

2.4GHz 3-Mode 4-Channel Electric RC Helicopter

2.4G 3模式 4通道遥控电动直升飞机

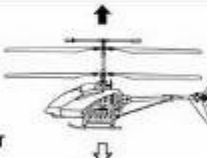

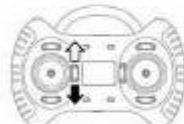

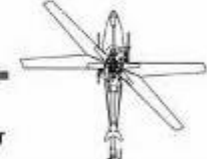




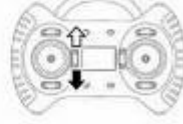
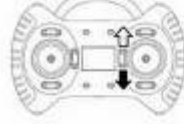




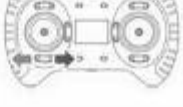
1. Check if there are loose screw or damaged parts. Stop flying if exist defects and replace the broken parts.
2. Clean the helicopter carefully after flying.
3. Ensure all part have no defects for safety flight.
4. Helicopter should be put in dry and shady place and be far away from heat and avoid sunshine.

1. 每次飞行前需要详细检查是否有松弛或损毁的零件。若有，必须立即终止飞行，锁紧松脱的零件，以及更换损坏的零件。
2. 飞行后请妥善清洁机体上的灰尘。
3. 为了安全的飞行，请确认所有的可动零件均可顺畅动作。
4. 将模型飞机存放在干燥、阴凉的地方，避免阳光直晒，远离热源。

NO.JJ-H21

13 发射机微调 Trim adjustment

Adjust the trim if the flying unit moves forward/reverse or left/right without operation of the stick.
Adjust the trim by using the trim lever on the transmitter.
如果飞机正未经操作地向某个方向移动，通过发射机上的微调按钮可以修正。

Operation 操作	Unit movement 移动方向	MODE1 Japanese mode 日本模式	MODE2 Chinese mode 中国模式	MODE3 American mode 美国模式	
Throttle trim 油门微调	如果在油门处于最低位置， 飞机仍不必要的向上升。 油门调整键向下按。 (图形中的黑色箭头)  And vice versa counter 反之则反	If the throttle at the lowest position, flying unit makes an unwanted move up, move the throttle trim lever down. (The black arrow in the drawing)			
Aileron trim 副翼微调	如果飞机不必要的 向左侧移。副翼调 整杆向右按。 (图形中的黑色箭头)  And vice versa counter 反之则反	If the flying unit makes an unwanted move left, move the aileron trim lever right. (The black arrow in the drawing)			
Elevator trim 升降舵微调	如果飞机不必要的 向前移动。升降舵 调整杆向下按。 (图形中的黑色箭头)  And vice versa counter 反之则反	If the flying unit makes an unwanted move forward, move the elevator trim lever down. (The black arrow in the drawing)			
Rudder trim 方向舵微调	如果飞机不必要的 向左旋转。方向舵 调整杆向右按。 (图形中的黑色箭头)  And vice versa counter 反之则反	If the flying unit makes an unwanted move left, move the rudder trim lever right. (The black arrow in the drawing)			

1 Introduction

引言

Thank you for your purchase of our product. In order to fly your helicopter more easily and conveniently, we kindly recommend you to read carefully the whole user handbook and keep it in a safe way as a reference book for maintenance and adjustment in the future.

感谢您购买我们的产品。为了让您的直升机飞行得更容易和更方便，我们诚恳地建议您仔细阅读整个用户手册，并把它放置在一个安全的地方，作为今后维修和调整的参考书。

1. This is not a toy. It is a complex combination of electronics, mechanics, and aerodynamics. It requires proper setup and fine adjustment to avoid accident. We accept no liability for damage and consequent damage arising from the use of the products, because we have no control over the way they are installed, used, and operated.
2. When charging the battery, do not overcharge. Overcharging may result in fire or explosion. When the battery is hot during charging, please stop charging at once. Use specified charger only. Never short circuit! The battery must be properly disposed of.
3. Children under 14 years old are strictly forbidden from flying the helicopter.
4. When your helicopter is running, any causes which stop the rotor blades spinning or make collision will result in serious damage or burning. Please immediately turn down the throttle stick at the lowest position!

2 Warning

警告

1. 这不是玩具。它是一个集电子学、机械学和航空动力学的复杂综合体。它需要正确的设置和精密调整来避免事故。对于产品的使用，我们不承担任何损害和由此产生的损害赔偿责任，因为我们不能掌控他们组装、使用、操作的方法。
2. 当电池充电时，请不要过度充电。过度充电可能会导致火灾或者爆炸。当电池在充电时发热，请立即停止充电。仅使用指定的充电器。请勿短路！电池必须妥善处置。
3. 14岁以下儿童严格禁止飞行直升飞机。
4. 当你的直升飞机正在飞行，任何原因停止旋转中的旋转翼或者造成碰撞将会导致严重的损坏或烧毁。请立即关小油门并保持在最低位置。

3 Cautions

注意事项


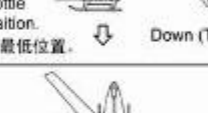

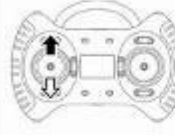
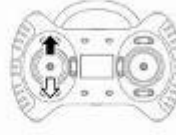


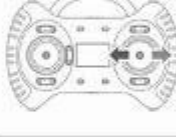
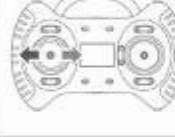
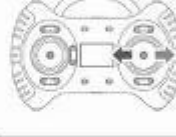







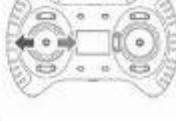

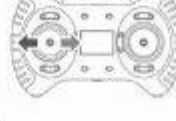
1. 因为直升飞机是由无线电控制操作，重要的是要确保你总是使用新的或者完全充电的电池。切勿使用快用完的电池要不然你的直升飞机可能会失去控制。
2. 不允许任何电器元件受潮，否则可能会发生电器损坏。
3. 你应该在每次飞行前完成对无线电设备有效范围内的检查。
4. 如果直升飞机脏，不用任何溶剂来清洁它。溶剂会损坏塑料和复合材料部件。
5. 请总是在打开遥控器之前装上飞行电池，在关掉遥控器之前拔出飞行电池。
6. 请勿在飞行过程中缩短接收天线，否则你将失去对直升飞机的控制。
7. 当直升飞机在飞行时，请确保遥控器的天线是完全扩展的，并朝向天空，而不是朝向地面。

1. Because the helicopter is operated by radio control, it is important to make sure you are always using fresh and/ or fully charged batteries. Never allow the batteries to run low or you could lose control of the helicopter.
2. Do not allow any of the electrical components to get wet. Otherwise electrical damage may occur.
3. You should complete a successful range check of your radio equipment prior to each new day of flying.
4. If the helicopter gets dirty, don't use any solvents to clean it. Solvents will damage the plastic and composite parts.
5. Always turn on the transmitter before plugging in the flight battery and always unplug the flight battery before turning off the transmitter.
6. Never cut the receiver antenna shorter or you could lose control of the helicopter during flight.
7. When flying the helicopter, please make sure that the transmitter antenna is completely extended and is pointed up toward the sky, not down toward the ground.

12 Special prompt

操纵方法

Thoroughly learn helicopter movement and stick operation from the following table.
正式操作前从下表彻底了解操纵直升机的操作方法。

Operation 操作	Unit movement 移动方向	MODE1 Japanese mode 日本模式	MODE2 Chinese mode 中国模式	MODE3 American mode 美国模式
Throttle 油门	 <p>Up (Throttle: High) 油门杆向上推 飞机起飞上升</p>  <p>Down (Throttle: Low) 油门杆向下推 飞机下降着陆</p>			
Aileron 副翼	<p>Left movement (Aileron: Left) 副翼杆向左推 飞机向左侧移</p>  <p>Right movement (Aileron: Right) 副翼杆向右推 飞机向右侧移</p> 			
Elevator 升降舵	<p>Forward (Elevator: Up) 升降舵向上推 飞机向前进</p>  <p>Back (Elevator: Down) 升降舵向下推 飞机向后退</p> 			
Rudder 方向舵	<p>Left rotation (Rudder: Left) 方向舵向左推 飞机向左转向</p>  <p>Right rotation (Rudder: Right) 方向舵向右推 飞机向右转向</p> 			

4 Specifications

机身长:
Overall Length: 415mm

机身高:
fuselage height: 190mm

机身宽:
fuselage width: 80mm

主旋翼直径:
Main Rotor Dia.: 450 mm

发射机:
Transmitter: 4 CH

总重量:
All-up weight: 355g (Battery included)

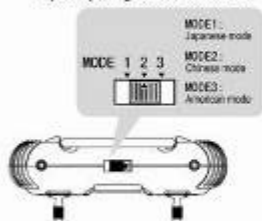
电池规格: 850mAh / 7.4V 大功率充电锂电池
Battery: 850mAh / 7.4V Lithium battery

接收装置: 三合一 接收机 (接收机, 速度控制器, 陀螺仪)
Receiver: 3-in-1 receiver (receiver, speed controller, gyro)

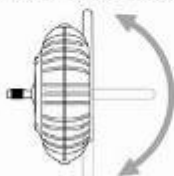
舵机: 重量 8.5 克 / 速度 0.11 sec/60° (4.8V) / 扭力 0.9kg/cm (4.8V) / 尺寸 22.5 × 11.5 × 24mm
Servo: weight 8.5g/speed 0.11 sec/60° (4.8V) / torque 0.9kg/cm (4.8V) / dimension 22.5 × 11.5 × 24mm

6 Transmitter features 发射机的特点

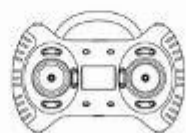
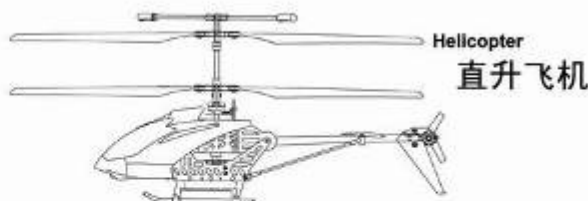
特别设计的3种操作模式
Specially designed 3 control mode



天线同时是习惯切换开关
Antenna is also used to switch



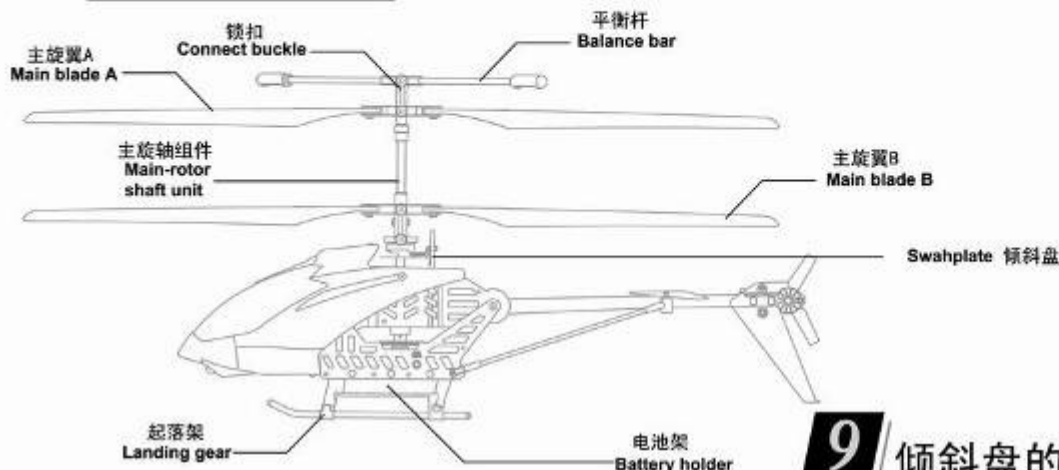
5 部件 Included parts



Lithium battery
锂电池



8 飞机主要构造图 Main structure drawing for helicopter



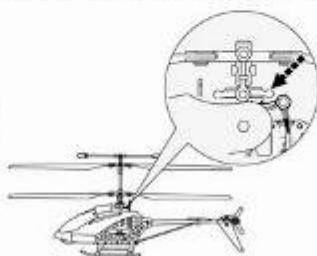
9 倾斜盘的调整 Swahplate adjustment

1. Inspection of Swahplate: Turn on the transmitter switch, move the throttle stick and throttle trim of transmitter to the lowest position, and move the elevator trim and aileron trim at the neutral position. Inspect whether the swahplate is horizontal.
2. Adjustment of Swahplate: if the swahplate is not horizontal, you can adjust through the following steps: (1). Elevator and aileron adjustment. Loosen the steering engine bellcrank screws and the steering engine bellcrank screws, then reconnect the power of the helicopter. Adjust the steering engine linkage rod and bellcrank to 90° angle after the reposition of the elevator and aileron. And then tighten the screw. (2). Adjust the length of the steering engine linkage rod to make the swahplate horizontal.

1. 倾斜盘检查: 打开遥控器电源开关, 将油门摇杆及油门微调调到最低位置, 将升降舵微调, 副翼微调调到中间位置, 检查倾斜盘是否处于水平。

2. 倾斜盘调节: 如果倾斜盘不是处于水平位置, 可以通过以下方法调节: (1). 升降舵机及副翼舵机调节。先拧松舵机摆臂螺钉, 松开舵机摆臂, 重新连接飞机电源, 待升降舵机, 副翼舵机复位后, 调节舵机连接杆和舵机摆臂至 90° 夹角, 再锁紧舵机摆臂螺钉。

- (2). 调节舵机连接杆的长度至倾斜盘水平。



Mode1

Elevator trim

Use to adjust the neutral position for forward/reverse movement. 前进、后退微调

Mode2 / Mode3

Throttle trim

Normally used in the center position. 油门微调

Power switch

Slide to the ON position to switch on the power. 遥控器的电源开关

Antenna/Used to control switch
天线/习惯切换开关**Mode1**

Throttle trim

Normally used in the center position. 油门微调

Mode2 / Mode3

Elevator trim

Use to adjust the neutral position for forward/reverse movement. 前进、后退微调

Mode1

Elevator/rudder stick

Use to control forward/reverse movement and left/right turning. 前进、后退/左转、右转 控制杆

Mode2

Throttle/rudder stick

Use to control up/down movement and left/right movement. 上升、下降/左侧飞、右侧飞 控制杆

Mode3

Throttle/rudder stick

Use to control forward/reverse movement and left/right turning. 上升、下降/左转、右转 控制杆

Mode1 / Mode3

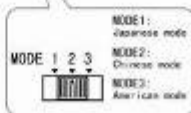
Rudder trim

Do not move from the central position. 左转、右转 微调

Mode2

Aileron trim

Use to adjust the neutral position for left/right movement. 左侧飞、右侧飞 微调

Function keys
功能键**Mode1**

Throttle/aileron stick

Use to control up/down and left/right movement. 上升、下降/左侧飞、右侧飞 控制杆

Mode2

Elevator/aileron stick

Use to control forward/reverse movement and left/right turning. 前进、后退/左转、右转 控制杆

Mode3

Elevator/aileron stick

Use to control forward/reverse movement and left/right movement. 前进、后退/左侧飞、右侧飞 控制杆

Mode1 / Mode3

Aileron trim

Use to adjust the neutral position for left/right movement. 左侧飞、右侧飞 微调

Mode2

Rudder trim

Do not move from the central position. 左转、右转 微调

10 充电 Charge

Plug the charger in the power supply socket, and insert the charger connector into the charging wire of the lithium battery. The charging time is normally 100-180 minutes or so. The helicopter can be used 5 minutes after charging is completed. Do not overcharge your helicopter. Failure to do so will damage the battery, even lead to fire and explosion.

Attention:

1. Make sure the voltage and connector plug of adapter tally with the local charging standard.
2. Player should stand aside as the plane in the process of charging.
3. The battery pack would become very hot when the plane finishes flying, please wait at least 30 minutes for continuous charging in order to protect the battery pack.
4. Do not throw the battery pack into fire to avoid explosion.

Lithium battery charging
锂电池充电

NOTICE: When the helicopter is not in use, please turn the switch to OFF and unplug the pontes between the batteries and helicopter, if always connected, it may cause the batteries gets weak as a long time electricity wasting.

注意：如果不飞行此飞机，请把开关拨向OFF以耗电过度放电。如果连接器保持连接的话，有可能会因长时间的耗电而导致电池没电。

Caution: The user is cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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 antenna.
- 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.
- Consult the dealer or an experienced radio/TV technician for help.

11 飞行前的环境

Before the flight of the environment

1. Fly on a sunny day without wind.
2. Do not fly in extreme temperature. Do not fly in strong wind.
3. Choose in the wide indoor flight, and make sure that no obstructions pets and people nearby.

