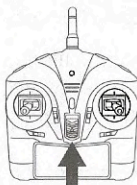
Remove Hood and install battery to receive power
取下机头罩装上电池、接收电源



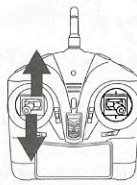
First, install the buckle on the head cover into the slot of the chassis
先将机头罩上面卡扣装到机壳卡槽



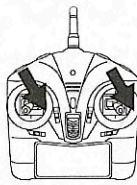
Press the casing upwards and install the buckle under the head cover into the slot at the bottom of the casing
往上压一下机壳把机头罩下面卡扣装到机壳底部卡槽



Turn on the power switch
打开电源开关



Up and down push-pull rocker pair frequency
上下推拉摇杆对频



Also calibrate to the lower right corner
同时往右下角校准水平



Outer eight unlocks start motor
外八解锁启动马达

Note: 1. Beginners please pay attention to the direction of flight, try to make sure that the aircraft head at the front, so as to avoid operational errors caused damage!

2. Just began to control the aircraft, rocker control volume do not be too large, out of control range of throttle landing in time to avoid impact!

注意: 1. 初学者请注意飞行方向, 尽量保证飞机头部对准前方, 以免操作失误造成损伤!

2. 刚开始操控飞机, 摇杆控制量不要幅度太大, 超出掌控范围及时收油门降落, 避免撞击!



Forward flight
前进飞行

2-3 meters



Calibration gyroscope, left-right conversion, and one click takeoff function introduction 校准陀螺仪、左右转换、一键起飞功能介绍

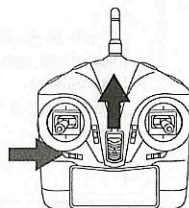
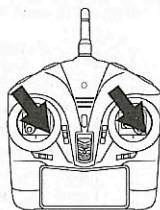
1. Recalibrate the gyroscope: when the plane goes off-course during the flight, land the plane and recalibrate the gyroscope. Step 1: place the plane at rest on the ground level, after the aircraft indicator flashing release, such as the indicator light long light calibration completed.

1. 校准陀螺仪: 当飞行过程中出现偏航, 将飞机降落重新校准一下陀螺仪
操作步骤: 飞机静止放置在水平地面, 遥控左右摇杆同时往右下角长按响一声, 飞机指示灯闪烁后松开, 等指示灯长亮校准完成。

2. Switch left, right hand will fine-tune the lower left to the right long press boot, up and down to push and pull throttle rocker click conversion completed, switch left hand push and pull left rocker, right hand push and pull right rocker.

2. 左、右手切换

将左下角微调往右长按开机, 上下推拉一下油门摇杆响的一声转换完成, 切换左手推拉左边摇杆、右手推拉右边摇杆。



3. One click takeoff

Align the remote control with the aircraft frequency, first calibrate the two joysticks horizontally to the bottom right corner at the same time, then unlock the starter motor on the outer eight, and wait for the indicator light on the aircraft to flash and turn on before pressing the one key takeoff button.

3. 一键起飞

遥控与飞机对上频, 先将两个摇杆同时往右下角校准水平然后外八解锁启动马达, 等飞机上指示灯闪烁变亮在按一键起飞按键。

Flight yaw correction method 飞行偏航修正方法

If there is a yaw in flight, it can be corrected by directly dialing the fine adjustment button.

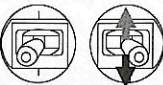
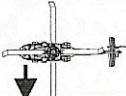
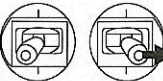
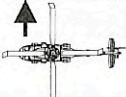
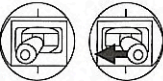
The product you have purchased has been set up at the factory. If you are not satisfied with the hover of the aircraft or the aircraft still has a yaw, you can adjust the hover of the aircraft through the following settings.

Control the throttle to take off the aircraft, and according to the current yaw direction of the aircraft, flip the fine adjustment button in the opposite direction until the aircraft can hover smoothly

如果飞行出现偏航, 可通过直接拨动微调按键修正。

你所购买的产品出厂时已经设定完成, 如果你对飞机悬停不满意或飞机还是存在偏航, 你可以通过以下设定, 来调整飞机悬停。

控制油门飞机起飞, 根据目前飞机的偏航方向, 向反方向拨动微调按键, 至到飞机能够平稳悬停

Helicopter Forward and backward yaw 直升机 前后偏航			Adjust the fine adjustment in the direction indicated by the arrow 按照箭头指示方向调整微调
Helicopter Left side yaw 直升机 左侧偏航			Adjust the fine adjustment in the direction indicated by the arrow 按照箭头指示方向调整微调
Helicopter Right side yaw 直升机 右侧偏航			Adjust the fine adjustment in the direction indicated by the arrow 按照箭头指示方向调整微调

Abnormal Problem Solving Method 异常问题解决方法

	Problem 状况	Possible Cause 原因	Solution 对策
1	Connect the battery with helicopter, then the signal light keeps flashing and without response when operate. 电池与接收机连接后, 接收机提示灯持续闪烁, 操作无反应。	The helicopter without bind with the transmitter. 发射机与接收机对码失败。	Bind the transmitter again 请重新执行发射机与接收机对码
2	The helicopter without any response when you connect the battery. 电池与接收机连接后, 直升机没有任何反应。	Check the power supply of helicopter and transmitter; Check the battery's voltage of the helicopter and transmitter; Batteries had a poor connecting. 检查发射机与接收机是否接通电源; 检查发射机与接收机电池电压; 电池极片接触不良。	Check the installation site of Transmitter's batteries; Use full voltage batteries; Install the batteries again; Confirm the batteries have a good connecting. 打开发射机, 确认电池安装位置; 使用完全充满电的电池; 重新插入电池, 确认电池与电池极片的接触是否正常。

3	Push the throttle but the motor not at work, the receiver's signal light keep flashing 推动油门摇杆时，马达不转，且接收机提示灯开始闪烁。	Helicopter's battery has a low voltage; The lipo battery has a poor connecting. 直升机电池电压不足；电池插头与接收机插座接触不良。	Charge the battery or change a full charge battery; Connect the battery with receiver again. 将电池充电或更换一个充满电的电池，重新连接电池与接收机。
4	Turn on the helicopter after bind, the main blade can rotate but the helicopter can not take off 对码成功后，启动直升机，主桨有持续转动，但不能飞。	Helicopter has a low voltage; The main shaft and the gear may loose. 直升机电池电压不足主轴齿轮松开。	Charge the battery or change a full charge battery; Press the main shaft and gear tightly 将电池充电或更换一个充满电的电池，将主轴与齿轮压紧。
5	The helicopter is violently shaking 直升机震动的很厉害。	Main rotor deformed cross shaft bent tail rotor bent Blade clamp screws are too tight to cause the main blade can not rotate 主桨变形，横轴弯曲，尾桨变形，桨夹螺丝锁太紧，导致主桨不动。	Change the main blade; Change the cross shaft; Change tail rotor; Loose the blade clamp screw. 更换主桨， 更换横轴， 更换尾桨， 将桨夹螺丝适当拧松。
6	Helicopter spinning to left after take off. 直升机起飞向左打转。	Tail motor has a poor power; The blades loose; Tail motor was broken. 尾马达力量不足 桨叶松动 尾马达损坏	Check the connection of tail blade and motor shaft. if loose, change tail blade or tail motor. 检查尾桨叶与马达轴的配合，如果松动更换尾桨叶。马达损坏更换尾马达。
7	The helicopter has a little yaw: 起飞后飞机出现轻微偏航：	made a operational error of the trimming button 误操作微调键	1. According to its yaw direction, push the trimming button in the opposite direction; 2. Reset the hovering point. 1. 向偏航方向打微调，只到修正为止 2. 重新设置悬停
8	The helicopter has a serious yaw. 起飞后飞机出现严重偏航		Check the servo if work properly; Check the swash plate; Check the rod sticks if loosening. 1. 检查舵机是否工作正常 2. 检查十字盘是否正常 3. 检查连杆是否掉落