XK™

Shenzhen XK Innovations Technology Co.,Ltd.

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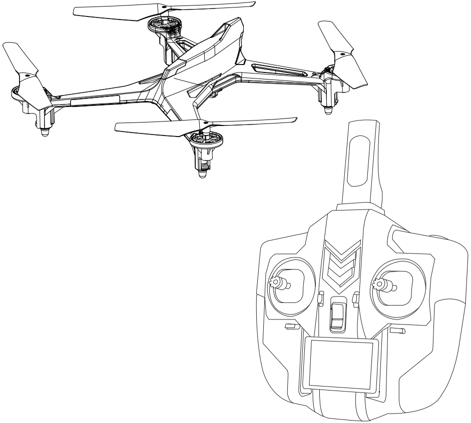
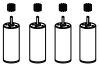
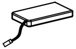
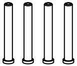
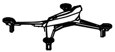
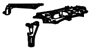
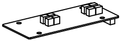
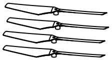
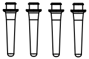
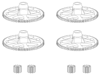
X250多功能四轴

使用说明书

INSTRUCTION MANUAL



Spare parts list 配件列表

Motor 马达配件组	Screw 螺丝配件组	Lipo battery 电池配件组	Lamp Shade 灯罩配件组
			
Bearing 轴承配件组	Main shaft 主轴配件组	Front cover 机身配件组	Back cover 机身2配件组
			
PCB 主板配件组	Propeller 螺旋桨配件组	Foot pad 2 脚垫2配件组	IIndicator LED 指示灯配件组
			
Foot pad 1 脚垫配件组	Charger 充电器	Gear 齿轮配件组	
			

RTF package list 整机包装清单

NO	PART NAME	零件名称	QUANTITY
1	Manual	使用说明书	1
2	Aircraft	飞行器	1
3	Charger	充电器	1
4	Li-po battery	锂电池	1
5	CW CCW Blades	正、反螺旋桨	4
6	Remote controller	遥控器	1
7	Screwdriver	十字螺丝刀	1

Upgrade Parts 可升级配件

X250A
5.8G FPV

X250B
WIFI FPV

Notice 注意事项

- **XK company has the rights to change related files of this product. Updating info, please visit our website, www.xk-innovations.com.**

- 所有的说明，本公司有权更改担保及其他相关文件的权利，更新的信息请访问

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, personal property and cause serious injury. This is a sophisticated hobby product. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this Product in a safe and responsible manner could result in injury or damage to the product or other property. This product is not intended for use by children **without any protection under adult** . This manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings, prior to assembly, setup or use, in order to operate correctly and avoid damage or serious injury.

- 操作前，请阅读整个说明书以便了解该产品的功能。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。这是一个复杂的模型产品，而不是一玩具。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，会毁坏该产品或者对人身，或者对其他财产造成损失。本产品不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,避免造成损伤或严重伤害。

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

1.Age: it is not suitable for younger than 14, it is not a toy.
2.Space: always operate it in a very open space, and far away from vehicle and person.
3.Pls strictly follow the operation manual and select the supported device.
4.All the chemicals, small parts and electric device should be away from children.
5.Be away from water and water steam.
6.Pls don’t put any parts into mouth, which might cause severe injury and even death.
7.Pls don’t operate it under low voltage battery status.

1.年龄建议: 不适合14岁以下的儿童，这不是一个玩具。
2.始终在开放的空间操作你的模型，远离车辆、交通和人。
3.必须仔细地遵循操作说明和警告，以及任何可选的支持设备。（充电器，可选充电电池等）
4.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。
5.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。
6.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。
7.当发射机电池电压过低时切勿操作你的模型。

Introduction 简介

- Thanks for choosing XK quadcopter X250. Please read this manua
For better future maintenance, pls keep this manual in hand.

感谢您选购XK产品！这是一台能在室外飞行的4轴飞行器，为了让
容易操控飞行器，请您仔细阅读完此说明书，再操作此台飞行器，
管这本说明书，作为日后调整及维修的参考。

- Before your first flght,please take the time to be carefully read this
important flight information,which will help your first flight to becom

在你第一次飞行前，请花时间仔细 阅读本手册含重要的飞行资料，
您的第一次飞行，成为一次伟大的历程。

Catalogue 目录

Spare parts list 配件列表
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Additional Safety Precautions and Warnings 附加安全措施防范和
Intriduction 简介
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Battery Charging 电池充电
Cautions before flight 飞前注意事项
TX functions 遥控器各部位名称
First Flight instruction 首次飞行指挥
One key to roll 一键翻滚
One key return 一键返航
CF MODE 无头模式
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Trouble shooting Guide 如何排除飞行中的异常
PCB circuit 电路板示意图
Exploded View 爆炸图
Spare parts list 零件清单
Quadcopter parameter 飞行器参数

al careful before operation.

您更方便，更
同时请您妥善保

manual containing
e a great course.

这将有助便

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警告 3
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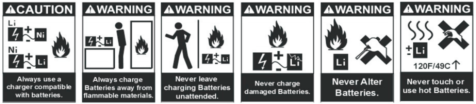
Warning and the guide of using battery 电池使用警告与向导


CAUTION
Li
Ni
Ni
Li
Always use a charger compatible with batteries.
WARNING
Li
Always charge Batteries away from flammable materials.
WARNING
Li
Never leave charging Batteries unattended.
WARNING
Li
Never charge damaged Batteries.
WARNING
Li
Never Alter Batteries.
WARNING
Li
120F/49C ↑
Never touch or use hot Batteries.

The charger included has been designed to safely charge the Li-Po battery.
X250附带的电池充电器可以安全的给聚合物锂电池充电。

CAUTION: All instructions and warnings must be followed exactly. Mishandling of Li-Po batteries can result in a fire, personal injury, and/or property damage.

1. All the risk of using lipo battery is at your hand
2. Please not exceed the recommended charge rate.
3. If the battery degins to balloon or swell at any time,please stop to use immediatediately. otherwise it can result in fire
4. Always store the battery at normail temperature and dry place
5. Always transport or temporarily store the battery in a temperature range of 40-120°F. Do not store battery in the car or direct sunlight.If stored in a hot car,the battery can be damaged or even catch fire.
6. Please not use a NI-CD or NI- MH aharger.Charge the battery with a uncompatible charger may cause fire.
7. Please stop to tly when low voltage of battery.

注意: 必须严格遵守所有的提示和警告，不正确处理聚合物电池可能会：

1.导致火灾、导致人生伤害或财产损失。
2.通过处理，充电或使用包括锂电池，你承担所有与锂电池相关的风险。
3.在任何时间如果电池开始膨胀，请立即停止使用；如果充电或放电，终止和断开；继续使用，充电或放电的膨胀电池，可能会导致火灾。
4.电池始终储存在温室下，在干燥的地方以取得最佳效果。
5.始终运输或暂时存放在40～120华摄氏的温度范围内，不要存放在车内或直射阳光下;如果在热车中，电池会被损坏，甚至着火。
6.切勿使用镍镉或镍氢电池充电器,不兼容的充电器充电电池可能会引起火灾，造成人生伤害和财产损失。
7.电池电压过低时,千万不要操作你的设备。

WARNING: Only use the original charger supplied from our company, or it will occur the property damage and injury.

警告: 充电时建议使用原厂提供的电源充电器,否则会导致财产损失和伤害发生。

Notice: When the voltage of Li-Po battery below 3V,it may be damaged or discharged; When it is lower than 3.3V,you will feel it will be very weak,please landing immmediately and charge the battery timely.

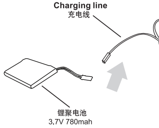
注意: 当低于 3 V时 ,锂电池可能会被损坏，或者可能不再接受充电;飞机飞行时电池电压低于3.3V时,飞行动力下降明显,请立即降落并且及时给电池充电。

Battery Chargi

1-cell 3.7V Variable Rate DC Li-Po Charger
1节3.7V变量控制直流锂电充电器

Instructions:
Pls charge as folllows,

说明：
用XK配送的飞碟专用充电器充电。将聚锂电池插头，
插入充电器插口。如图所示


Charging line
充电线
锂聚电池
3.7V 780mah

Notice: Only use the charger provided by XK

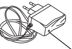
注意：只能使用 XK 提供的充电器

Cautions before fligh

1.Make sure the power is full.
2.Make sure the throttle stick at the bottom before open
3.Make sure bind successfuly before fly.
4.Find a wide space to enjoy you flirst flight.

1.确认电源是否充足 。
2.打开电源开关时，请确认 油门摇杆在最下方 。
3.确认与飞行器是否同频，如果异常请重新对码。
4.寻找一个合适飞行的场地，远离人群、车、高压电塔、

ng 电池充电

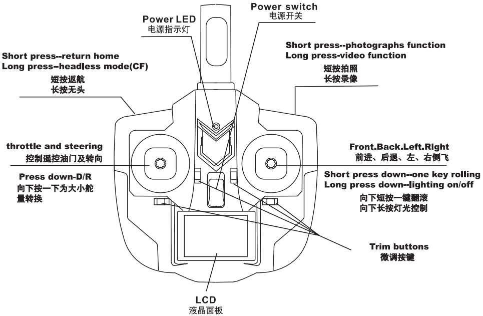


nt 飞前注意事项

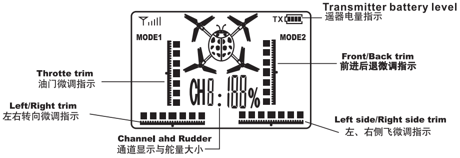
the TX.

水塘等，方可进行安全愉快的飞行。

TX FUNCTIONS 遥控器各部位名称



Power switch
电源开关
Power LED
电源指示灯
Short press--photographs function
Long press-video function
短按拍照
长按录像
Short press--return home
Long press--headless mode(CF)
短按返航
长按无头
throttle and steering
控制遥控油门及转向
Front.Back.Left.Right
前进、后退、左、右侧飞
Press down-D/R
向下按一下为大小舵量转换
Short press down--one key rolling
Long press down--lighting on/off
向下短按一键翻滚
向下长按灯光控制
Trim buttons
微调按键
LCD
液晶面板



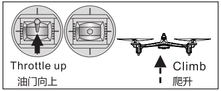
MODE1
MODE2
TX
CH8:188%
Transmitter battery level
遥器电量指示
Front/Back trim
前进后退微调指示
Throtte trim
油门微调指示
Left/Right trim
左右转向微调指示
Left side/Right side trim
左、右侧飞微调指示
Channel ahd Rudder
通道显示与舵量大小

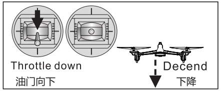
First Flight Instruction 首次飞行指挥

Take a little time to be familar with the controls of X250 before your first flight.

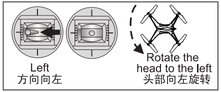
如果你不熟悉X250的控制，花几分钟熟悉他们，然后尝试你的第一次飞行。

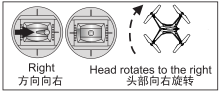
Throttle 油门


Throttle up
油门向上
Climb
爬升

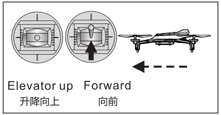

Throttle down
油门向下
Decend
下降

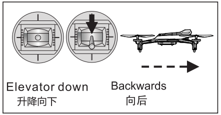
Rudder 方向


Left
方向向左
Rotate the head to the left
头部向左旋转

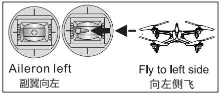

Right
方向向右
Head rotates to the right
头部向右旋转

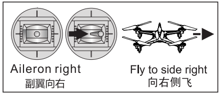
Elevator 升降


Elevator up
升降向上
Forward
向前

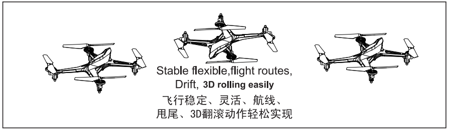

Elevator down
升降向下
Backwards
向后

Aileron 副翼


Aileron left
副翼向左
Fly to left side
向左侧飞


Aileron right
副翼向右
Fly to side right
向右侧飞

One key to roll 一键翻滚



Stable flexible,flight routes,
Drift, **3D rolling easily**

飞行稳定、灵活、航线、
甩尾、3D翻滚动作轻松实现

★During flying, short press the direction stick, TX will send “DiDi” sound, then push the direction stick on TX to roll as your required direction. You can not do roll actions under Headless mode.

★当前面的基本动作都很熟练时就可以玩一些惊险的翻滚动作，在飞机油门保持平飞情况下，向下短按一键翻滚，遥控器发出连续的滴滴响声，此时进入3D翻滚状态，这时打遥控器前后、左右侧飞任意方向摇杆方可向对应方向翻滚，无头模式下不能翻滚。

One key return 一键返航

Short press “return home” key, TX will send “DiDi” sound, and tail LED will flash, then quadcopter will return home automatically. Push “forward” stick to stop to return home.

Notice:When fly under CF mode,pls make sure the quadcopter always in right ahead of you(red blades in front).

快速按下一键退航按键，遥控器发生滴滴响声，飞行器尾灯快速闪烁，飞行器开始返航。向前推一下前进摇杆可解除一键返航。

注意！在使用返航时；必须在对码时把飞行器的头朝正前放正。且在飞行时，操控者不能改变方向

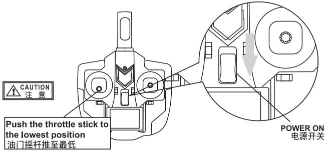
CF MODE 无头模式

Make sure the quadcopter in right ahead of you(Red blades in front), then make binding. Press “headless mode(CF)” key for 2 seconds, then TX will send “DiDi” sound, to remind you it is CF mode now.

Notice: When fly under CF mode, pls make sure the quadcopter always in right ahead of you (red blades in front).

把飞碟放在正前方，对码起飞后长按遥控器无头模式按键2秒进入无头模式同时遥控器发出的滴滴响声，再长按2秒退无头模式。注意：使用无头模式时必须在对码前把飞机放正。（红桨朝正前方）操控时人不能改变方向！

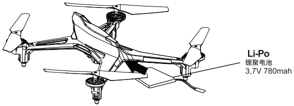
BINDING OF RADIO TRANSMITTER AND RECEIVER 遥控器与接收器的对频


CAUTION
注 意
Push the throttle stick to the lowest position
油门摇杆推至最低
POWER ON/OFF
电源开关

Step 1 步骤 1

Pull the throttle stick at the bottom,trun on TX,
indicator will flash.

将油门摇杆拉至最低，打开遥控器电源开关，
灯闪烁。


Li-Po
锂聚电池
3.7V 780mah

Step 2 步骤 2

Plug on and connect the Lipo battery, then pu
quadcopter on flat ground quickly.Binding suc
till LED change From flash to always on. Pls u
throttle by pushing and pulling the thrittle stick
to bottom.Then you can fly now.

当闪烁停止为对码成功，此时将油门摇杆向上
迅速向下拉回解锁。解锁完成后方可飞行。

]。

then TXpower

电源指示

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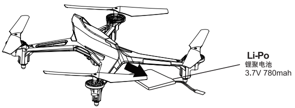
from topside

推至最大并


Li-Po
锂聚电池
3.7V 780mah

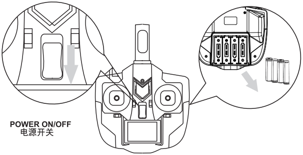
To make safety,pls get off the Lipo battery after flight.

结束飞行时，请将飞行器电池安全取下，
请养成良好习惯以免造成遗憾。

⚠ WARNING 警 告

Not Get off the lpo battery,it will cause,over discharge to damage the battery,or even fre.

电池未取下，将导致电池过放电而损坏。
甚至造成起火燃烧的危险。


POWER ON/OFF
电源开关

Power off the TX.Remove the battery from TX.

关闭发射器电源，长时间不使用时请将遥控器电池取出并妥善保管。

⚠ WARNING 警 告

Warning:If the AA batterise are left in the transmitter, potential leakage could occur which may damage the transmitter,and create fire hazards.

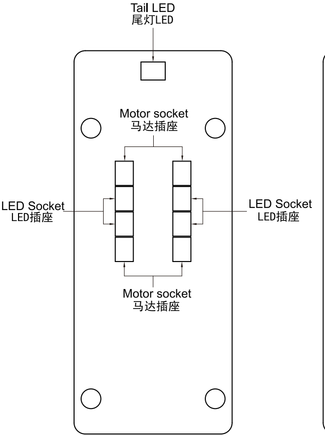
电池未取下，将导致电池漏液而损坏遥控器，甚至造成起火燃烧的危险。

Troubleshooting Guide 如何排除飞行中的异常

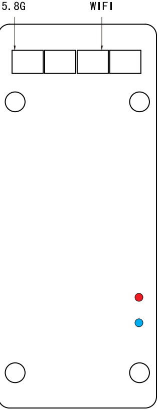
	Situation 状况	Possiblc Cause 原因	Solution 对策
1	**After connect the lipo battery,LED flash,can not operate.** 接上飞行器电池接收器指示灯持续闪烁，操作无反应	**Binding failure** 遥控器与接收器未对频成功	**Rebind as instruction** 将遥控器电源关掉，将电池插头拔掉重新上电，重新对频。
2	**No any reactions after connect the lipo battery.** 接上飞行器电池后飞行器没有任何反应	**1.Check if TX and RX have electricity.** **2.TX and RX low power.** **3.Lipo battery is not well connected.** 1. 检查遥控器和接收器是否接通电源 2. 检查遥控器和接收电池的电压 3. 电池极片接触不良	**Make sure TX and RX battery is full power and well connected.** 1. 打开发射器与确实插入飞行器电池至定位 2. 使用完全充电充饱的电池 3. 从新插入电池，确认电池和电池极片的接触是否正常
3	**Push throttle stick motor not rotate and RX indicators flash.** 推动油门摇杆时马达不转，且接收器指示灯开始闪烁。	**Lipo battery low voltage.** 飞行器锂聚电池电量不足	
4	**Main rotor continue to rotate after landing.** 降落之后，主旋翼仍在旋转未停止	**Throttle trim is too high.** 飞行中误将油门微调调高	**Confirm throttle trim is in the middle or slightly below.** 确认油门微调在中间位置或是稍微向下调
5	**Main rotor rotate but unable ti takooff.** 飞行器主旋翼有持续转动但不能起飞	**1.Rotor deformation** **2.Low voltage of lipo battery** 1. 旋翼变形 2. 飞行器电池电量不足	1.Replace main blades 2.Charge or replace with a fully charged battery. 1. 更换主旋翼 2. 将电池充电或是更换另一个充饱的电池
6	**Strong vibration of quadcopter.** 飞行器震动得很厉害	**Rotor deformation** 旋翼变形	**Replace the rotor** 更换旋翼
7	**After well trim,but still disorder rotate for the quadcopter.Different rotate speed of right and left rotor blades.** 已调整方向微调，但机身仍会打转，左旋/右旋速度不一致	**1.Deformed rotor baldes.** **2.Damaged motor** 1. 旋翼变形 2. 马达不良	**Replace the rotor** **Replace the motor** 更换旋翼 更换主马达

8	**Quadcopter moves to one side during flying** 飞机起飞后向左右或前后偏移	**1.Triming is not at the middle position.** **2.Calibrate gyro to make it horzional.** 1. 微调不回中 2. 重新校准陀螺仪
9	**Can not fly again,after fall.** 飞行器跌落后飞不起来	**1.Lipo battery connector loos** **2.gear loose** 1. 电池插头松脱 2. 把齿轮装紧
10	**Large deviations under headless mode** 无头模式偏差较大	**During binding,not put the quadcopter in the right ahead of you(red blades infront.)** 对码时飞行器放偏

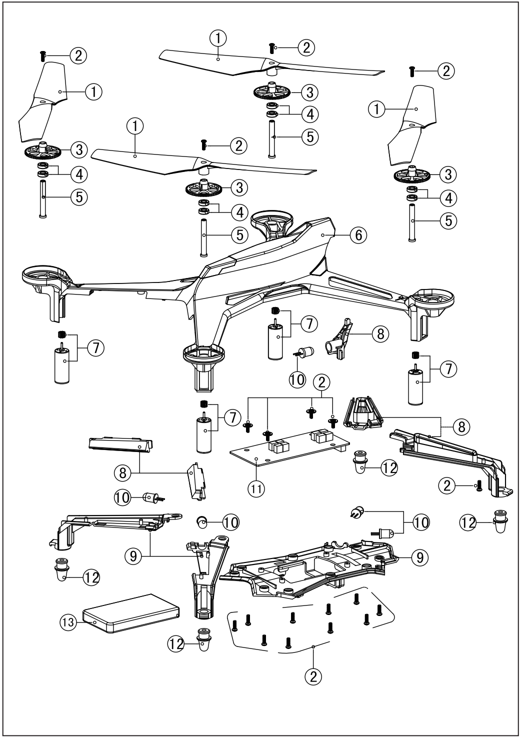
PCB circuit 电路板示意图


Tail LED
尾灯LED
Motor socket
马达插座
LED Socket
LED插座
LED Socket
LED插座
Motor socket
马达插座

	1.Make sure the triming at the middle position,and then restart to fly. **2. Pull the two joysticks to the lower left corner at the same time.Gyro calibration finish when LED change from flash to be always on. Then you can re-take off.** 1. 将微调调回中点，再重新起飞 2. 将遥控器摇杆同时向左下角打到底变LED灯闪烁，此时进入陀螺仪水平校准，当LED灯闪烁停止为校准完成。再重新起飞即可
e	**1.Pls reconnect the lipo battery** **2.Reinstall the gear.** 1. 把插头重新插紧 2. 把齿轮装紧
	During binding,pls make sure the quadcopter in the right ahead of you and horizonal. 对码时飞行器要水平放置



Exploding View 爆炸图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Spare parts list 零件清单

NO	PART NAME	零件名称	QUANTITY
1	Propeller	螺旋桨组	1
2	Screw	螺丝组	1
3	Gear	齿轮组	1
4	Bearing	轴承组	1
5	Main shaft	主轴组	1
6	Front cover	机身组	1
7	Motor	马达组	1
8	Lamp shades	灯罩组	1
9	Back cover	下机身组	1
10	Indicators	指示灯组	1
11	PCB	主板组	1
12	Foot pad	脚垫组	1
13	Lipo battery	电池组	1

Quadcopter Parameters 飞行器参数

Wheel base	对角长度	240mm
Height	高度	66mm
Blade diameter	螺旋桨长度	135mm
Battery Specification	电池规格	3.7V 780mAh20C
Flight time	飞行时间	about 10min