

# WLT OYS

**Specifications & Equipment/ 规格配备:**

**V913-A**

**Length/ 机身长:** 548mm

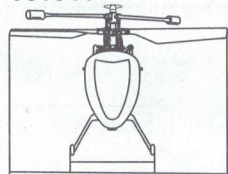
**Height/ 机身高:** 201mm

**Main Blade Length/ 主旋翼长:** 532mm

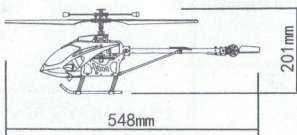
**Tail Rotor Diameter/ 尾旋翼直径:** 146mm

**Weight(without Power System)/ 空机重:** 450g

V913-A



532mm



548mm

201mm



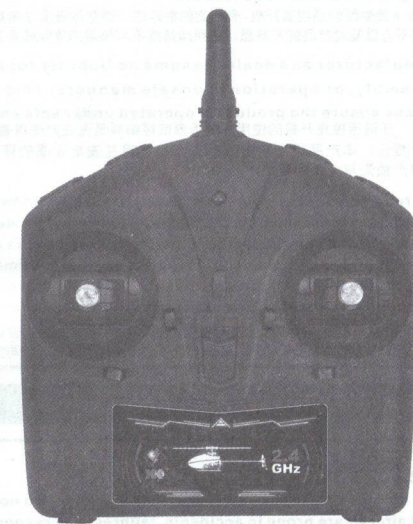
## V913-A

### 四通道气压定高无刷直升机

### INSTRUCTION MANUAL

### 使用说明书

V913-A In The House!



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Thank you for choosing WLT OYS remote control world series products. Before entering the remote control world, you must tell you a lot of relevant knowledge and precautions to ensure that you can be more comfortable in the learning process. Before starting operation, please be sure to read this manual carefully, I believe it will be able to bring you considerable help, and please keep this manual properly for future reference.

承蒙阁下选用 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与注意事项, 以确保您能够在学习的过程中得心应手。在开始操作之前, 请务必详阅本说明书, 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




Thank you for choosing Weili products! Weili medium-sized air pressure fixed altitude helicopter, in order to make it more convenient and easier for you to use V913-A, please read this manual carefully before operating this helicopter. At the same time, please keep this manual properly for future adjustment and Reference for maintenance.

感谢您选购伟力产品！伟力中型气压定高直升机，为了让您更方便、更容易的使用V913-A，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。

V913-A helicopter can satisfy your desire for flying no matter when and where, no matter the weather is sunny or rainy, including outdoor wind is not more than 4-5.

V913-A 直升机，不论何时何地，不管晴天雨天，包括室外风力不大于4-5级，都可以满足您对飞行的渴望。

### WARNING LABEL LEGEND 标志代表含义

	<b>WARNING 警告</b> 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。
	<b>CAUTION 注意</b> 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。
	<b>FORBIDDEN 禁止</b> 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

V913-A is a sophisticated hobby product and not a toy. Although small, it still poses certain risk factors that should not be over looked. 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.

V913-A 是中型的遥控直升机，有一定的危险性，请您依安全注意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，请勿轻视。

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于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因不当操作/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 warrantee and cannot be returned for repair or replacement. Please contact our distributors are not covered by any warrantee and cannot discounted rates when you experience problems during operation or maintenance.

模型商品属于需高操作技术且为消耗性商品，如经拆装使用后，会造成不等到情况零件损耗，任何使用情况所造成商品不良或不满意，将无法於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

	<b>CAUTION 注意</b> 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，飞行时必须远离人群，人为组装不当或机件损坏，电子控制设备不良，以及操控上的不熟悉，都有可能导致飞行失控损伤伤等到不可预期的意外，请飞行者务必注意飞行安全，并需了解自负疏忽所造成任何意外之责任。
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	<b>FORBIDDEN 禁止</b> 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 5), 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5级)环境飞行的遥控直升机，飞行时请妥善选择无障碍物的室内、室外场地，并与人群或宠物等到保持适当距离，切勿於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、迫降、纠缠而引发火灾、电击等危险，造成生命财产损失。
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	<b>FORBIDDEN 禁止</b> <b>PREVENT MOISTURE 远离潮湿环境</b> 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 melfunction, or a crash. Do not operate or expose To rain or moisture. 直升机内部也是由许多精密的电子零组件组成，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，防止水汽进入机身而导致机件及电子零件故障而引发不可预期的意外！	
	<b>FORBIDDEN 禁止</b> <b>PROPER OPERATION 勿不当使用本产品</b> 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. 请确於产品界限内操作，请勿过载使用，并勿用於安全、法令外其它非法用途。 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改造加工，任何的升级改装或维修，请使用伟力产品目录中的零件，以确保结构的安全。请确认於产品界限内操作，请勿过载使用，并勿用於安全、法令外其它非法用途。	
	<b>FORBIDDEN 禁止</b> <b>SAFETY NOTE FOR NI-MH BATTERIES 镍氢电池使用安全</b> 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清理法令回收，切勿任意丢弃以免污染环境。	
	<b>FORBIDDEN 禁止</b> <b>SAFETY NOTE ON LI-POLYMER BATTERIES 锂聚电池使用安全</b> 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。本公司将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危险。 严禁撞击、拆解、正负极反接、焚烧电池，避免金属物品触碰电池正负极造成短路。并请防止尖锐的物品刺穿电池，以避免电池起火的危险。 充电时请谨慎小心，确保在您的视线范围内进行充电。并远离幼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、爆炸甚至起火燃烧，危害生命财产的安全。废弃的电池，请严格依照该使用国家或地区的废弃物清理法令回收，以免污染环境。	
	<b>CAUTION 注意</b> <b>KEEP AWAY FROM HEAT 远离热源</b> 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PA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熔毁损坏的可能。	
	<b>WARNING 警告</b> <b>OBTAIN THE ASSISTANCE OF AN EXPERIENCED PILOT 避免独自操控</b> The products are suitable for more than 15 years old, 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着一定难度，建议有经验的人士在旁指导才可以飞行。	

### 3 NOMENCLATURE 遥控器各部位名称

**FORBIDDEN 禁止**

**Do not disassemble 禁止任意拆解**

**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。

电池盖

Push 推

**Step 2**

Trasmitter 遥控器

Please use 4 AA sized batteries, installed based on polarity indicated case. Do not mix batteries of different chemistry/spec. 请使用4颗5号电池(AA), 并依正负极性方向组装。(勿混用不同规格电池)

**FORBIDDEN 禁止**

**Do not disassemble 禁止任意拆解**

#### Throttle on right hand 右手油门

**Mode 1 模式一**

**Throttle 油门**

#### Throttle on left hand 左手油门

**Mode 2 模式二**

**Throttle 油门**

### 4. STANDARD EQUIPMENT 标准配件

USB charging cable  
USB充电线

Tail Blade X1  
Blade X2  
一个尾风叶x1  
两个主桨叶x2

screwdriver  
螺丝刀

### 5. BATTERY AND CHARGING TIME 电池与充电时间

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 锂聚电池	7.4 1500MAH	Helicopter flight time 直升机飞行时间	Approx. 10 Minutes 约10分钟	180 minutes 约180分钟
Carbon-Zinc (Non Rechargeable) 碳锌电池 (不可充电)	AA*6	Transmitter Operation Time 供遥控器开机时间	18 Hours 18小时	Non Rechargeable 不可充电

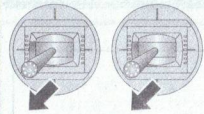
### 6 . BINDING OF RADIO TRANSMITTER AND RECEIVER 遥控器与接收器的对频

**For the first time use or frequency interference and unable to frequency, must bind frequency again.**  
首次使用或首频率受到干扰而无法对频时, 必须重新对频。

- Insert the battery plug into the aircraft's power socket, turn on the power, and the lights on the aircraft begin to flash.
- Turn on the power switch of the remote control. Then push the left-hand throttle stick (MODE2) to the TV, and then pull it to the bottom. At this time, the indicator light on the front of the aircraft changes from flashing to steady on, indicating that the code matching is successful. If unsuccessful, please re-operate in the above order.

- 把电池插头插入到飞机的电源插孔, 接通电源, 飞机上的灯光开始闪烁。
- 打开遥控器电源开关。然后把左手的油门摇杆(MODE2)推到最大然后在拉到最低, 这时飞机前部的指示灯由闪烁变为常亮, 提示对码成功。如不成功请按上面顺序重新操作。

## 7. CALIBRATION OF THE GYROSCOPE 陀螺仪的校准

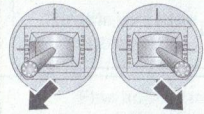


After aligning the code, place the aircraft on a flat ground, and then press the two joysticks of the remote control to the bottom left corner at the same time for about 1 second. At this time, the indicator light on the aircraft flashes, release the joystick, and the aircraft indicates The light is always on to indicate that the calibration is complete.

对好码后, 把飞机放在平坦的地面上, 然后把遥控器两个摇杆同时向左下角打到底保持1秒左右, 这时飞机上的指示灯闪烁, 松开摇杆, 飞机指示灯常亮表示校准完成。

**Note!** The aircraft must be placed on a flat ground during calibration!  
注意! 校准时飞机一定要放在平坦的地面!

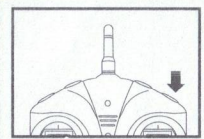
## 8. UNLOCK/LOCK THE AIRCRAFT 飞机的解锁/上锁



After the code is aligned, the two joysticks of the remote control hold the outer or inner horoscope for 1 second to unlock the aircraft. After unlocking, push the throttle and the plane will take off and hover about 1 meter.

对好码后, 遥控器的两个摇杆同时外八字或者内八字保持1秒钟对飞机解锁。解锁后推油门飞机就会起飞到1米左右悬停。

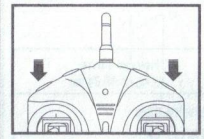
## 9. ONE-CLICK TAKE-OFF/LANDING 一键起飞/降落



Press the button on the upper right corner of the remote control and the aircraft will take off automatically, then rise to about 1 meter and hover. After pressing the button, the aircraft automatically landed on the ground and the motor stopped.

按遥控器右上角的按键飞机自动起飞, 然后上升到1米左右悬停。再按一下按键飞机自动降落地面然后电机停转。

## 10. EMERGENCY STOP 紧急停止



In an emergency, press the buttons on the left and right upper corners at the same time, and the aircraft motors will stop immediately.

紧急情况下同时按下左上角的按键, 飞机电机就会立即停转。

**Note!** When the aircraft is flying at high altitude, do not press emergency stop in non-emergency situations.

注意! 飞机在高空飞行时, 非紧急情况下不要按急停。

## 11. SWAP LEFT AND RIGHT HANDS 左右手互换



Push and hold the button next to the left-hand joystick, and then turn on the power switch at the same time. After turning it on, release the button to switch between left and right hands.

把左手摇杆旁按键向上推不放手后同时打开电源开关, 打开后松开按键, 即可左右手转换。

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

Mode	Illustration 图示	Mode	Illustration 图示
<b>Aileron 副翼</b>		<b>Throttle 油门</b>	
<b>Elevator 升降/前展</b>		<b>Rudder 方向</b>	

## 13. 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 flashes 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. 遥控器与接收器未对频成功	Repeat the power up initializing process. 请重新执行遥控器与接收机板的对频动作
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. 检查遥控器和接收电池的电压 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. 打开发射器与确实插入直升机电池至定位 2. 使用完全充电充足的电池 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. 推动油门摇杆时马达不转, 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	The aircraft did not receive a stop order 飞机没有接收到停转命令	Keep down the throttle until it stops 油门下拉保持直到停转
5	Motor fails to run, but servo moves. 马达不转, 但伺服器仍有动作	Loose motor connection or damaged motor 马达接头松动或马达损坏	Re-seat the motor plug or replace the motor. 将接头插至定位或更换马达
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. 将电池充电或是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. 尾旋翼变形 4. 主旋翼固定座螺丝锁太紧, 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. 依适当力道重新锁附主旋翼固定座螺丝
8	Tail still off trim after tab adjustment, or inconsistent speed during left/right pirouette. 已调整尾舵微调, 但尾部仍会偏向一边或左旋/右旋速度不一致	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. 尾旋翼变形 2. 尾马达不良 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. 更换尾驱动马达 3. 重接电源并保持直升机在静止状态 4. 请参考问题7
9	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. 机构干涉顺滑度不足 2. 控制臂锁太紧干涉	1. Confirm smooth movements of components and ball links. 2. Loosen up mixing arms axial screws. 1. 确认机身每一个机构及连杆头动作顺畅 2. 放松轴套螺丝让控制臂动作顺畅
10	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络您的经销商。