

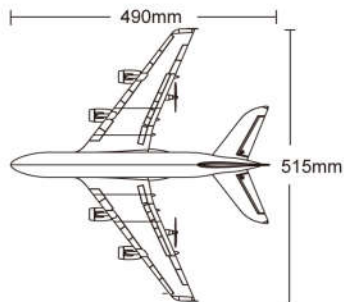
Specifications & Equipment/ 规格配备：

A120

Length/ 机身长: 490mm

Wingspan / 翼展: 515mm

Flying weight / 飞行重量: 72g



广东伟力智能科技有限公司



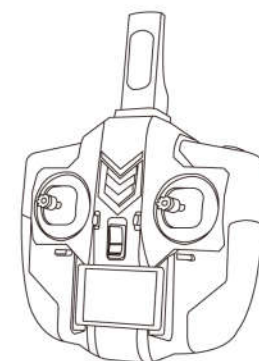
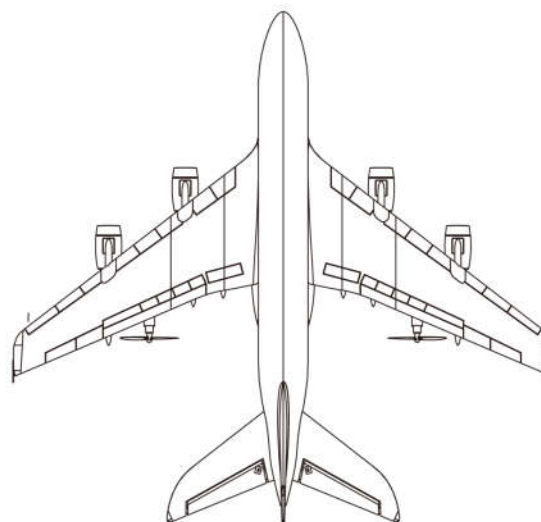
A120

3 CHANNEL MODEL AIRPLANE

三通道固定翼像真机

INSTRUCTIONS

使用说明书



Contents	
1	INTRODUCTION 前言
1-2	SAFETY NOTES 安全注意事项
3-4	Sticker 贴纸
4	STANDARD EQUIPMENT 标准配件
5	REMOTE CONTROL 遥控器各部位名称
5	TRANSMITTER BATTERY INSTALLATION 遥控器电池安装
5-6	BATTERY CHARGING 电池的充电
6	BATTERIES AND CHARGERS RELEVANT SPECIFICATIONS 电池与充电器相关规格
7	BINDING OF RADIO TRANSMITTER AND RECEIVER 遥控器与接收器的对频
7-8	FLIGHT AND LANDING 飞行与降落
9-10	FLIGHT ADJUSTMENT AND SETTING 飞行动作调整与设定
10	TROUBLE SHOOTING DURING FLIGHT 如用前飞行中遇到的问题
11-12	NOMENCLATURE 模型飞机各部位名称

Thank you for buying WLTOYS products. A120 is the latest technology in RC models. Please read this manual carefully before assembling and flying the new A120 airplane. We recommend that you keep this manual for future reference regarding tuning and maintenance.


感谢阁下选用 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 product! A120 is a world's first in a smaller space, and outdoor sport flying remote control fixed-wing aircraft, in order to make it easier and easier Use A120, please read the complete instructions after operating this model airplanes, For your convenience, please read this manual before use and keep the instructions.

感谢您选购伟力产品! A120是一台室外飞行的遥控运动型固定翼飞机, 为了让您更方便、更容易的使用A120, 请您仔细阅读完成说明书后, 在操作这台模型飞机, 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。

WARNING LABEL LEGEND 标志代表涵义




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

A120 is not toys product, operational process is dangerous, Please follow the instructions of the instructions and any modifications mat result in accidental injury. The use of this airplane beyond its intended purposes and disassembly may cause unforeseen danger, and should be avoided.

A120并非玩具, 是微型 模型飞机但是仍然有一定的危险性, 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, 请勿轻忽。

This product is only suitable for use over 14 years old. The manufacturer will not responsible for any accidents caused by improper operations.

注意! 任何遥控飞机的使用, 制造商或经销商是无法对使用者於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14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. Please contact the dealer for after-sales problems.

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, 会造成不等情况零件损耗, 任何使用情况所造成商品不良或不同意, 将无法於保固条件下更换新品或退货, 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 of a result of R/C aircraft models.


遥控模型飞机, 属于危险性商品, 飞行时务必远离人群, 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。



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 unsafaty, 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) 环境飞行模型飞机飞行时请妥善 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。



1

No.	Code No.	Name	Specification	Quantity	Remarks
1		螺旋桨AB	Propeller AB	2	
2		水平尾翼AB	Horizontal tail AB	1	
3		机身	body	1	
4		前起落架	Front landing gear	1	
5		后起落架	Rear landing gear	1	
6		升降舵	Elevator	1	

Warning: When the aircraft feels weak when flying, it means that there is no power. It is recommended that the operator should land as soon as possible. In order to avoid the aircraft can not fly back without power, or fly.

警告: 当飞机在飞行时感觉动力比较弱就是说明快没电了, 建议操作者要尽快降落。以免飞机没电无法飞回来, 或飞丢。

The accessories in this manual are for reference only. If there is any update, please refer to the website information.

本说明书内的材质, 规格或零件包装之内物谨供参考。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。

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 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.

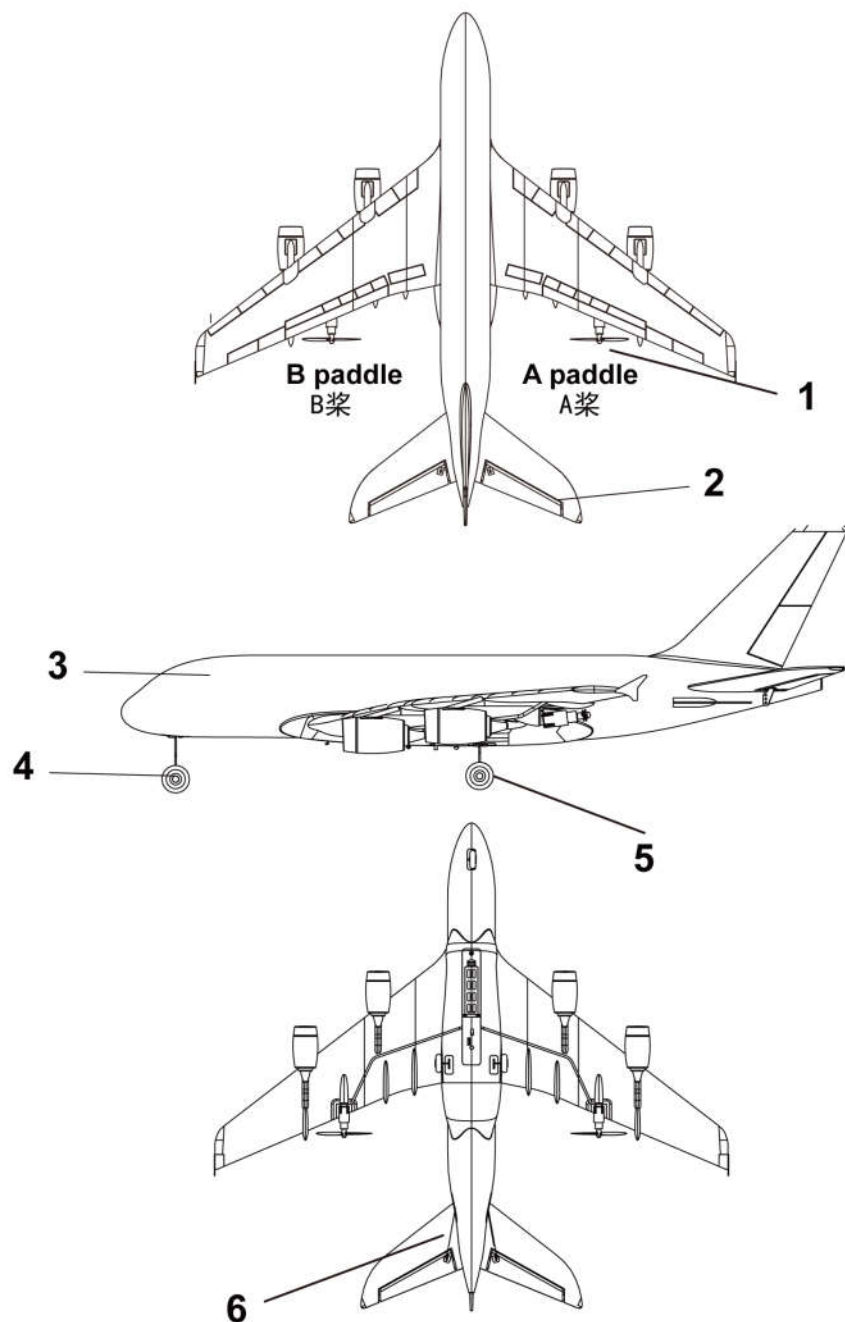
Increase the separation between the equipment and receiver.

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.

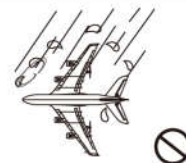
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

12



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.
飞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改造加工，任何的升级改造或维修，请使用伟力产品目录中的零件，以确保结构的安全。请确认於产品限界内操作，请勿过载使用，并勿用於安全、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清理法令回收，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.

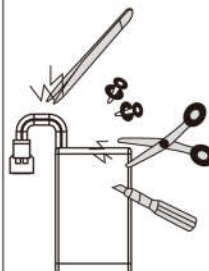
锂聚合物电池较其他电池有更高的危险性，使用前请务必详读并遵照下列注意事项使用本电池，本公司将不对任何不当使用所造成的损害负责。

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，避免金属物品碰触电池正负极造成短路。并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。



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EPO泡沫、电子商品为主要材质，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。



OBTAIN THE ASSISTANCE OF AN EXPERIENCED PILOT 避免独自操控

The products are suitable for more than 14 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14岁以上，遥控模型飞机在学习初期有着一定难度，需要熟练操作模拟器上面的模型飞机可飞行。



3. Sticker 贴纸

Sticky water sticker steps:

粘水贴纸步骤:

1. First cut the water sticker to be cut along the die line with scissors.

2. Remove the transparent film on the top of the water sticker and paste the water sticker with glue on the body to be attached.

3. Wet the water sticker with a wet towel and wait for a minute or so to remove the sticker from the side.

4. Let the water transfer sticker stick to the body and wipe off the excess water with a towel.

5. When the water sticker is attached to the upper side of the wing, the water sticker needs to be cut with a knife in order to allow the steering surface to swing flexibly.

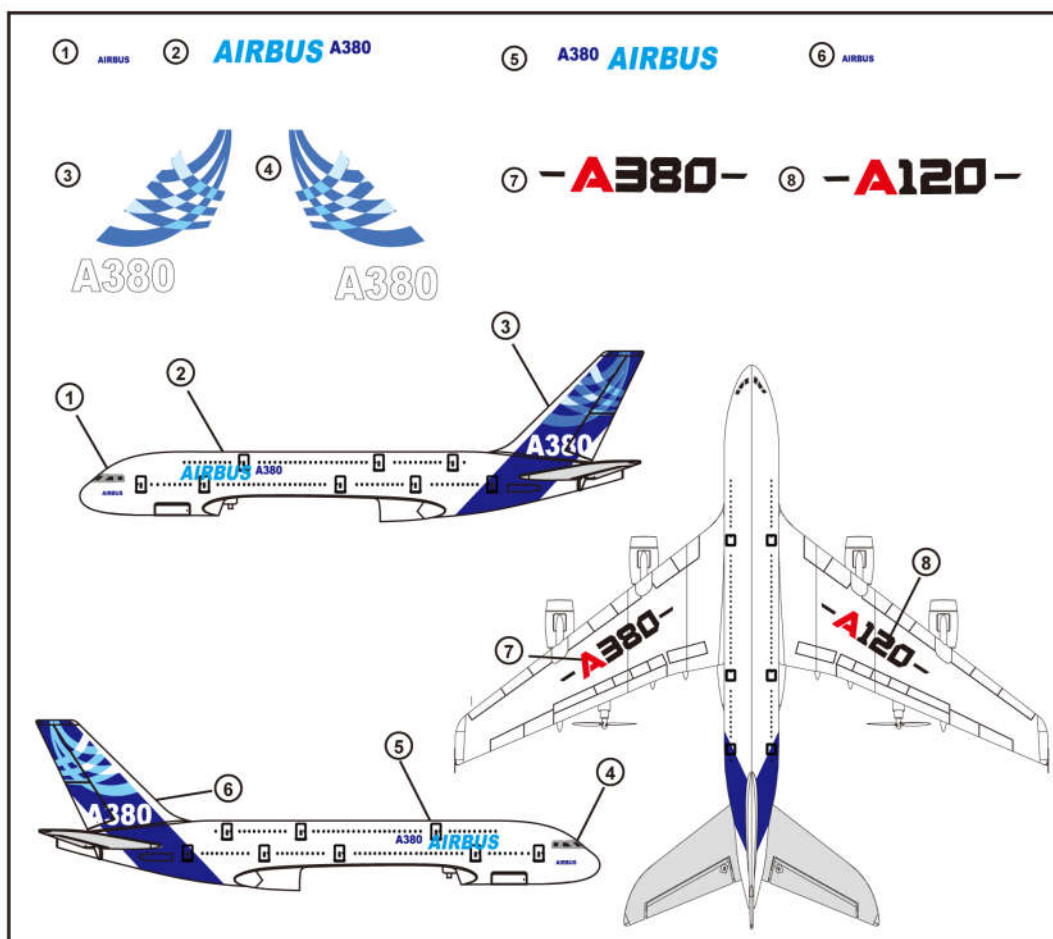
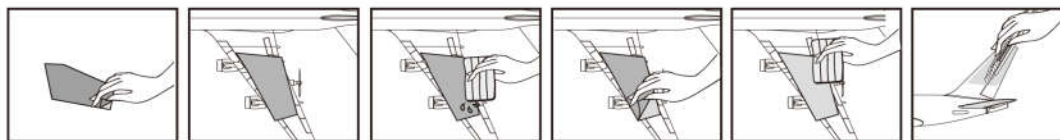
1. 先将要粘贴的水贴纸用剪刀沿着刀模线剪下来。

2. 将水贴纸上边的透明膜拿掉，将有带胶的水贴纸粘贴在机身上要贴的位置。

3. 用湿毛巾将水贴纸充分的打湿，等一分钟左右后将贴纸的底纸从侧面移开。

4. 让水转印贴纸粘在机身上，用毛巾将多余的水擦干净即可。

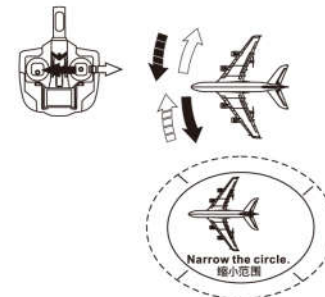
5. 水贴纸粘贴在机翼上边活动的位置时，为了使舵面能够灵活摆动需要将水贴纸用小刀割开。



STEP 3 RUDDER CONTROL PRACTICING 方向舵操作练习

Use rudder to control ground taxiing direction and air flight direction.

当模型飞机离地时，如果飞机在路面滑行偏移可打方向舵修正，起飞后可打方向舵改变航线。



Beginners must practiced on simulator or an experienced person guidance to fly.

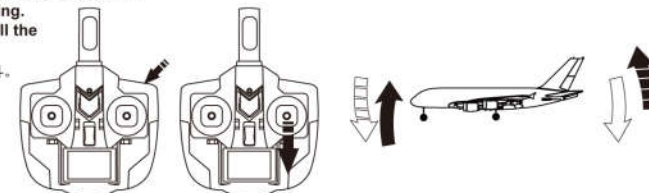
初学者飞行前一定要练习好模拟器或者有经验的人士指导方可飞行。

STEP4 BIG RUDDER OPERATION 大舵操作

When the rudder is pressed, the indicator on the remote will flash and the aircraft can do some tumbling.

Press the big rudder switch first, then pull the upgrade rudder rod to pull the ribs.

当按大舵时遥控上的指示灯会闪，飞机可以做翻筋斗。先按大舵开关，再拉升级舵拉杆就可以拉筋斗。



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

	Situation 状况	Cause 原因	solution 对策
1	The indicator light continues to flash after the aircraft is powered on but the operation is not reflected. 飞机通电后指示灯持续闪烁，但操作无反映	binding failure 遥控器和接收机对频失败	Please re-binding according to the page 7 of the manual. 请重新执行遥控器与接收机板的对频动作（请参阅P. 7 遥控器与接收器的对频）
2	No response after battery is connected to airplane. 接上模型飞机电池后飞机没有任何反应	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电池的电压 3.电池极片接触不良	1.Turn on transmitter and ensure airplane 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飞机电池至定位 2.使用完全充电电池的电池 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。	Airplane battery depleted. 飞机锂电池电量不足	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	Motor fails to run but servo still working 马达不转，但伺服器仍有动作	1. The throttle joystick not on top position when connect the battery. 2.Loose motor connection or damaged motor 1.开机时，油门摇杆未置于最低点 2.马达接头松动或马达损坏	1.Lower throttle stick all the way down and restart throttle. 2.Re-seat the motor plug or replace the motor. 1.将油门摇杆推至最低点后，重新启动油门 2.将接头插至定位或更换汤不換马达
5	Main rotor spins but unable to takeoff. 模型飞机主旋翼有持续转动但不能起飞	1.Deformed main blades. 2. Airplane battery depleted 1.主旋翼变形 2.飞机电池电量不足	1.Replace main blades 2.Charge or replace with a fully charged battery. 1.更换旋翼 2.将电池充电或是更换另一个充电的电池
6	Abnormal aircraft vibration 飞机震动异常	1.Deformed main blades 2.Motor shaft bending 1.旋翼变形 2.马达轴弯曲	1.Replace main blades 2.Replace the motor 1.更换旋翼 2.更换马达

11. 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

Please read the instructions and repeat the exercises before the actual operation.

1. Please operate in an open space, place the aircraft directly in front of the operator.

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.

在还没了解模型飞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. 将模型飞机放在空旷的地方，并将模型飞机的机尾对准自己。

2. 练习操作遥控器的各摇杆（各动作的操作方式如下图），并反复练习油门高/低、副翼左/右、升降舵前/后及方向舵左/右操作方式。

3. 模拟飞行的练习相当重要，请重复练习直到不需要思索，手指能自然随着喊出的指令移动控制。

Mode	Illustration 图示	Mode	Illustration 图示
Ascent 上升		Descent 下降	
Turn left 左转		Right turn 右转	

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



- 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。

Please operate in an open space.
请在没有人及障碍物的空旷室内、室外飞行

STEP 1 THROTTLE CONTROL PRACTICE 油门控制练习

Mode



After the plane takes off, please control the throttle so that the plane can fly at a constant speed. Do not suddenly accelerate.

飞机起飞后请控制油门高度，使飞机匀速飞行，请勿突然加速。

Hereby, [SHANTOU CHENGHAI WEILI TOYS CO.,LTD], declares that [A120] is in compliance with the Essential requirements and other Relevant provisions of Directive 2014/53/EU.

All the radio frequency can be used in all EU member state without restrictions.

Frequency band: 2405Mhz to 2475Mhz

The maximum RF Power: 6.61dBm

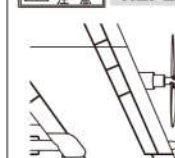
Product limit temperature: -10~60[]

4. STANDARD EQUIPMENT 标准配件

<p>Li-Polymer battery x1 锂聚合物电池 x1 3.7V 300mAh/25C</p>	<p>Lipo charger x1 USB cable x1 Li-po 充电器 x1 USB 连接线 x1</p>	<p>Propeller x 2 螺旋桨 x 2</p>
<p>Front landing gear x1 前后起落架 x1</p>	<p>screwdriver 螺丝刀</p>	

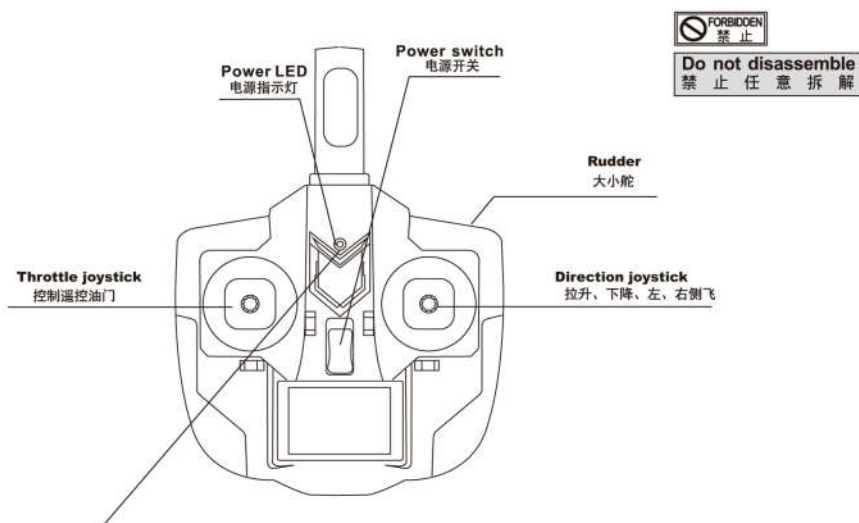


REPLACEMENT PROPELLER: 更换螺旋桨:



The exit of the propeller in the direction of the arrow out, so that replacement of the propeller.
将螺旋桨按箭头的方向退出，然后更换新的螺旋桨。

5 REMOTE CONTROL 遥控器各部位名称

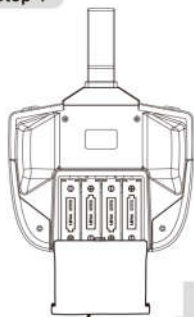


⚠ When the remote control is in the state of the small rudder, the indicator light continues to flash quickly, indicating that the remote control battery is out of power. Please replace the battery as soon as possible.

⚠ 当遥控器对频完毕后在小舵的状态时指示灯持续快闪时说明遥控的电池没电了，请尽快更换新电池。

6. TRANSMITTER BATTERY INSTALLATION 遥控器电池安装

Step 1



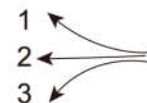
Slide the battery lid to open by following the arrow.
请依箭头方向先将电池盖打开。

FORBIDDEN 禁止

Do not disassemble 禁止任意拆解

Please use 6 AA sized batteries, installed based on polarity indicated case. Do not mix batteries of different chemistry/spec. 请使用6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)

Step 2



1. Error to throw up
 2. Correct to throw horizontal
 3. Error to throw down
1. 错误掷法飞机抬头
2. 正确掷法飞机平飞
3. 错误掷法飞机低飞

Hand throwing off 手掷起飞

Push the throttle to about 60%, Throw in the horizontal direction against the wind and pull the direction joystick at the same time.

按上面步骤对好码，再次确认各个舵面有回中。油门推到60%左右，迎风向前方水平掷出同时轻拉下次升降舵（不要拉太多）

Landing 降落

Please landing when the aircraft is underpowered. First reduce the flying height, then land in the wind, pull the throttle joystick until airplane landing. (Push the direction joystick properly during the landing)

当飞机飞行时感觉动力不足时请立即降落，首先把飞机飞到下风区调整机头迎风降落，把油门拉低降低飞行速度，飞机慢慢向下滑行，直到飞机接触地面，然后油门拉到最低，滑行过程中要适当拉一下升降舵。

CAUTION 注意

Falling off if routes can play aileron or rudder correction. 下滑过程中如果航线偏离可打方向舵修正。

Ending flight 结束飞行

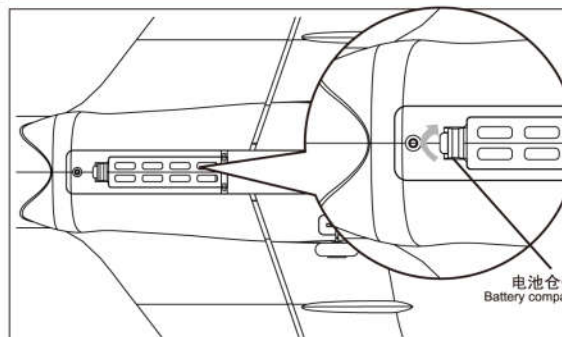
Please remove the battery in time when the flight finish.

结束飞行时，请将模型飞机电池安全取下。请养成良好的习惯，以免造成遗憾。

WARNING 警告

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

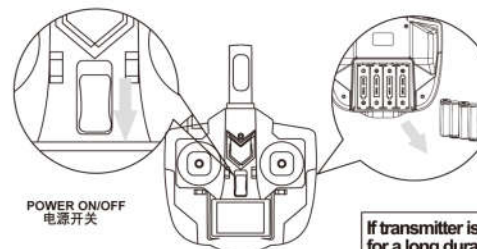
电池未取下，将导致电池过放电而损坏，甚至造成起火燃烧的危险。



WARNING 警告

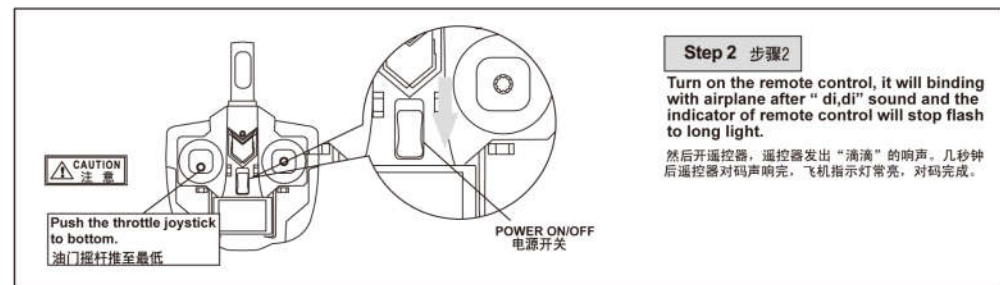
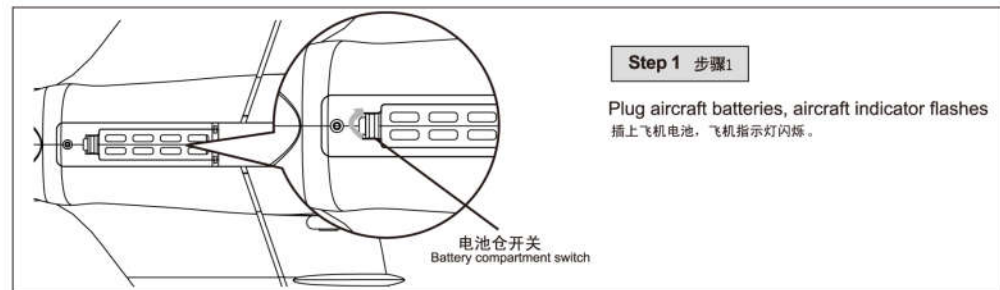
If you do not use the remote control for a long time, please remove the battery.

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。

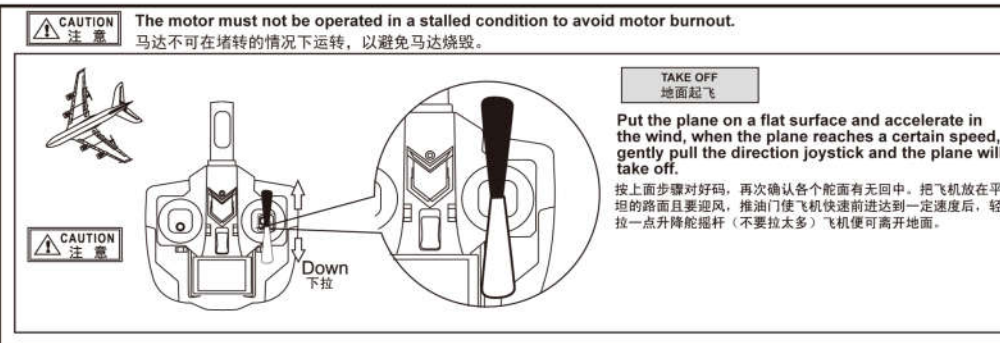


If transmitter is not to be used for a long duration, please remove the battery for storage. 长时间不使用时请将遥控器电池取出并妥善保管。

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

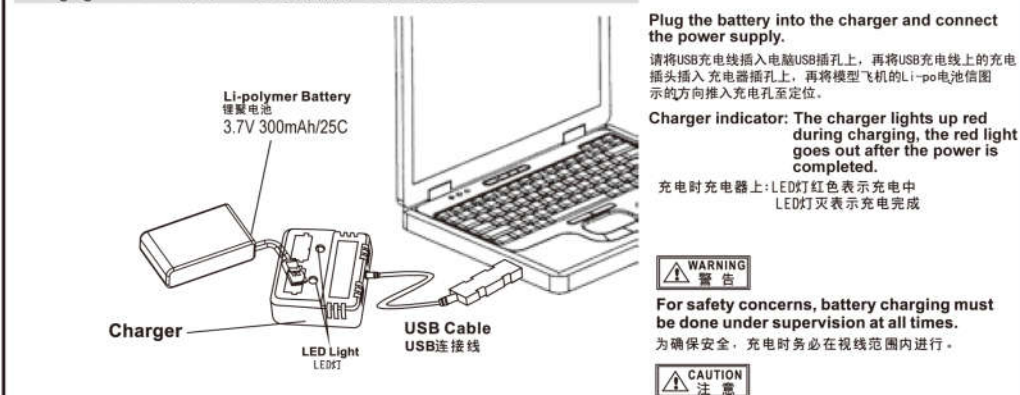


10. FLIGHT AND LANDING 飞行与降落

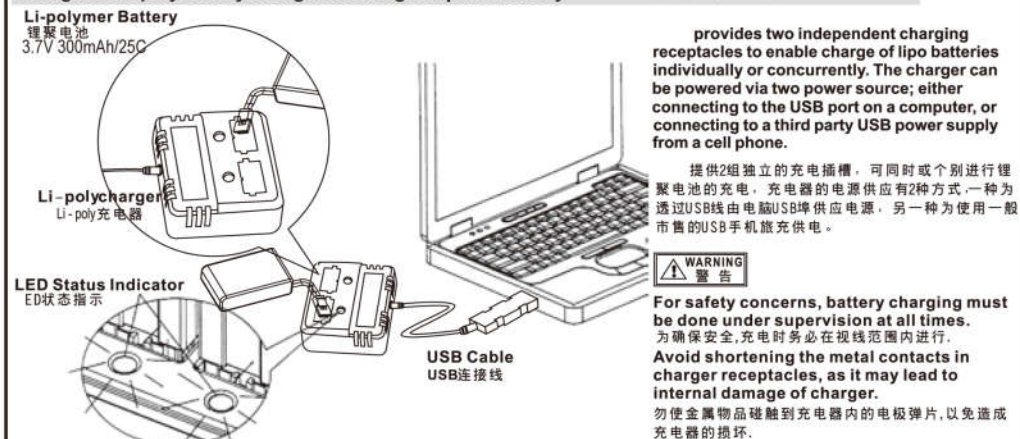


7. BATTERY CHARGING 电池的充电

Charging with USB 利用USB充电线给模型飞机电池充电



Using the Li-polybattery charger to charge airplane battery



LED Indicator LED 表示

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

Charger Specifications 充电规格

Input 输入	Charging Current 充电电流	Full Voltage 充电电压
0.5A	300mAh*1组	4.2 ± 0.03V

8. 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-poly battery 锂聚合物电池	3.7V 300mAh/25C	airplane flight time 模型飞机飞行时间	Approx. 6-8 Minutes 约6-8分钟
			Approx. 60 Minutes (Charging current approx. 0.5A) 约60分钟 (充电电流约0.5A)