

WLTOYS

Specifications & Equipment/ 规格配备:

V911

Length/ 机身长: 220mm

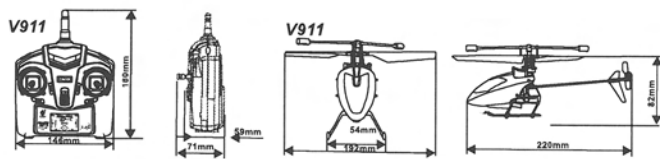
Height/ 机身高: 82mm

Main Blade Length/ 主旋翼长: 192mm

Tail Rotor Diameter/ 尾旋翼直径: 36mm

Weight(without Power System)/ 空机重: 27.8g

Flying Weight/ 全配置: Approx. 32g



伟力玩具有限公司



MICRO HELICOPTER
V911 Super Combo
INSTRUCTION MANUAL
使用说明书

WLTOYS

V911 In The House!



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Thank you for buying WLTOYS products. The V911 is the latest technology in Rotary RC models. Please read this manual carefully before assembling and flying the new V911 helicopter. We recommend that you keep this manual for future reference regarding tuning and maintenance.

感谢您选用伟力遥控世界系列产品，谨表谢意。进入遥控世界之前必须告诉您许多相关的知识您注意事项，以确保您能够在学习的历程中充满信心应手。在开始操作之前，请务必阅读本说明书，相信一定能够给您带来相当大的帮助，也请您妥善保管这本说明书，以作为日后参考。




1. INTRODUCTION 前言

Thanks for using wtoys products. V911 is the first helicopter which can fly outdoor in a wild weather. In order to play V911 more convenient and easy, please read it carefully before playing the helicopter. Meanwhile, please keep it well, and take it for reference when adjustment and maintenance.

感谢您选购伟力产品！V911是一台世界首创能在较小空间以及室外飞行的遥控直升机。为了让您更方便、更易于使用V911，请您仔细阅读完此说明书后，再操作这台直升机。同时请您妥善的保存这本说明书，作为日后调整及维修的参考。V911 helicopter can satisfy you whatever rainy or sunny, even when outdoor wild grade 3-4, it will keep moving.

V911直升机，不论何时何地，不管晴天雨天，包括室外风力不大于3-4级，都可以满足您对飞行的渴望。

WARNING LABEL LEGEND 标志代表含义

 WARNING 警告	Mishandling due to failure to follow these instructions may result in damage or injury. 因为疏忽这些操作说明，而使用错误可能造成财产损失或严重伤害。
 CAUTION 注意	Mishandling due to failure to follow these instructions may result in danger. 因为疏忽这些操作说明，而使用错误可能造成危险。
 FORBIDDEN 禁止	Do not attempt under any circumstances. 在任何禁止的环境下，请勿尝试操作。

IMPORTANT NOTES 重要声明

V911 is a sophisticated hobby product and not a toy. Although small, it still poses certain risk factors that should not be overlooked. Please follow safety and operation recommendations to ensure correct operation of this helicopter. The use of this helicopter beyond its intended purposes and disassembly may cause unforeseen danger, and should be avoided.

V911并非玩具，虽然是模型的遥控直升机，但是仍然有一定的危险性。请您注意安全事项与操作说明来正确的使用该模型。任意的改装拆解或使用不当以及对产品的不熟悉，都可能造成不可预期的危险或意外，请勿轻忽。

Manufacturer and dealer assume no liability for accidental damages by abnormal wear of parts, improper assembly, or operation in unsafe manners. This product is intended for use by age 15 years or older. Please ensure the product is operated under safe environment.

注意！任何遥控直升机的使用，制造商或经销商是无法对使用者因零件使用的损耗异常、组装不当或不安全的环境操作所发生之意外负任何责任。本产品适用年龄15岁以上，请确保在安全无虞的环境下操作。产品售出后本公司将不负责任不当操作/拆卸/改装所引起的财产损失与人身伤害。

We recommend that you seek the assistance or an experienced pilot before attempting to fly our products for the first time. A local expert is the best way to properly assemble, setup, and fly your model for the first time.

The requires a certain degree of skill to operate, and is an item subject to normal wear and tear. Any damage or dissatisfaction as a result of accidents or modifications are not covered by any warranty and cannot be returned for repair or replacement. Please contact our distributors are not covered by any warranty and cannot be returned for repair or replacement. Please contact our distributors are not covered by any warranty and cannot be returned for repair or replacement.

模型产品属于高技术且为消耗性商品。如经拆解使用后，会造成不同程度的零件损耗。任何使用情况所造成商品不良或不满意，将无法于保固条件内更换新品或退货。如遇有使用操作维修问题，本公司全省分公司或代理将提供技术指导，特价零件供应服务。

2. SAFETY NOTES 安全注意事项

CAUTION 注意

Fly only in safe areas, away from other people. Do not operate R/C aircraft within the vicinity of crowds or people. R/C aircraft are prone to accidents, failures, and responsible for their actions and damage or injury occurred during pilot error, and radio interference. pilots are responsible for their actions and damage or injury occurred during the operation or as a result of R/C aircraft models.

遥控模型飞机，直升机属于危险性商品。飞行时必须有人群。人为组装不当或机件损坏，电子控制设备不良，以及操作上的不熟悉，都有可能导致飞行失控损坏等不可预期的意外。请飞行者务必注意飞行安全，并需了解自身疏忽所造成任何意外之责任。

FORBIDDEN 禁止

Special despecial design for indoor & outdoor please keep it away from obstacle

室内、室外专用机，请远离障碍物

This product is suitable for indoor and outdoor (the wind grade should be no more than 4), please choose a place without obstacle, and keep distance from crowd and pets, don't play it under unsafe, for instance, heat source, wire or electronic power source, in order not to be damaged by collision landing, entanglement and lead to a fire, electric shock and cause losses of lives and property

本产品适合室内、室外（包括室外风力不要大于4级）环境飞行的遥控直升机。飞行时请选择远离无障碍物的室内、室外场地，并有人群或宠物等保持适当距离。切勿在不安全的环境下操作，如热源、电线、电源等等，以免直升机碰撞、故障、纠缠而引发火灾、电击等危险，造成生命财产损失。



PREVENT MOISTURE 远离潮湿环境
R/C models are composed of many precision electrical components. It is critical to keep the model and associated equipment away from moisture and other contaminants. The introduction or exposure to water or moisture in any form can cause the model to malfunction resulting in malfunction, or a crash. Do not operate or expose to rain or moisture.
直升机内部是由许多精密的电子零件组成，所以必须绝对的防止潮湿或水汽。避免在浴室或雨天时使用。防止水汽进入机身内部而导致机件及电子零件故障而引发不可预期的意外！

PROPER OPERATION 勿不当使用本产品
To avoid potential fire hazard from batteries, please do not short, reverse polarity, or puncture batteries. Battery charging must be done under supervision at all times, and at location out of reach by children. Double check the four AA batteries are rechargeable Ni-CD/MH batteries before charging. The manufacturer or this product will not be liable for accidental damages incurred by charging non-rechargeable batteries.
请勿任意拆卸或任意更改增加。任何的开焊或更改，请使用伟力产品目录中的零件，以确保结构的安全。请确认于产品限界内操作。请勿超载使用，并勿用于安全、法令外其它非法用途。

SAFETY NOTE FOR NI-MH BATTERIES 镍氢电池使用安全
Make sure the batteries are installed based on polarity indicated in the case and do not mix batteries of different chemistry/spec. Please take out the batteries if you are not going to use for a long time to avoid potential leakage which may damage the transmitter. Please dispose depleted batteries according to local laws and ordinances. Do not dispose improperly.
安装时请确认正负极位置。新旧电池请勿同时混用以影响电池寿命。若长时间不使用本产品，请取出电池，以免造成电池漏液、故障。若电池有漏液状况请勿再使用，废弃的电池，请依照该使用国家或地区的废弃物处理法令回收，切勿任意丢弃以免污染环境。

SAFETY NOTE ON LI-POLYMER BATTERIES 锂聚合物电池使用安全
Li-Polymer batteries poses higher operational risks compared to other battery chemistry, thus it is imperative to follow its usage instructions. Manufacturer and dealer assume no liability for accidental damages caused by improper usage.
Do not use charger other than the factory supplied unit to avoid potential fire and explosion. Do not crush, disassemble, burn, and reverse polarity. Avoid metallic materials to come into contact with battery's polarity and cause it short and never puncture batteries to avoid fire hazards.
Battery charging must be done under supervision at all times, and at location out of reach by children.
Please stop the use or charge of the battery should there be an unusual increase in battery temperature after use. Continue use of this battery may cause it to expand, deform, explode, or even result in fire hazards.
Please dispose depleted batteries according to local laws and ordinances. Do not dispose improperly.
锂聚合物电池较其他电池有更高的危险性，使用前请务必详读并遵照下列注意事项使用本产品。本公司不对任何不当使用所造成的损害负责。
严禁使用原厂以外的充电器进行充电，以免发生爆炸起火的风险。
严禁撞击、拆解、正负极反接、焚烧电池，避免金属物品接触电池正负极造成短路，并预防防止尖锐物品刺穿电池，以避免电池起火的风险。
充电时请谨慎小心，确保在空旷的区域内进行充电，并远离孩童可以接触到的地方，以免发生危险。
电池使用后如有发热情况，严禁充电，否则会造成电池膨胀、变形、爆炸甚至起火爆炸，危害生命财产安全。
废弃的电池，请严格按照该使用国家或地区的废弃物处理法令回收，以免污染环境。

KEEP AWAY FROM HEAT 远离热源
R/C models are made of various forms or plastic. Plastic is very susceptible to damage or deformation due to extreme heat and cold climate. Make sure not to store the model near any source of heat such as an oven, or heater. It is best to store the model indoors, in a climate-controlled, room temperature environment.
遥控飞机多半是以PAH纤维或聚乙烯、电子商品为主要材料。因此要尽量远离热源、日晒，以避免因高温而变形甚至烧毁损坏的可能。

OBTAIN THE ASSISTANCE OF AN EXPERIENCED PILOT 避免独自操控
The products are suitable for more than 15 years old age, at the beginning it will have some certain difficulty in learning, suggestion guidance by experienced when playing.
本产品适用年龄15岁以上，遥控直升机在学习初期有一定难度，建议有经验的人士在旁指导才可以飞行。

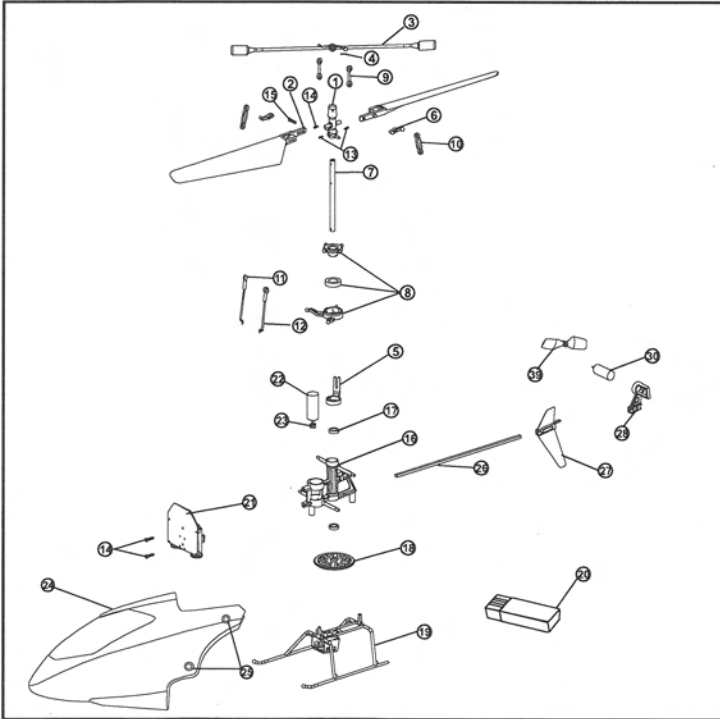
No	Code No	Name	Specification	Quantity	Remarks
1	10H001	Main rotor housing	主旋翼固定架	18.8X6X4.4mm	1
2	10H009	Blade	主旋翼	102X20.8X6.7mm	2
3	10H062	Flybar rod	平衡杆	126X13.4X3.2mm	1
4	10H011	Bar screw	平衡杆螺丝	41.5X7mm	1
5	10H003	Washout base	向位器	15X3.9x3.5mm	1
6	10H004	Washout control arm	控制臂	6.2X2.8mm	2
7	10H005	Swashplate	主轴	41.6X93X45.8mm	1
8		Main shaft	十字轴组		1
9	10Z001	Ball link a	连杆头a	42.1X7.6x1.3mm	2
10	10Z002	Ball link b	连杆头b	42.1X11x1.3mm	2
11	10Z003	Ball link	连杆头	40.1X5x1.3mm	2
12	10Z004	Linkage rod	机身连杆	40.6X5x12.5mm	2
13	S5140	Screw	圆头十字自攻螺丝	T1.4x4mm	4
14	S51425	Screw	圆头十字自攻螺丝	T1.4x2.5mm	1
15	T11232	Collar screw	圆头十字轴套螺丝	M1.2x3.2mm	2
16	10B001	Main frame	机身	33.7X36.1mm	1
17	HH63	Bearing	轴承	43X46X2mm	2
18	10BA00	Main drive gear	主齿轮		1
19	10F001	Landin skid	脚架	52X29.5mm	1
20	Kv910015	Li-polymer battery	锂聚合物电池	3.7V/120mAh/15C	2
21	Er10021	Receiver board	接收板		1
22	Mb10001	Motor	主马达		1
23	10M001	Motor pinion gear	马达齿轮		1
24	10C001	Canopy	彩绘机头罩		1
25	10H014	Canopy nut	机头罩垫圈	41.4X43X1.5mm	4
26	10T001	Tail boom	尾管	2.2x2.8X115mm	1
27	10T002	Horizontal stabilizer	横直翼	42.4X17.5X4.4mm	1
28	10T004	Tail motor mount	尾马达座	47X97.5X11.7mm	1
29	10T003	Tail Blade	尾旋翼	40.8X42.2X35.1mm	1
30	Mb10021	Tail Motor	尾马达		1

Specifications, contents of parts and availability are subject to change, Align RC is not responsible for inadvertent errors in this publication. 本说明书内的材质，规格或零件包装之内容物仅供参考。本公司将不对此印刷物之异动负责，也无法主动通知消费者，任何更新或异动，请以伟力网页为主。

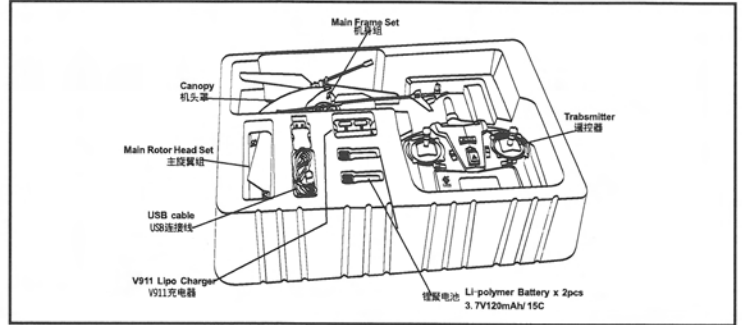
Situation 状况	Cause 原因	Way to deal 对策
11 Helicopter unable to remain stationary during hover 悬停时机身无法定点	1.Binding caused by rough components 2.Overtightening of mixing arms. 1. 机构干涉精度不足 2. 控制臂固定太紧干涉	1.Confirm smooth movements of components and ball links. 2.Losen up mixing arms axial screws. 1. 确认机身每一个机构及连杆会作动顺畅 2. 放松轴套螺丝(1)控制臂干涉精度
12 Unusual vibration of helicopter during flights 直升机飞行时机身异常抖动	1.Binding between main blades and blade grips. 2.Insufficient head speed due to depletion of helicopter battery. 1. 主旋翼和主旋翼固定座干涉 2. 直升机电池电压不足, 主旋翼转速太慢	1.Ensure all head components are smooth with no binding. 2.Replace with a fully charged battery. 1. 确认主旋翼头组的每个机构活动顺畅不干涉 2. 请更换一个充电完成的新电池

If the problem is still there even after tried above, stop flying and contact with your seller.
在做完以上调整后, 仍然无法改善情况时, 应立即停止飞行并联系您的经销商。

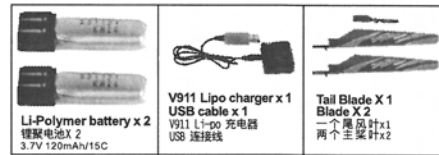
15. PARTS LIST 各部件名称



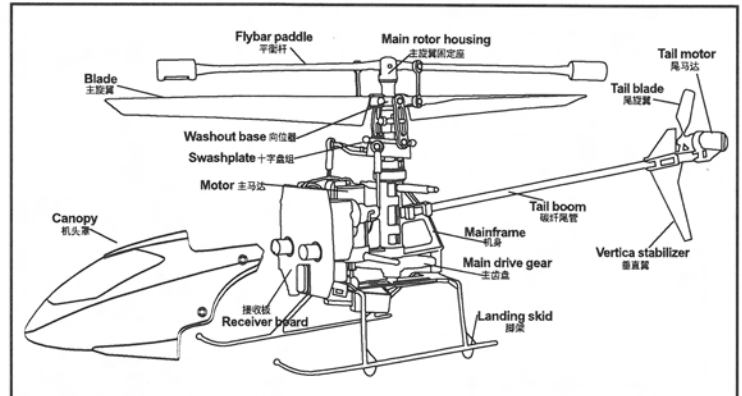
3. PACKAGE ILLUSTRATION 包装说明



4. STANDARD EQUIPMENT 标准配件



5. NOMENCLATURE 直升机各部位名称



6 3 STEPS FOR HELICOPTER ASSEMBLY 直升机组装三步

Step 1

Main rotor head set
主旋翼组

Press the main rotor assembly onto main shaft until fixed in position.
主旋翼组压入主轴固定定位。

Please release the screw and then install the main rotor set at the proper position.
请先将螺丝退出,再将主旋翼组压入固定定位。

Please install ball link B without base slot.
球杆头B请安装在向位槽为槽中。
Concave side face out
平面朝外

Ball link B installation position (18.5mm)
球杆头B组装位置(18.5mm)

Ball link B
球杆头B

Main frame set
机身组

Approx. 17mm
Approx. 15.2mm
Approx. 10.5mm

Step 2

Ensure all linkages and balls move freely without binding.
请确认所有连杆头和球头动作顺滑不干涉。

Approx. 1mm
约1mm

CAUTION
注意

Screw
螺丝十字攻螺纹
T1.2x5.5mm

Please tighten with suitable force, as over tighten will cause deformation of the head block, resulting in poor concentricity.
请以适力度力拧紧即可,过度拧紧会导致主旋翼头无同心度不良。

Stable flight uses inner hole(A)
稳定飞行使用孔(A)
敏捷飞行使用外孔(B)

Do not overtighten the collar screw and make sure the control arm is working smoothly.
拧紧螺母请勿过紧,确认控制臂动作顺滑不干涉。

Step 3

CAUTION
注意

Tail rotors rotate in certain direction. When you are replacing the tail rotors, please make sure.
按正确方向安装尾桨,如需要更换尾桨时请确认。(如图示)

Rotate direction
旋转方向

Canopy
机头罩

CAUTION
注意

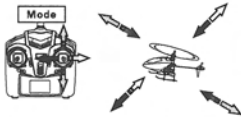
Some parts are already assembled by factory, please re-check if the screws are fastened when assembling, and carefully inspect before every flight.
部分零件已经预装,请在此步仍要确认螺丝是否拧紧,并仔细检查飞行前是否安装正确。

Main gear is designed to fix onto main shaft without screw. When pressing main gear onto main shaft, match the flat spot on the main shaft and press all the way in to ensure it is seated all the way in.
主齿固定为无螺丝设计,当主齿压入主轴时,请对准平面固定位并确认主齿上下无虚位,并压上锁紧。

14. TROUBLE SHOOTING DURING FLIGHT 如何排除飞行中的状况

Situation 状况	Cause 原因	Way to deal 对策
1 Receiver status LED blinks continuously for more than 4 seconds after helicopter battery inserted. No response to control input. 插上直升机电池接收器指示灯持续闪烁,操作无反应	Unable to bind to transmitter. 遥控器与接收器未配对成功	Repeat the power up initializing process. (Refer to P.11: Binding of radio transmitter and receiver) 请重复执行遥控器与接收器的配对动作(请参考P.11遥控器与接收器的配对)
2 No response after battery is connected to helicopter. 插上直升机电池后直升机没有任何反应	1. power to transmitter and receiver. 2. Check transmitter and receiver voltage. 3. Poor contact on battery terminals. 1. 检查遥控器和接收器是否接通电源 2. 检查遥控器和接收器的电压 3. 电池极片接触不良	1. Turn on transmitter and ensure helicopter battery is inserted properly. 2. Use fully charged batteries. 3. Re-seat the battery and ensure good contact between battery contacts. 1. 打开发射器并确保插入直升机电池固定位 2. 使用完全充电的电池 3. 重新插入电池,确认电池和电池极片的接触是否正常
3 Motor does not respond to throttle stick, receiver LED flashes. 推动油门杆时马达不转,且接收器指示灯开始闪烁。	Helicopter battery depleted. 直升机锂电池电量不足	Fully charge the battery, or replace with a fully charged battery. 将电池充电或更换另一个充电的电池
4 Main rotor continue to spin after landing 降落之后,主旋翼仍在旋转未停止	Throttle trim accidentally increased during flight. 飞行中误将油门微调调整	Confirm throttle trim is in center or slightly below. 确认油门微调在中间位置或是稍微向下调
5 Motor fails to run, but servo moves. 马达不转,但伺服器仍有动作	1. Throttle trim is too high, triggering safety protection function. 2. Throttle was not all the way down during power up. 3. Loose motor connection or damaged motor 1. 油门微调偏高,启动安全保护功能 2. 开机时,油门杆并未压至最低点 3. 马达接头松动或马达损坏	1. Lower throttle trim and restart throttle. 2. Lower throttle stick all the way down and restart throttle. 3. Re-seat the motor plug or replace the motor. 1. 调低油门微调后重新启动油门 2. 将油门杆压至最低点后,重新启动油门 3. 将插头插紧定位或更换不响马达
6 Main rotor spins but unable to takeoff. 直升机主旋翼有持续转动但不能起飞	1. Deformed main blades. 2. Helicopter battery depleted 1. 主旋翼变形 2. 直升机电池电量不足	1. Replace main blades 2. Charge or replace with a fully charged battery. 1. 更换主旋翼 2. 将电池充电或更换另一个充电的电池
7 Strong vibration of helicopter 直升机震动的很厉害	1. Deformed main blades 2. Bent main shaft 3. Deformed tail rotor 4. Overtightening of main blade grips. 1. 主旋翼变形 2. 主轴弯曲 3. 握把变形 4. 主旋翼固定座握把拧得太紧,导致偏摆	1. Replace main blades 2. Replace main shaft 3. Replace tail rotor 4. Re-tighten main blade grips with suitable force. 1. 更换主旋翼 2. 更换主轴 3. 更换尾旋翼 4. 适当调力调整握把固定座握把螺丝
8 Tail still off trim after tab adjustment, or inconsistent speed during left/right piroquette. 已调整尾钩胶圈,但尾桨仍会偏向一边或左/右盘旋速度不一致	1. Damaged tail rotors 2. Damaged tail drive motor 3. Helicopter was not stationary during power up. 4. Vibration induced gyro interference, causing tail unable to lock. 1. 尾桨损坏 2. 尾轴损坏 3. 插上直升机电源时机身未保持在静止状态 4. 机身异常震动,陀螺仪受干扰,尾舵无法锁定	1. Replace tail rotors 2. Replace tail drive motor 3. Re-power the helicopter while remaining stationary. 4. Refer to symptom 7. 1. 更换尾旋翼 2. 更换尾轴马达 3. 重新通电并保持直升机在静止状态 4. 请参考问题7
9 Helicopter still wonders forward after trim adjustment during hover. 停悬时已调整微调,但是直升机仍会往前或往后漂移	1. Elevator servo not level during power up. 2. Elevator pushed too long or too short. 1. 开机时升降伺服器连接臂未置于水平位置 2. 升降控制连杆过长或过短	1. Center elevator trim after power up, and re-install elevator servo horn at level position. 2. If helicopter drifts forward, adjust linkage longer. If it drifts backward, adjust linkage shorter. 1. 开机后将升降微调调回中点,重新装上升降臂 2. 往前漂移时连杆调长,往后漂移时连杆调短
10 Helicopter still wonders left/right after trim adjustment during hover. 停悬时已调整微调,但是直升机仍会往左或往右漂移	1. Aileron servo not level during power up. 2. Aileron pushed too long or too short. 1. 开机时副翼伺服器连接臂未置于水平位置 2. 副翼控制连杆过长或过短	1. Center aileron trim after power up, and re-install aileron servo horn at level position. 2. If helicopter drifts left, adjust linkage longer. If it drifts right, adjust linkage shorter. 1. 开机后将副翼微调调回中点,重新装上副翼臂 2. 往左漂移时连杆调长,往右漂移时连杆调短

STEP 2 AILERON AND ELEVATOR CONTROL PRACTICE 副翼和升降控制练习



1. Raise the throttle stick slowly.
2. Move the helicopter in any direction back, forward, left and right, slowly move the aileron and elevator sticks in the opposite direction to fly back to its original position.

CAUTION
注意

- ① If the nose of the helicopter moves, please lower the throttle stick and land the helicopter. Then move your position diagonally behind the helicopter 2m and continue practicing.
- ② If the helicopter flies too far away from you, please land the helicopter and move your position behind 2m and continue practicing.
- ③ 当直升机机头偏移时，请降低油门并且降落，然后移动自己的位置到直升机的正后方2公尺再继续练习。
- ④ 假如直升机飞离你太远，请先降落直升机，并到直升机后2公尺再继续练习。

STEP 3 RUDDER CONTROL PRACTICING 方向舵操作练习

1. Slowly raise the throttle stick.
2. Move the nose of the helicopter to right or left, and then slowly move the rudder stick in the opposite direction to fly back to its original position.



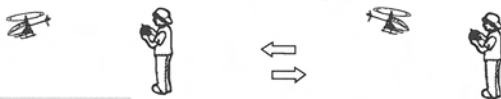
STEP 4

- After you are familiar with all actions from Step 1 to 3, draw a circle on the ground and practice within the circle to increase your accuracy.
- 当你觉得step1-3动作熟悉了，在地上画圆圈并在这个圆圈的范围内练习飞行，以增加你操控的准确度。
- ① You can reduce the size of the circle as you become familiarized with the control reflexes.
 - ② 当你更加习惯操作动作，你可以画更小的圆圈。



STEP 5 DIRECTION CHANGE AND HOVERING PRACTICE 改变直升机方向和悬停练习

- After you are familiar with Step 1 to 4, stand at side of the helicopter and continue practicing Step 1 to 4. Then repeat the Step 1 to 4 by standing in front of the helicopter.
- 当你觉得step1-4动作熟悉了站在直升机侧边并继续练习step1-4之后，站在直升机机头前方重复步骤练习。



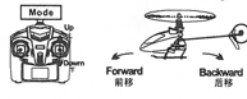
ADJUSTMENT OF EACH TRIM 飞行动作微调

Slowly raise the throttle stick and just as the helicopter lift-off the ground, you can use the trim to correct the action if the helicopter leans in a different direction. 慢慢升起油门摇杆，当直升机刚刚离开地时，若直升机偏向不同方向，可使用微调修正动作。

1. Adjustment of rudder trim 调整方向舵微调
Just before the helicopter lift-off, the nose lean left/right...
When leans right, adjust the trim to left side.
When leans left, adjust the trim to right side.
在直升机正要起飞时，机头朝左/右方向偏移...
向右偏移时，微调向左调整。
向左偏移时，微调向右调整。



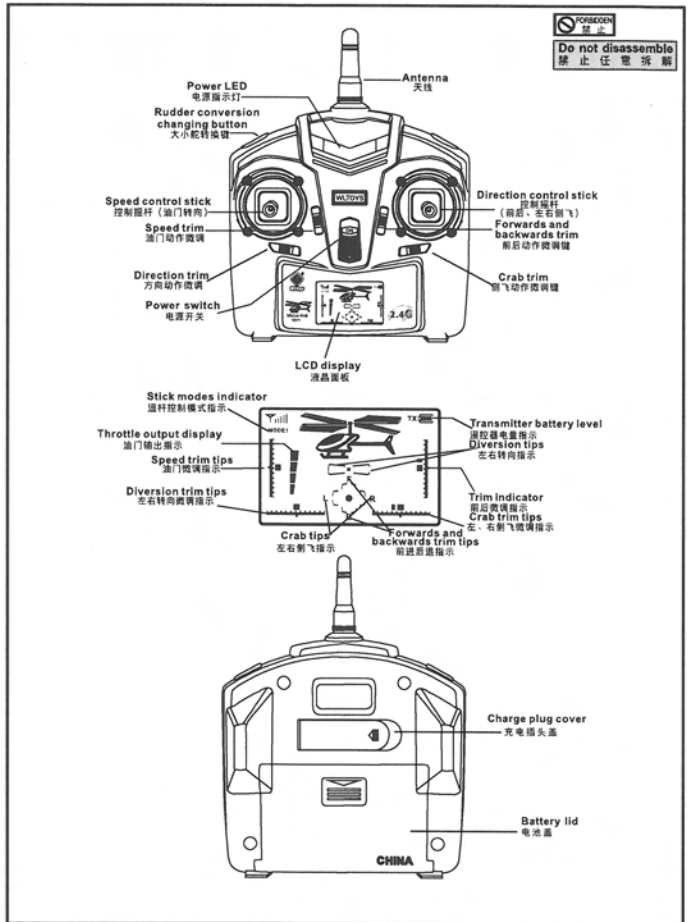
2. Adjustment of elevator trim 调整升降舵微调
Just before the helicopter lift-off, the nose lean forward/backward...
When leans forward, adjust the trim to down.
When leans backward, adjust the trim up.
在直升机正要起飞时，机头朝前/后方向偏移...
向前偏移时，微调向下调整。
向后偏移时，微调向上调整。



3. Adjustment of aileron trim 调整副翼微调
Just before the helicopter lift-off, the body lean left/right...
When leans right, adjust the trim to left side.
When leans left, adjust the trim to right side.
在直升机正要起飞时，机身朝左/右方向偏移...
向右偏移时，微调向左调整。
向左偏移时，微调向右调整。

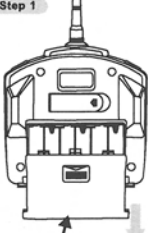


7 NOMENCLATURE 遥控器各部位名称



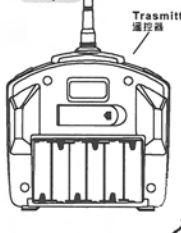
8. TRANSMITTER BATTERY INSTALLATION 遥控器电池安装

Step 1



Slide the battery lid to open by following the arrow.
请依箭头方向先将电池盖打开。

Step 2



Trasmitter 遥控器

Push 推

Do not disassemble 禁止任意拆解

Please use 6 AA sized batteries, installed based on polarity indicated case. No not mix batteries of different chemistry/spec. 请使用6节2号电池(AA),并依正负极性方向插装。(勿混用不同规格电池)

Battery lid 电池盖

9. CHARGING BATTERIES 电池的充电

Use the charging line of the controller to charge the helicopter 利用遥控器上的充电线给直升机电池充电

Please switch on the remote control, insert the charge plug into the V911 insert the li-po battery into the charge plug as the picture showed.

请打开遥控器电源,将遥控器上的充电插头插入V911充电器插孔上,再将直升机的Li-po电池依照图示的方向插入充电孔充充电。

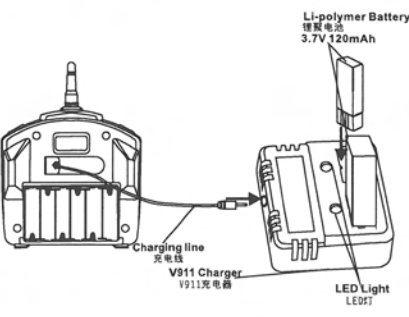
When charging: LED light is red mean it is charging
LED light is out mean the charging is done

充电时充电器上:LED灯红色表示充电中
LED灯灭表示充电完成

WARNING 警告

For safety concerns, battery charging must be done under supervision at all times.
为确保安全,充电时必须有人在视线范围内进行。

CAUTION 注意



Li-polymer Battery 锂聚合物电池 3.7V 120mAh

Charging line 充电线

V911 Charger V911充电器

LED Light LED灯

6

13. FLIGHT ADJUSTMENT AND SETTING 飞行动作调整与设定





PLEASE PRACTICE SIMULATION FLIGHT BEFORE ACTUAL FLYING 飞行前请先熟练模拟飞行

Before you are familiar with the helicopter, please don't set it fly, read the instruction carefully. Get familiar with all kinds of direction control and keep repeating until you can play it as you perform your wishes.

1. Place the helicopter in a clear open field and the tail of helicopter point to yourself.
2. Practice to operate the throttle stick (as below illustration) and repeat practicing "Throttle high/low", "Aileron left/right", "Rudder left/right", and "Elevator up/down".
3. The simulation flight practice is very important, please keep practicing until the fingers move naturally when you hear operation orders being call out.

在还空熟练直升机各动作的操控方式前,严禁实机飞行,请先阅读说明书,熟悉各种方向的操控并不断的重复,直到手指可熟练的操控各个动作及方向。

1. 将直升机放在空旷的地方,并将直升机的机尾对准自己。
2. 练习操作遥控器的各摇杆(各动作的操控方式如下图),并反复练习油门高/低、副翼左/右、升降舵前/后及方向左/右操作方式。
3. 模拟飞行练习相当重要,请重复练习直到不需要思索,手指能自然的随着喊出的指令移动控制。

Mode	Illustration 图示	Mode	Illustration 图示
Aileron 副翼		Throttle 油门	
Elevator 升降/前后		Rudder 方向	
	Ascend 上升		Descend 下降
	Turn left 左旋		Turn right 右旋

FLIGHT ADJUSTMENT AND NOTICE FOR BEGINNERS 初学者飞行调整与注意

CAUTION 注意

- Check if the screws are firmly tightened.
- Check if the transmitter and receivers are fully charged.
- 再次确认螺丝是否锁固?
- 发射器和接收器电池是否足够。

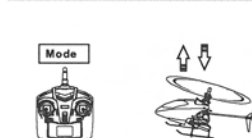
When arriving at the flying field.
请在没有人及障碍物的空旷场内、室外飞行

CAUTION 注意

- Make sure that no people or obstructions in the vicinity.
- You must first practice hovering for flying safety. This is a basic flight action. (Hovering means keeping the helicopter in mid air in a fixed position)
- Please stand approximately 2m diagonally behind the helicopter.

- 确认邻近地区没有人和障碍物。
- 为了飞行安全,你必须先练习停悬。这是飞行动作的基础(停悬:直升机停留在空中并保持固定位置)。
- 练习时,请站在直升机后方2公尺。

STEP 1 THROTTLE CONTROL PRACTICE 油门控制练习



When the helicopter begins to lift-off the ground, slowly reduce the throttle to bring the helicopter back down. Keep practicing this action until you control the throttle smoothly.

当直升机离地后,慢慢降低油门将直升机降下。持续练习直升机从地面上升和下降直到你觉得油门控制很顺。

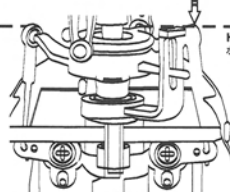

11

Step 4-3 步骤4-3

Push up on elevator control, elevator servo will push the right side of swashplate down.
升降舵拉杆往上推时，升降舵伺服器将十字盘的右侧下推。

Horizontally level 水平

Elevator 升降/前桥

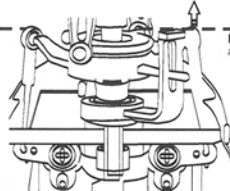




Step 4-4 步骤4-4

Push down on elevator control, elevator servo will push the right side of swashplate up.
升降舵拉杆往下推时，升降舵伺服器将十字盘的右侧上推。

Horizontally level 水平

Elevator 升降/前桥

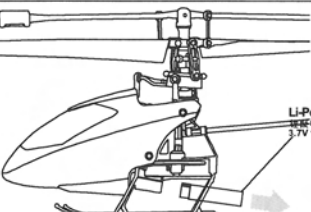



Step 5 步骤5

Remove the helicopter battery safely at the conclusion of flight. This should be made into a post flight habit to avoid unforeseeable problems.
结束飞行时，请将直升机电池安全取下，请养成良好习惯，以免造成问题。

Li-Polymer Battery 锂聚合物电池 3.7V 120mAh/15C

Warning: If left connected in the helicopter for long duration, the battery may be damaged due to over-discharge, or even become fire hazards. 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。



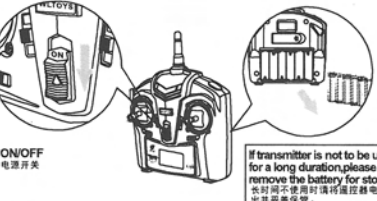
Step 6 步骤6

Turn off the transmitter, if transmitter is not to be used for a long duration, please remove the battery for storage.
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。

ON/OFF 电源开关

Warning: If the AA batteries 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。

If transmitter is not to be used for a long duration, please remove the battery for storage. 长时间不使用时请将遥控器电池取出并妥善保管。



Using the Ch100 Lipo battery charger to charge helicopter battery 使用V911 L1-20充电器充直升机电池

Li-polymer Battery 锂聚合物电池 3.7V 120mAh

connect to USB port on computer 连接电脑USB端

V911 Lipo charger V911 L1-po充电器

LED Status Indicator LED状态指示

USB Cable USB数据线

V911 provides two independent charging receptacles to enable charge of lipo batteries individually or concurrently. The charger can be powered via two power source; either connecting to the USB port on a computer, or connecting to a third party USB power supply from a cell phone.

V911提供2组独立的充电插槽，可同时对两个进行锂聚合物电池的充电，充电器的电源供应有2种方式，一种为通过USB线由电脑USB端供电，另一种为使用一般市售的USB手机充电器供电。

WARNING 警告

For safety concerns, battery charging must be done under supervision at all times. 为确保安全，充电时必须在视线范围内进行。 Avoid shortening the metal contacts in charger receptacles, as it may lead to internal damage of charger. 勿使金属物品碰到充电器内的电极薄片，以免造成充电器的损坏。

LED Indicator LED 指示

Red 红灯灭	Red 红灯亮
Idle and Charge Completion 充电完成	Charging 充电中

Charger Specifications V911 充电器规格

Input 输入	Charging Current 充电电流	Full Voltage 充电电压
DC 5V 1A	200mA x 2 sets 组	4.2 ± 0.03V

10. BATTERY AND CHARGER SPECIFICATION 电池与充电器相关规格

Battery usage and charge duration reference 电池使用时间与充电时间参考表

Battery type 电池种类	Battery Specification 电池规格	Usage Duration 可使用时间		Charge Time 充电所需时间
Li-po battery 锂聚合物电池	3.7V 120mAh	Helicopter flight time 直升机飞行时间	Approx. 5-6 Minutes 约5-6分钟	Approx. 30 Minutes (Charging current approx. 0.2A) 约30分钟 (充电电流约0.2A)
Carbon-Zinc (Non Rechargeable) 碳锌电池 (不可充电)	1.5V (GP 15G R6P)	Transmitter Operation Time 供遥控器开机时间	18 Hours 18小时	Non Rechargeable 不可充电
		Used for Lithium Polymer Charging 用于锂聚合物电池充电	Approx. 3 times 约3次	

CAUTION 注意

You needn't to change anything because it has been adjusted when it finish produce 原厂出厂时，已为您将模式设定好了，无需再调。

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

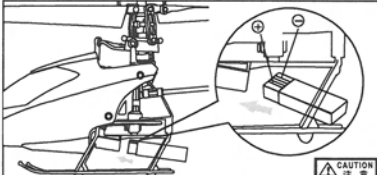
If there are frequency interference preventing completion of radio binding, please re-binding the radio of transmitter and receiver.
首次使用或有频率干扰导致无法对频时，必须重新对频。

Step 1 步骤1

With the helicopter placed on level surface, push the lipo battery pack in the direction shown in diagram until fixed into position. At this time avoid moving the helicopter so the radio and gyro system can initialize and the red LED on the receiver board will be start flashing.

将直升机置于平地位置，依照图示方向插入Li-Po电池盒至定位，不要再移动机身，使陀螺仪读取取中立点，此时接收板上红色LED灯会闪烁。

CAUTION 注意 Electrode surface of batter face up
电池的电极面朝上。



Step 2 步骤2

With throttle control stick at lowest position, turn on radio transmitter to start the binding process.

将油门杆推至最低位，打开遥控器电源进行对频。

CAUTION 注意 Push the throttle stick to the lowest position
油门杆推至最低位

ON/OFF 电源开关

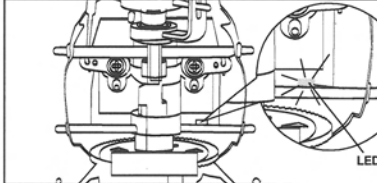


Step 3 步骤3

The red LED on receiver board will blink during radio initialization, and becomes steady after 4 seconds, indicating successful radio binding. If it continues to blink, radio binding has failed and needs to be restarted. After the radio binding is done, you don't need to re-bind it anymore.

对频中接收板的红色LED灯会闪烁，约4秒后LED灯变亮表示对频成功。若LED灯仍持续闪烁表示对频失败，必须再次执行步骤1至步骤2。只要对频成功，每次飞行即不需再重新对频。

CAUTION 注意 LED



12. USAGE INSTRUCTIONS AND CHECK LISTS 开机步骤与飞行前检查

CAUTION 注意 Motor should not be run without loading main or tail rotor blades to avoid motor burnout.
马达不可在没有带动主旋翼的状态下单独通电运转，以避免马达烧坏。

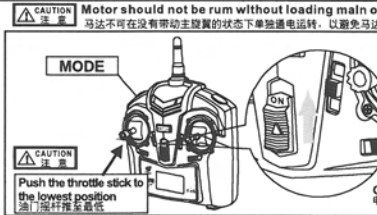
MODE

CAUTION 注意 Push the throttle stick to the lowest position
油门杆推至最低位

ON/OFF 电源开关

Step 1 步骤1

With the throttle control stick all the way down, turn on transmitter power.
将油门杆推至最低位后，打开遥控器电源。



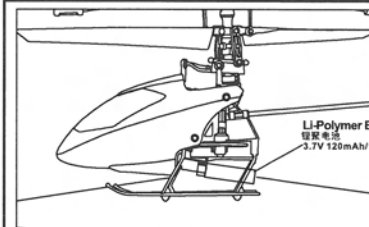
8

Step 2 步骤2

With the helicopter placed on level surface, push the lipo battery pack in the direction shown in diagram until fixed into position. At this time avoid moving the helicopter so the radio and gyro system can initialize, as indicated by the flashing red LED on receiver board.

将直升机置于平地位置，依照图示方向插入Li-Po电池盒至定位，不要再移动机身，使陀螺仪读取取中立点，此时接收板上红色LED灯会闪烁。

Li-Polymer Battery 锂电电池 3.7V 120mAh/15C



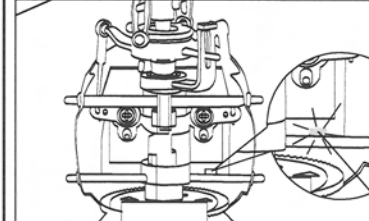
Step 3 步骤3

The red LED on receiver board will blink during radio initialization, and becomes steady after 4 seconds, indicating successful radio binding. If it continues to blink, radio binding has failed and needs to be restarted. (Refer to P11 Binding of radio transmitter and receiver)

对频中接收板的红色LED灯会闪烁，约4秒后LED灯变亮表示对频成功。若LED灯仍持续闪烁表示对频失败，必须重新对频。（参阅P11遥控器与接收器的对频）

CAUTION 注意 LED

If helicopter is moved during initializing process, the gyro will not center properly causing helicopter rotor to yaw excessively. When this happens please go back and perform step 2 again. 对频过程中若移动机身会导致陀螺仪中立点错误，飞行时直升机尾部会产生偏移，请重新执行步骤2。



CAUTION 注意 Check the control directions with throttle off prior to flight.
请在油门关闭的状态下测试控制系统各动作是否正常后，才可以飞行。

Step 4-1 步骤4-1

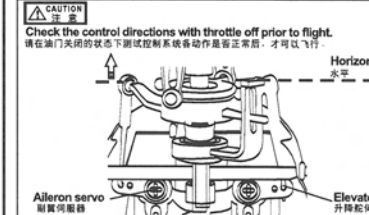
Push right on aileron control, aileron servo will push the left side of swastiplate up.
副翼杆杆往左推时，副翼伺服器将十字盘的左面下推。

Aileron 副翼

Aileron servo 副翼伺服器

Elevator servo 升降舵伺服器

Horizontally level 水平

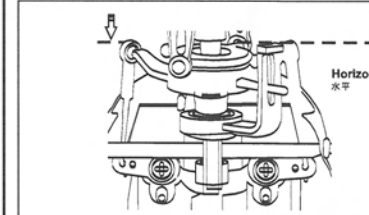


Step 4-2 步骤4-2

Push left on aileron control, aileron servo will push the left side of swastiplate down.
副翼杆杆往右推时，副翼伺服器将十字盘的左面上推。

Aileron 副翼

Horizontally level 水平



9

FCC INFORMATION

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received including interference that may cause undesired operation.

Warning: Changes or modifications to this unit 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 unit 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 and 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 to 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.