

Specifications(Ready-to-Fly) / 规格:

|                                    |                                                      |
|------------------------------------|------------------------------------------------------|
| Wingspan /翼展                       | 700 mm(27.6 in)                                      |
| Overall Length / 总机长               | 598 mm (23.5 in)                                     |
| Flying Weight (Ready-to-Fly)/ 飞行重量 | 130 g (4.6 oz) with Included 1S 1150mAh LiPo Battery |
| Maximum Flight Speed / 最大飞行速度      | Up to 60 km/h (37 mph)                               |
| Control Range / 控制距离               | Up to 150 m (490 ft)                                 |
| Flying time / 飞行时间                 | Approximately 8–10 Minutes                           |
| Wing Area / 机翼面积                   | 11 dm²                                               |
| Wing Loading / 翼载荷                 | 11.8 g/dm²                                           |
| Wing Material / 主翼材料               | EPP Foam                                             |
| Finish / 完成度                       | Factory Applied Graphics                             |
| Pilot Skill Level / 操作等级           | ■Beginner / 初学者 □ Intermediate / 中级 □ Advanced / 高级  |
| Assembly Time / 组装时间               | About 10 Minutes                                     |
| Recommended Age / 推荐年龄             | Ages 14+                                             |
| Operating Temperature / 工作温度       | 0°C ~ 40°C                                           |

Electronics / 电子配置:

|                                 |                                                                 |
|---------------------------------|-----------------------------------------------------------------|
| 2.4GHz Radio System / 控制系统      | 3-Channel with Integrated Gyro Stabilization/ 集成陀螺仪             |
| Motors / 电机                     | Dual 1020 Coreless Motors (42,000 RPM)                          |
| Flight Battery / 飞行电池           | Included 3.7V 1150mAh 25C LiPo Battery                          |
| Flight Controller / 飞行控制        | Integrated Receiver, ESC & Flight Controller with Built-In Gyro |
| Servos / 舵机                     | Two 2.5g Servos                                                 |
| Propellers / 螺旋桨                | Counter-Rotating 65 mm Propellers - shaft diameter 1.2mm/ 轴径    |
| Landing gear / 起落架              | Removable Fixed Wire Landing Gear / 可拆卸固定起落架                    |
| Air Brakes / 空气刹车               | No                                                              |
| LED Lighting / 灯光系统             | No                                                              |
| Ailerons / 副翼                   | No                                                              |
| Horizontal Stabilizer / 平尾      | Yes                                                             |
| Vertical Stabilizer / 垂尾        | Yes                                                             |
| Gyro Stabilization / 陀螺仪        | Yes                                                             |
| Camera Mount Provision / 相机安装孔位 | Provision for Optional Camera Installation / 预留可选摄像头安装位置        |

www.hsdrc.com

hsd@hsdjetshuangasai.com

公司地址: 广东省东莞市长安镇新安社区红山一街 3 号(邮编:523882)

生产地址: 湖南衡东经济开发区机电智造产业园23#栋(邮编:421421)

www.Flyhsd.com

sales1@hsdjetshuangasai.com

Company address: Number3 Red Mountain 1st Street, Xin'an Community, Chang'an Town, Dongguan, Guangdong, China (Post:523867)

Production address: Building 23, Electromechanical Intelligent Manufacturing Industrial Park, Hengdong Economic Development Zone, Hunan Province (Postal Code: 421421)



扫码关注，谢谢支持！

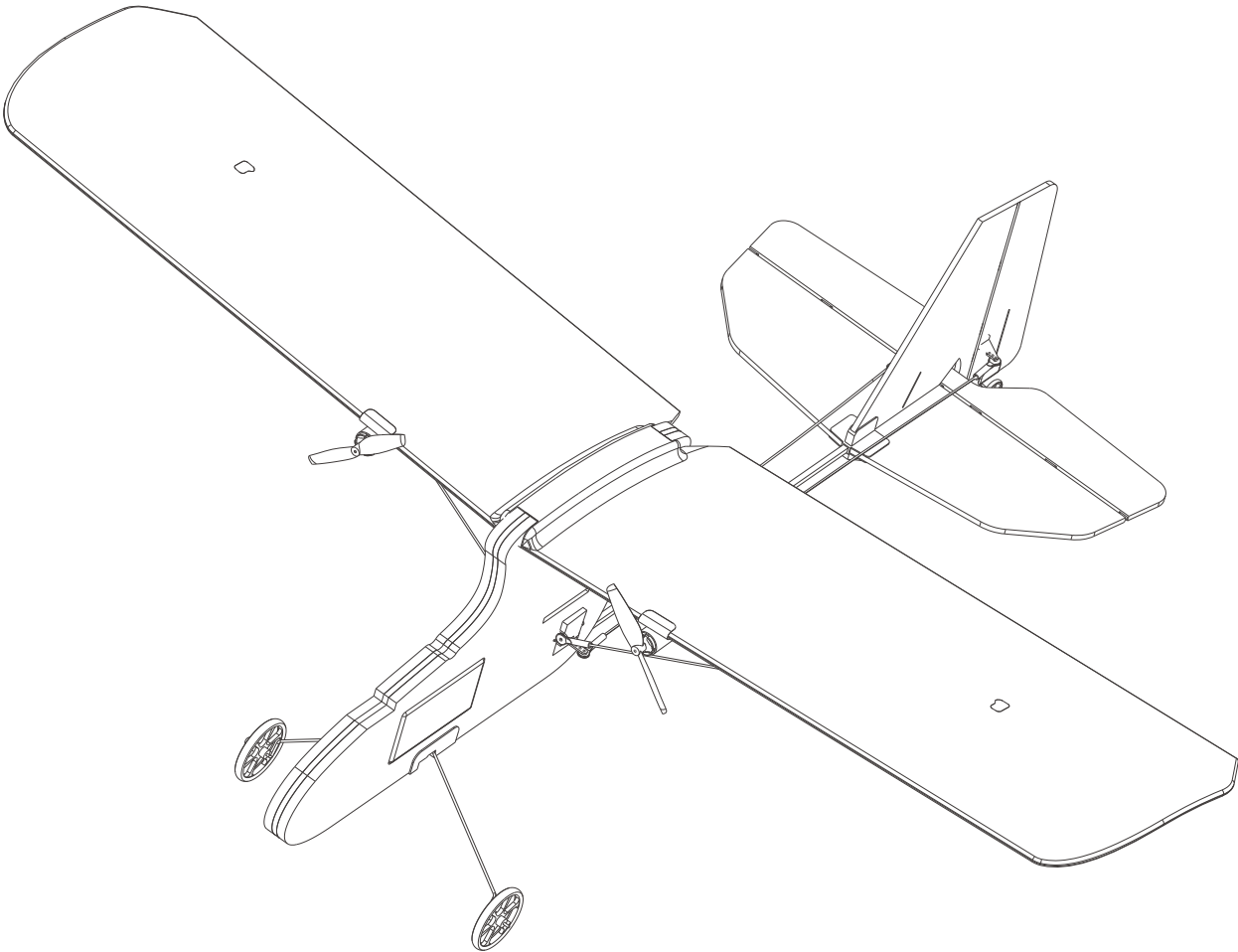


# HX-10

## 天眼云雀 / Skylark

### 快速组装说明

#### QUICK START MANUAL

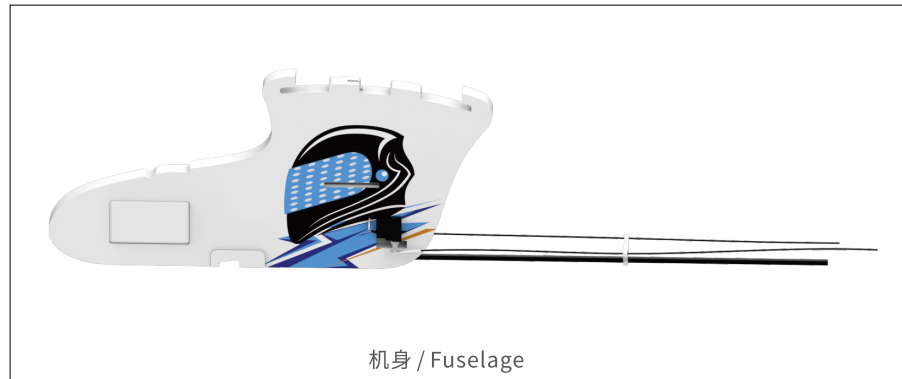


产品序列号:

## 包装清单 / BOX CONTENTS:

飞机开箱：依次取出纸箱内的机身、机翼、平尾、垂尾、斜撑杆、前后起落架、螺丝包、电池、充电器、遥控器等物品，并根据说明书内的包装物品清单核对包装物品数量是否完整，如有遗漏请联系经销商补齐。

Carefully remove all components from the package. Compare the contents with the list below. If any item is missing or damaged, do not begin assembly; contact your authorized HSD retailer or HSD Customer Support.



机身 / Fuselage



遥控器 / Transmitter



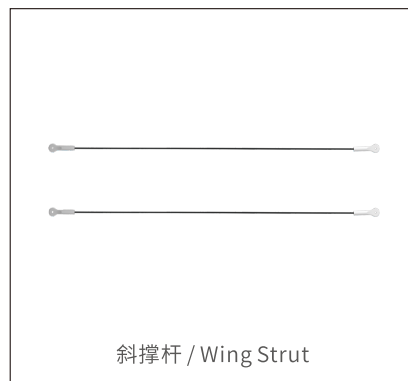
主翼 / Wing Assembly



平尾 / Horizontal Stabilizer



垂尾 / Vertical Stabilizer



斜撑杆 / Wing Strut



起落架 / Landing Gear Set



电池 / Flight Battery



充电器 / USB Charger

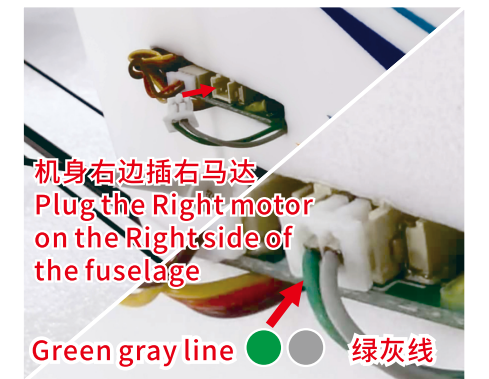
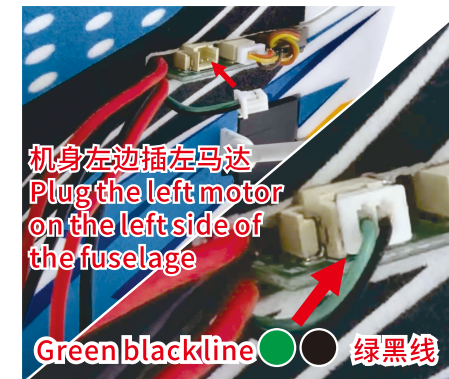
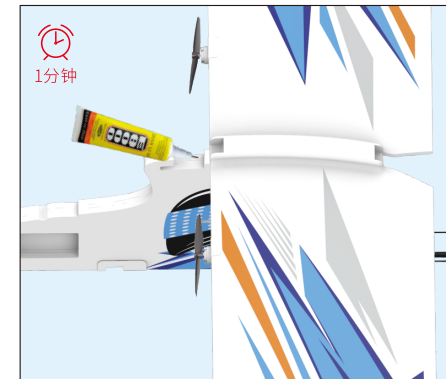


配件包 / Accessory Set

## 安装 / ASSEMBLY:

### 01.安装机翼 / INSTALL THE WING

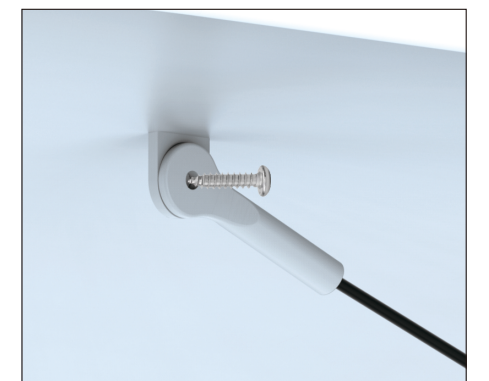
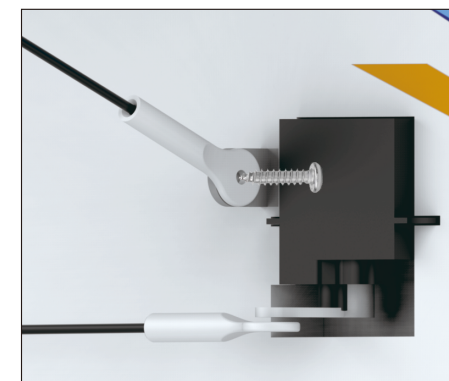
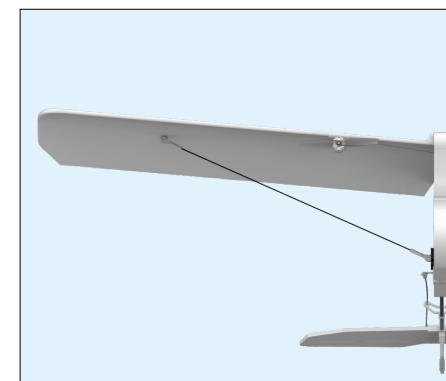
注: 电机插头不能插反。  
WARNING: Connect the left and right motor leads exactly as shown. Reversing the connections will reverse the intended propeller rotation.



取出机身、机翼，摆放到平整干净的台面上，将机翼电机线对准机身相应孔位，将线穿到机身接收机安装位置。在机身安装机翼位置均匀打上胶水，将机翼安装在机身上，然后分别将电机连接到接收机上。

Place the fuselage and wing assembly on a clean, flat work surface. Route the left and right motor leads through the corresponding openings in the fuselage and into the receiver compartment. Apply the specified foam-safe adhesive evenly to the wing mounting surface. Seat the wing fully, then connect each motor lead to its matching receiver lead as shown.

### 02.安装斜撑杆 / INSTALL THE WING STRUTS

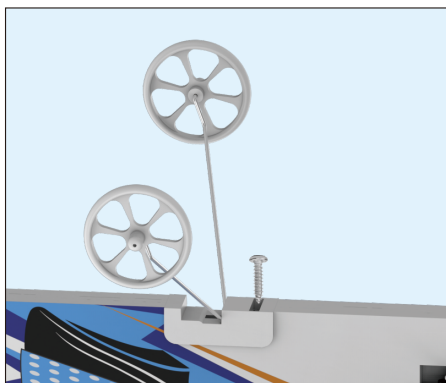
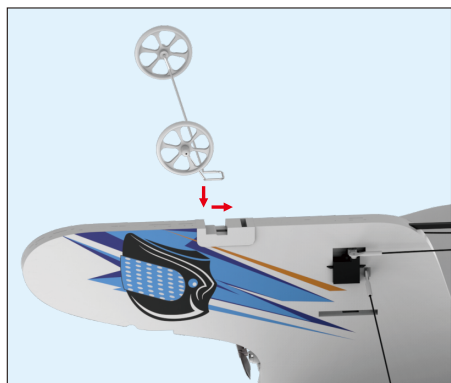


取出斜撑杆，摆放到平整干净的台面上，先将一端斜撑杆安装在机身指定位置，用PA1.5\*4mm螺丝固定，再将另一端安装在机翼指位置，用PA1.5\*4mm螺丝固定。左右两边各安装一根。

Attach one end of each strut to the designated fuselage mounting point using a PA1.5 × 4 mm screw. Attach the other end to the corresponding wing mounting point with a second PA1.5 × 4 mm screw. Install one strut on each side. Do not over tighten the screws.

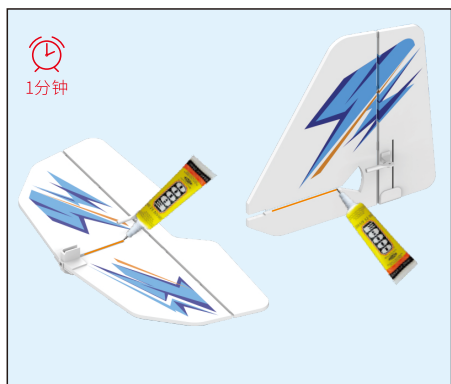


## 03. 安装前起落架 / INSTALL THE MAIN LANDING GEAR



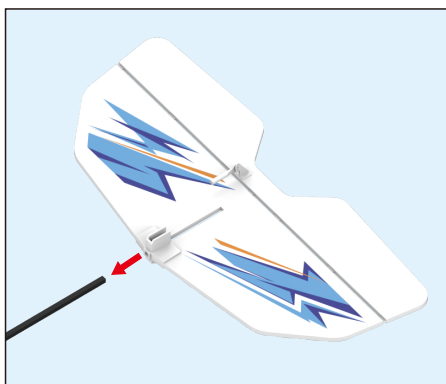
取出前起落架，将前起落架安装在机身前面塑胶件槽位里；安装到位后用螺丝（PA1.5×4mm×2pcs）固定。

Install the Main Landing Gear: Insert the landing-gear assembly into the slot on the front underside of the fuselage. Secure it with two PA1.5 × 4 mm screws. Confirm that the assembly is fully seated and aligned.

04. 安装垂尾+平尾+平尾/垂尾连接碳杆  
INSTALL THE HORIZONTAL AND VERTICAL STABILIZERS

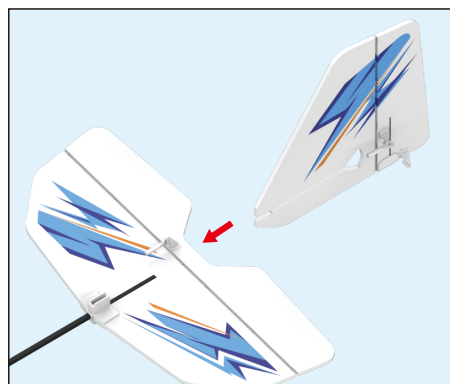
分别将平尾和垂尾沿着开口槽打上泡沫胶水并静置1分钟，如图所示。

Apply the specified foam-safe adhesive to the mating slots on the horizontal and vertical stabilizers. Allow the adhesive to become tacky for 1 minute.



将平尾沿着开口槽从后方中心插入尾杆，如图所示。

Insert the horizontal stabilizer into the tail support from the rear, aligning it with the locating slot as shown.

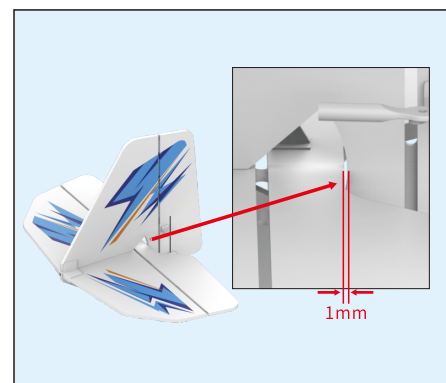


将垂尾沿着开口槽从后方中心插入平尾并对齐，如图所示。

Slide the vertical stabilizer into the horizontal stabilizer from the rear and align the parts as shown.

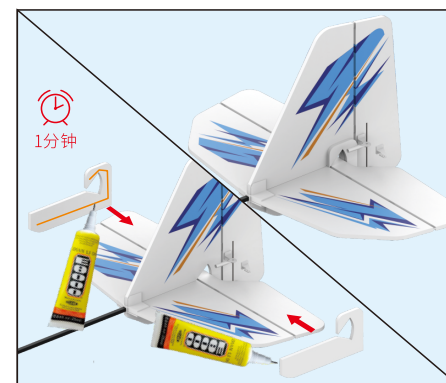
**重要提醒：**  
在胶水达到规定的完全固化时间之前，请不要遥控飞机。

**IMPORTANT:**  
Do not fly the aircraft until the adhesive has reached its full manufacturer-specified cure time.



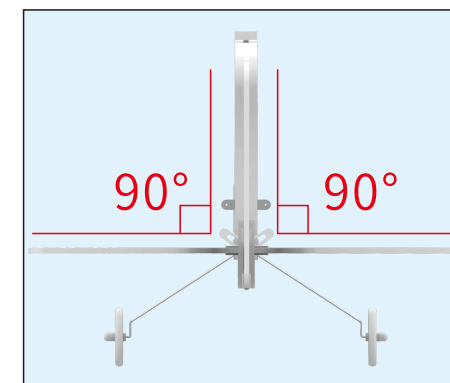
注：此处要有1+mm的间隙。

NOTE: Maintain the approximately 1 mm clearance shown in the illustration.



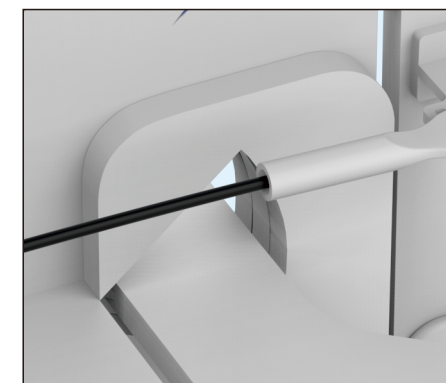
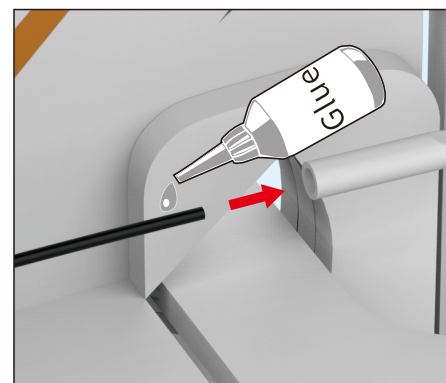
将配件包内的垂尾加强片涂上胶水，静置1分钟后，分别粘到垂尾两侧并压紧，如图所示。

Apply adhesive to the vertical stabilizer reinforcement plates. Wait 1 minute, then attach one plate to each side of the vertical stabilizer and press firmly into place.



注：垂尾与平尾的夹角必须垂直90度，如有偏差可手动调整。

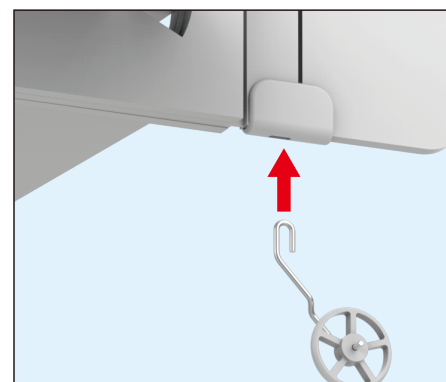
NOTE: The vertical stabilizer must be perpendicular (90°) to the horizontal stabilizer. Correct any misalignment before the adhesive cures.



点上胶水前，请确保飞机通道设置完成，遥控器已连接，舵机测试回中，平尾和垂尾舵面调平。再将平尾+垂尾拉杆两边点上502胶水(另购)，再插入球头扣，微调位置使拉杆尽量置于两个球头扣之间，如图所示。

Before applying adhesive, connect the transmitter and center the servos. Make sure the elevator and rudder are in their neutral positions. Apply 502 adhesive (sold separately) to both ends of the linkage rod. Insert the rod into the ball-link connectors and adjust the linkage as shown.

## 05. 安装尾轮 / TAIL WHEEL INSTALLATION



将尾轮钢丝插入垂尾下方尾轮固定座的槽内。

Insert the upper end of the tail wheel wire into the slot beneath the vertical stabilizer.



完成效果如图所示。

The completed assembly should appear as shown.

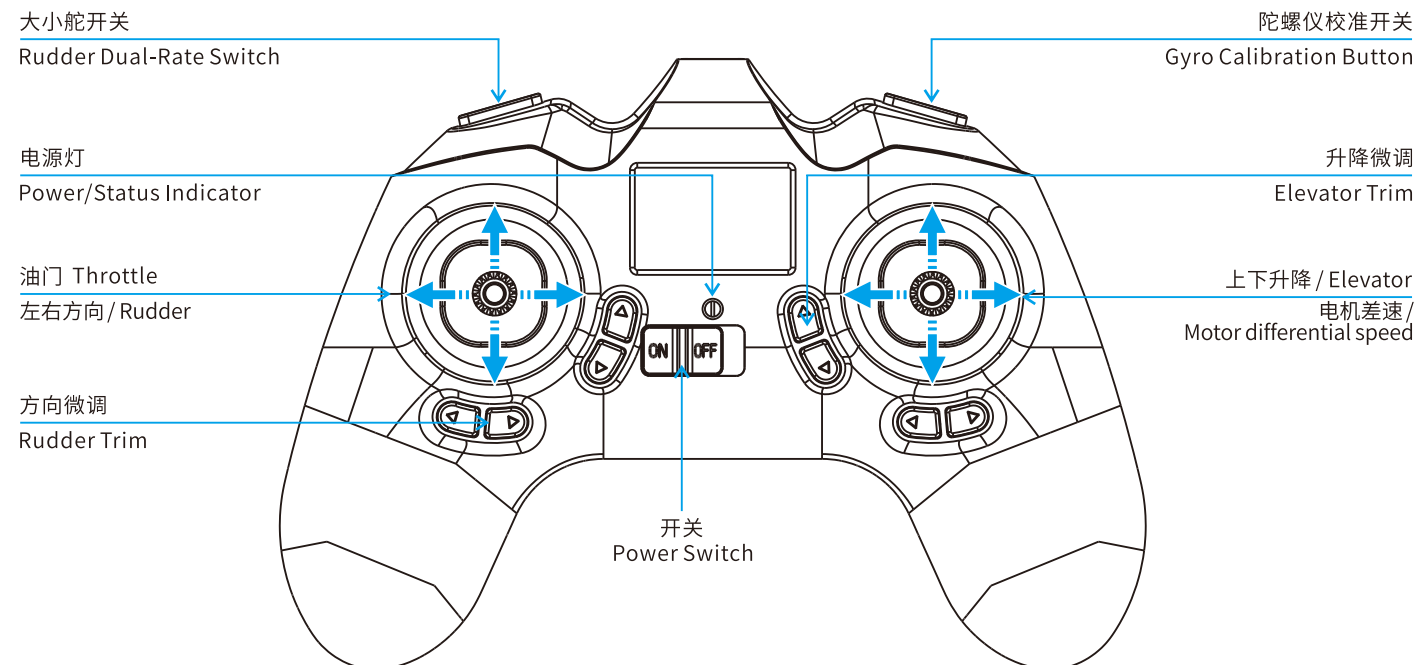


此步骤最终完成效果如图所示。

Confirm that the entire tail assembly is fully seated, properly aligned, and secure.

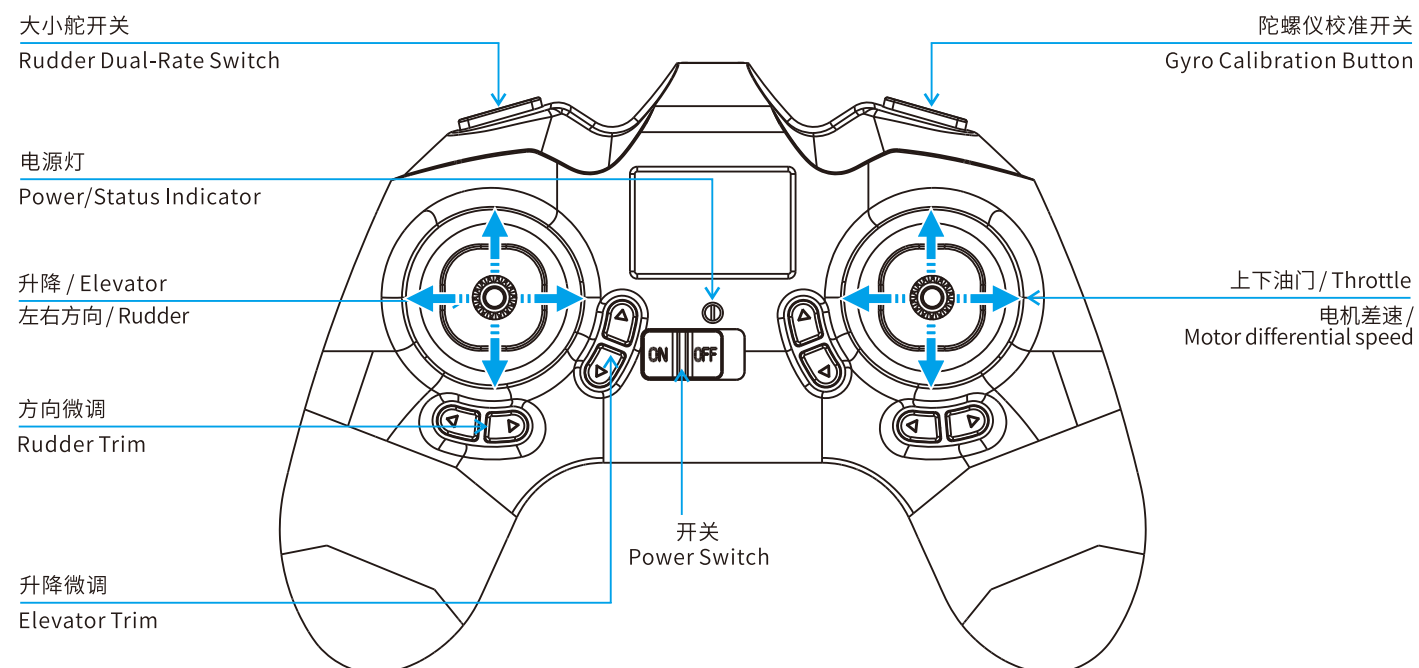
### 左手油门遥控器

#### MODE 2 TRANSMITTER - THROTTLE ON LEFT



### 右手油门遥控器

#### MODE 1 TRANSMITTER - THROTTLE ON RIGHT

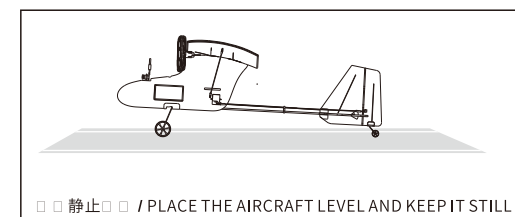


### 遥控器功能说明 / TRANSMITTER FUNCTION DESCRIPTION

1. 电源指示灯快速闪烁，是遥控器与接收机没有对上频。
2. 电源指示灯慢闪，是遥控器电量不足。
3. 陀螺仪校准时，飞机需要保持水平状态，飞机不能有晃动，如果飞机有晃动或是在有风的情景下会校准失败。
4. 接收机灯慢闪，是接收机与遥控器未连接。
5. 接收机自带陀螺仪，陀螺仪默认开启状态，无法关闭。

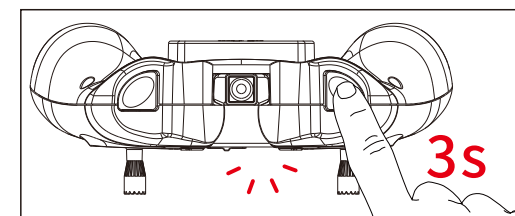
1. Rapidly Flashing Transmitter Indicator: The transmitter and receiver are not linked.
2. Slowly Flashing Transmitter Indicator: The transmitter batteries are low. Land as soon as safely possible and replace them before the next flight.
3. During gyro calibration, place the aircraft on a level surface and keep it completely still. Wind, movement, or vibration may cause calibration to fail.
4. Slowly Flashing Receiver LED: The receiver is not linked to the transmitter.
5. The receiver includes built-in gyro stabilization. The gyro is enabled by default and cannot be disabled.

### 陀螺仪校准 / GYRO CALIBRATION



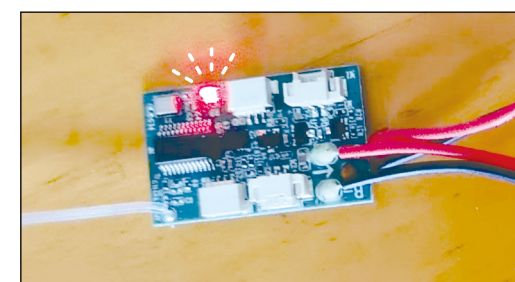
首先将飞机水平静止放置于平坦干燥的地面上；

Place the fully assembled aircraft on a level, dry surface. Keep it completely still throughout calibration.



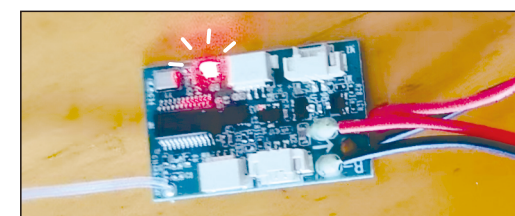
飞机与遥控器接好电源开机，再长按陀螺仪校准开关键 3 秒进入陀螺仪校准模式，此时遥控器发出“嘀”的一声，飞机开始校准；

Turn on the transmitter with the throttle at its lowest position, then connect the flight battery. After the transmitter and receiver link, press and hold the Gyro Calibration button for approximately three seconds. The transmitter will beep and calibration will begin.



校准过程接收机灯会快速闪烁；

The receiver LED will flash rapidly during calibration.



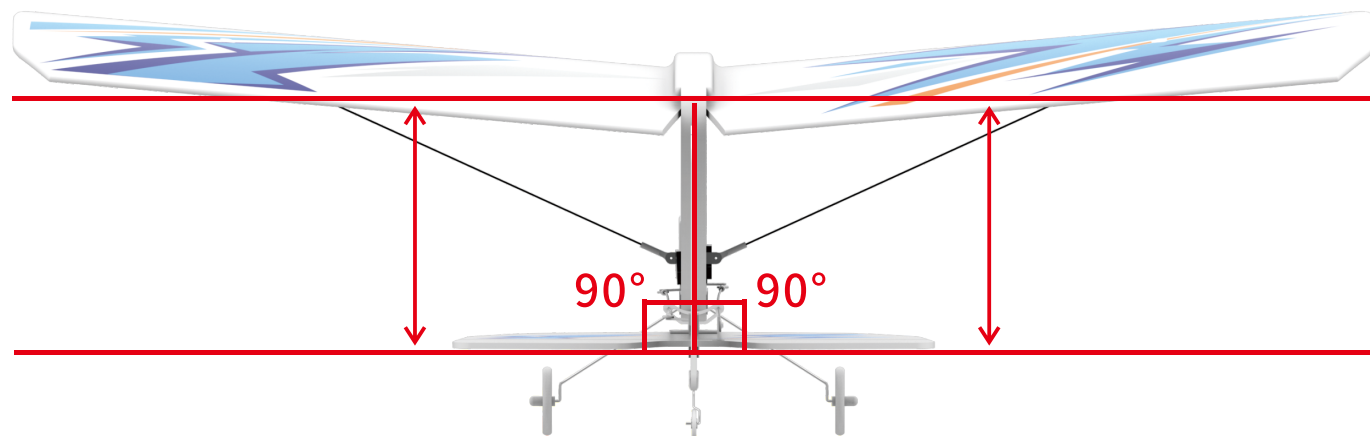
校准完成后，接收机灯会变常亮，表示校准成功；如果校准失败，断电重新接电校准。

Keep the aircraft motionless until the receiver LED remains steadily illuminated, indicating that calibration is complete. If calibration fails, disconnect the flight battery, turn off the transmitter, and repeat the procedure on a level surface away from wind or vibration.



## 天眼云雀组装完成首次检测与调整

- 1.开启遥控器。(注：遥控器需要自己单独购买7号电池，4pcs)
- 2.将飞机接上1组1S锂电池；
- 3.把油门推到最高，再拉到最低。遥控器会发出 嘀 的一声，电源指示灯变常亮。（电源指示灯快速闪烁，就是遥控器与接收机没有对上频）
- 4.检查所有通道和舵面是否工作正常。
- 5.检查陀螺仪工作是否正确。
- 6.飞机连接好后，陀螺仪默认开启，升降舵面会往上翘10mm。



**注意：**  
平尾与机翼要在一个水平线，  
垂尾与平尾呈垂直90度直角。  
才是标准的。

**Note:**  
The horizontal stabilizer must be parallel to the wing. The vertical stabilizer must be perpendicular (90°) to the horizontal stabilizer. Correct any misalignment before flight.

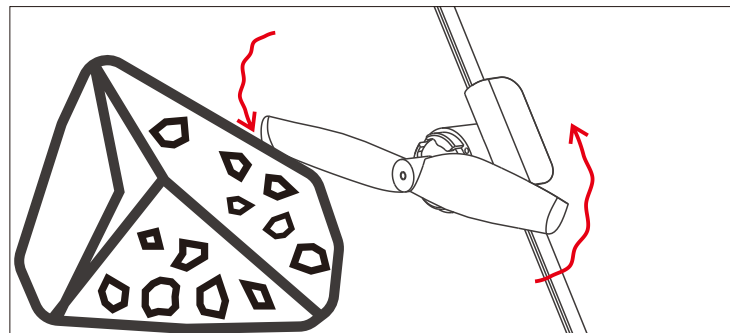
## INITIAL SETUP AND PREFLIGHT CHECK

1. Install four new AAA batteries in the transmitter, observing the correct polarity. Batteries are sold separately.
2. Move the throttle stick and throttle trim to their lowest positions. Turn on the transmitter first, then connect one fully charged 1S flight battery to the aircraft.
3. Move the throttle stick fully up, then immediately return it to the lowest position. The transmitter will beep and the power/status indicator will remain steadily illuminated. A rapidly flashing transmitter indicator means the transmitter and receiver are not linked.
4. From behind the aircraft, verify that the rudder and elevator move in the correct directions and return consistently to neutral.
5. Gently tilt the aircraft by hand and confirm that the gyro moves the control surfaces in the correct direction to oppose the movement. If any response is reversed or abnormal, do not fly.
6. After the aircraft is connected, the gyro is enabled by default and the elevator will move approximately 10 mm upward.

## 油门保护功能 / THROTTLE PROTECTION

螺旋桨在高速旋转时，突然遇到阻碍，电机便在2秒后启动油门保护功能，系统会阻止给电机供电，从而保护电机不会烧坏。重新断电和接电后，油门保护功能自动解除。

If a propeller is obstructed while rotating at high speed, the throttle protection system will activate after approximately 2 seconds and stop power to the motor. Move the throttle to the lowest position and disconnect the flight battery before removing the obstruction. Inspect the propeller, shaft, and motor for damage. Reconnect the battery to reset the throttle protection system.

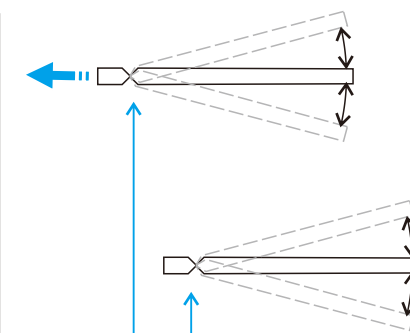
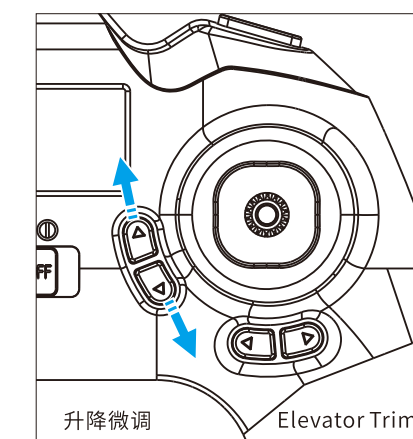
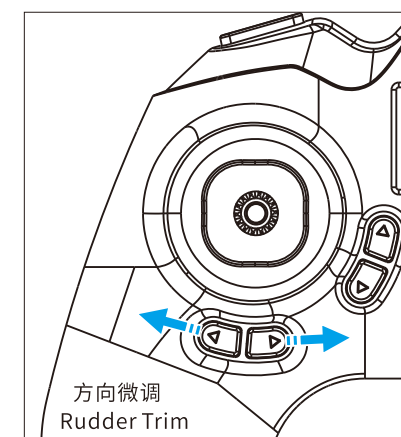


## 舵面调整 / RUDDER AND ELEVATOR TRIM ADJUSTMENT

在飞行过程中可以通过微调去调整飞机的飞行姿态。

Use the trim buttons only for small in-flight corrections. If substantial trim is required, land and correct the mechanical alignment before flying again.

## 左手油门遥控器

MODE 2 TRANSMITTER  
- THROTTLE ON LEFT左手油门遥控器  
MODE 2 TRANSMITTER  
- THROTTLE ON LEFT

## 对频操作说明

## Binding the Transmitter to the Receiver instructions:

- 1: 先将遥控器油门调到最低位置，再给飞机连上电池；
- 2: 再开启遥控器开关，会自动对频，此时遥控器红灯会闪烁几秒；
- 3: 等遥控器红灯常亮，表示对频成功；
- 4: 没有对上频，接收机和遥控器都闪红灯；
- 5: 连上电池前，如果遥控器油门没有在最低位置，开遥控器对频后，油门需要推到最大再收到最小，油门才会工作。

1. Move the transmitter throttle stick to its lowest position, then connect the flight battery to the aircraft.
2. Turn on the transmitter. Pairing will begin automatically, and the red transmitter indicator will flash for several seconds.
3. When the red transmitter indicator remains steadily illuminated, pairing is complete.
4. If pairing is unsuccessful, both the receiver and transmitter indicators will flash red.
5. If the throttle was not at its lowest position before the flight battery was connected, move the throttle stick fully up and then back to its lowest position to enable throttle operation.

