k110s 使用说明书

INSTRUCTION MANUAL

K110s is compatible with FUTABA S-FHSS & FASST-FHSS transmitters and other transmitters with compatible protocols. Check your transmitter's user manual to see if it is compatible. Do not use with any other transmitter. Failure to use the correct transmitter may cause your K110s to malfunction or become uncontrollable. Please read the manual carefully before flying. 本产品兼容futaba的S-FHSS和FASST-FHSS发射机，其他具有相同通信协议的发射机也可以使用。请参阅您的发射机说明书确认您的发射机是否兼容。不正确的发射机可能会导致您的K110s失控或无法控制。请在飞行前仔细阅读说明书。

Packaging List 包装清单

NO	PART NAME	零件名称	QUANTITY
1	gift box	包装盒	1
2	6G transmitter Manual	发射机说明书	1
3	helicopter	直升机	1
4	transmitter	发射机	1
5	USB line	USB线	1
6	6G-6D Charger	6G-12C充电器	1
7	Li-ion battery 3.7V 450mAh 25C	电池3.7V 450mAh 25C	1
8	Cross screwdriver / hex wrench	十字螺丝刀/六角扳手	1
9	main blade / flat rotor	主桨/桨毂	1 Set

Notice 注意事项

- All instructions, warnings and other informational documents are subject to change at the sole discretion of our company. For up-to-date product literature, visit www.xkrc.com
- 所有说明书、警示及其他信息资料均可能随时更新，请参阅最新的说明书。www.xkrc.com

Warning 警告

- Read the ENTIRE instruction manual to become familiar with the features of the product before operating. Failure to operate the product correctly can result in damage to the product or personal injury and void the product's warranty. This is a sophisticated hobby product. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate in a safe manner may result in injury to yourself and others and damage to the product or other property. This product is not intended for use by children without direct adult supervision. This manual contains instructions for safety, operation and maintenance. It is important to read the entire manual for safety and warnings in the manual, prior to assembly, setup or use, in order to operate properly and avoid damage or serious injury.
- 警告：请在操作前仔细阅读说明书，以熟悉产品的特性。不正确的操作可能会导致产品损坏或人身伤害，并使产品保修失效。这是一个高级的爱好产品。必须谨慎操作，并具有一定的机械能力。不正确的操作可能会导致您自己和他人受伤或产品或其他财产受损。本产品不适合儿童在没有成人监督的情况下使用。本说明书包含安全、操作和维护的说明。为了安全和正确操作，请在组装、设置或使用之前阅读整个说明书。

Additional Safety Precautions and Warnings 附加安全提醒和注意事项

1. Age Recommendation: Not for children under 14 years. This is not a toy.
2. Keep away from people and animals. Keep away from hot surfaces, traffic and people.
3. Follow the operation notes, warning and any support equipment (charger, battery, etc) instructions.
4. Keep away from any chemicals; keep children away from any small parts and electrical equipment.
5. Always keeping away from water, especially for this product don't have waterproof function, and don't operate in the rain.
6. Never place any portion of the model in your mouth as it could cause serious injury or even death.
7. Use only genuine parts with low voltage transmitter batteries.

1. 年龄建议：不适合14岁以下的儿童，这不是一个玩具。
2. 始终保持远离动物和他人，远离热源、交通和人群。
3. 遵守操作说明、警告和任何支持设备（充电器、电池等）的指示。
4. 保持远离任何化学品；儿童不要接触任何小零件和电子设备。
5. 始终保持远离水，特别是本产品不具备防水功能，请勿在雨天操作。
6. 切勿将模型任何部分放入口中，这可能会造成严重伤害甚至死亡。
7. 仅使用带有低压发射机电池的原装零件。

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Introduction 简介

- This is a super classic helicopter with excellent high performance. Fuselaxies design, microlaxe resistance of rotor head. Quote to aerodynamics, the blades can supply more lift force and more stable flying. Brushless motor and brushless ESC are used in the model. You can make a variety of stunts by 3D mode, 6G mode is suitable for beginners and advanced.
- 这是一款经典的高性能直升机。机身采用高强度设计，减少桨毂的阻力。桨叶采用空气动力学设计，提供了更稳定的升力及更高的表现。本产品采用无刷电机，配备无刷电调。可以进行3D模式或6G模式飞行，6G可以轻松实现稳定悬停和特技动作，特别适合初学者飞行。

- After flying the helicopter, you will find other retro helicopters, which have flying skills are eclipsed, this is a incomparable and popularization helicopter. Beginners will find it easy to fly and experts will find it a challenging and rewarding helicopter.
- 飞行这款直升机后，你会发现以前飞行过的模型直升机在技术表现方面黯然失色，这是一款真正无与伦比的机种，既适合大众化的普及机种，初学者会觉得很容易飞行，飞行技术高超的爱好者会觉得这是一款具有挑战性和回报性的直升机。

- This manual with detailed instruction, will help you learn more about the product. We need before your flying.
- 本说明书有很多不同寻常了解产品的一些，有助您的产品说明书的，飞行前请仔细阅读。

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Helicopter Parameters 飞机参数

长度	Length	270 mm	
高度	Height	80 mm	
主桨直径	Propeller length	245 mm	
尾桨直径	Tail rotor diameter	45 mm	
电池规格	Battery Specification	3.7v 450mAh 25C	
飞行时间	Flight time	6-7min	
主马达	Main Motor	1103	
尾马达	Tail Motor	0730	

Warning and the guide of using battery 电池使用警告与指导

The Battery Charger included with the K110s has been designed to safely charge the Li-Po Battery.

K110s 附带的电池充电器设计用于安全地给锂电池充电。

CAUTION: All instructions and warnings must be followed exactly. Mishandling of Li-Po batteries can result in fire, explosion, burn, injury and damage.

1. Can result in a fire, personal injury or property damage if not followed properly.
2. By handling, charging or using the battery, you assume all risks associated with lithium polymer batteries.
3. If at any time the battery begins to bottom or swell, discontinue use immediately. If charging or discharging, discontinue and disconnect. Continuing to use, charge or discharge may result in fire, explosion, burn, injury and damage.

1. 如果不按照说明操作，可能会导致火灾、爆炸、烧伤、受伤和财产损失。
2. 处理、充电或使用电池，即表示您承担了锂聚合物电池的全部风险。
3. 如果电池开始变形或膨胀，请立即停止使用。如果正在充电或放电，请立即断开连接。继续使用、充电或放电可能会导致火灾、爆炸、烧伤、受伤和财产损失。

WARNING: Only use the charger supplied by our company, or it would damage the battery.

警告：请勿使用非我公司提供的充电器，否则会损坏电池。

Notice: When a Li-Po battery is discharged below 3.1V, the battery may be damaged and may no longer accept a charge. Please land the helicopter immediately and recharge the flight battery.

注意：当锂电池放电电压低于3.1V时，电池可能会损坏，并且可能无法再接受充电。请立即降落飞机并对飞行电池进行充电。

Notice: When a Li-Po battery is discharged below 3.1V, the battery may be damaged and may no longer accept a charge. Please land the helicopter immediately and recharge the flight battery.

注意：当锂电池放电电压低于3.1V时，电池可能会损坏，并且可能无法再接受充电。请立即降落飞机并对飞行电池进行充电。

Description:

1. Use standard charger and USB power cord to connect, and then connect to the computer.
2. The charging will flash after connecting to computer
3. The red lamp will brighten when charging, it will go out when complete charging.
4. The charger can charge two batteries at the same time.

描述：

1使用标准充电器和USB数据线进行连接，再连接到电脑。
2连接电脑后，充电器将闪烁。
3充电时红灯亮起，充电完成后灯熄灭。
4充电器可以同时为两个电池充电。

Notice: Use only before supplied charger.

Notice: Never attempt to power the charger from an AC outlet without the use of a proper AC to DC power supply.

注意：只使用随附的充电器。

注意：请勿尝试从交流电源插座直接为充电器供电，应使用适当的交流电转直流电源。

First Flight preparation CAUTION 飞行前注意事项

1. Make sure the battery power is full both for TX and helicopter.
2. Before open the power of TX, please make sure the TH. Stick at the bottom position, and the THR of TX=CH3, and 3D mode in back position (back cross position).
3. Make sure the TX is binding with helicopter, or please rebind them.
4. Place the helicopter on a flat surface, and keep it away from the helicopter blades and tail rotor. When close, please cut the power of helicopter first, and then cut the power of TX.
5. Keep away from crowd, cars, high-tension towers and pond. Then you can start your flying.

1.确认遥控器和电池电量充足。
2.开启遥控器前，请确保油门摇杆在最低位置，THR=CH3，3D模式处于后位（后交叉位置）。
3.确认遥控器与飞机对频成功，否则请重新对频。
4.将飞机放置在平坦表面，远离桨叶和尾桨。关闭飞机电源后，再关闭遥控器电源。
5.远离人群、汽车、高压塔和水塘，然后开始飞行。

First Flight instruction 首次飞行指南

Gyroscope calibration

Aircraft factory has passed the flight testing, gyroscope gyr very in individual cases, by calibrating the gyroscope can improve the flight.

1. Place the aircraft on a flat surface, **turn on the transmitter and the aircraft power, 3S switch is in the OFF position.**
2. **Keep the aircraft still, do not touch it or shake it.**
3. **Push the throttle stick to the top (half way), and then pull the throttle stick to the bottom position within 2 seconds, the aircraft will start to beep twice, and the gyroscope calibration is completed.**
4. 飞机出厂时已经通过了测试，个别情况下陀螺仪会出现偏差，通过校准陀螺仪，会使飞行更稳定。
5. 将飞机放置在平坦表面，开启遥控器和飞机电源，3S开关处于OFF位置。
6. 保持飞机静止，不要触碰或摇晃飞机。
7. 将油门摇杆推到顶（半行程），然后将摇杆拉到最低位置，两秒钟内完成，飞机将发出两声提示音，陀螺仪校准完成。

Notice:

1. When you are in the aerobic control, throttle hold switch is ON, the aerobic control function will be closed, the throttle will be in the middle position.
2. Turn on the remote control when 3D switch in the ON side, the remote controller ☞ ☞ ☞ will be in the middle position, the throttle will be in the middle position.
3. Turn on the remote control when the 3D switch is in the back position, the remote controller ☞ ☞ ☞ will be in the middle position, the throttle will be in the middle position.

Notice: 3D switch

Throttle Curve and Pitch Curve Set 油门曲线和螺距曲线设置和调整

	0%	25%	50%	75%	100%
Throttle curve 油门曲线	0%	25%	50%	75%	100%
Pitch curve 螺距曲线	-100%	-50%	0%	50%	100%

The above information is for your reference only, you can self freely according to your demand and personal habits.

本图表仅供参考，用户可根据个人需求和习惯自行调整。

Receiver Interface Diagram 接收机接口图

Throttle/Aux channel
Rudder channel
Elevator channel
Aileron channel
Left aileron
Right aileron
Tail rotor
Main rotor