



优雷特航空模型有限公司

UNIQUE MODEL TECH CO., LTD

XC-142



使用说明书
Manual

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Pls read carefully and pay attention to the following points before flight	

重要说明

Important Note

尊敬的客户

Dear Customer:

XC-142 运输机是比较特殊的飞行器。在您使用前请务必详细阅读使用说明书，如有技术问题请致电厂家技术部咨询，请勿按自己的理解去组装、调试。

This is an unusual aircraft ,and likely different from R/C aircraft you may have built and flown.Please take a few minytes to familiarize yourself with the instructions.If you have any question or contents,please contact our technical support department before you begin.

为避免不必要的纠纷，请您在购买本商品前，仔细阅读以下协议，您正式订购后即表示您已了解并同意如下协议条款。

To avoid unnecessary disputes, please carefully read the following agreement before buying this product, After transaction, it is deemed that you have accepted and agreed to the following terms.

- 1、本产品出厂已经过严格检验，如有缺少配件等问题请在收货前开箱验收，及时联系厂家，如发现严重的外观变形问题，请立即联系厂家。使用不当或商品有任何碰撞及磨损，厂家不负任何责任。

We take care to carefully inspect and package each product prior to shipping.the product is wanrranted against manufacturing defects such as serious deformation or missing parts,but not shipping damege.Please inspect the packaging for damage that may have occurred in transit before accepting the package.

- 2、模型产品是易损产品，正确使用不会造成部件损坏，使用不当均会造成个别部件损坏，对于初学者更是容易损坏：电机、电调、舵机、模型机身等，短时间内损坏都不属质量问题，厂家不给予维修和退换赔偿服务。

Model plane is perishable product, the correct use does not caused damaged of parts , improper use may caused damage of individual components, for beginners is easy to damage such as Motor, ESC, Servos, and model fuselage, please note eletronic parts damages in a short period of time are not quality problem, manufacturers do not give compensation for repair and replacement services.

- 3、买家不能因个人认为的产品性能差异（如新手不会操作）、材质制造差异、其它差异提出退换货要求。

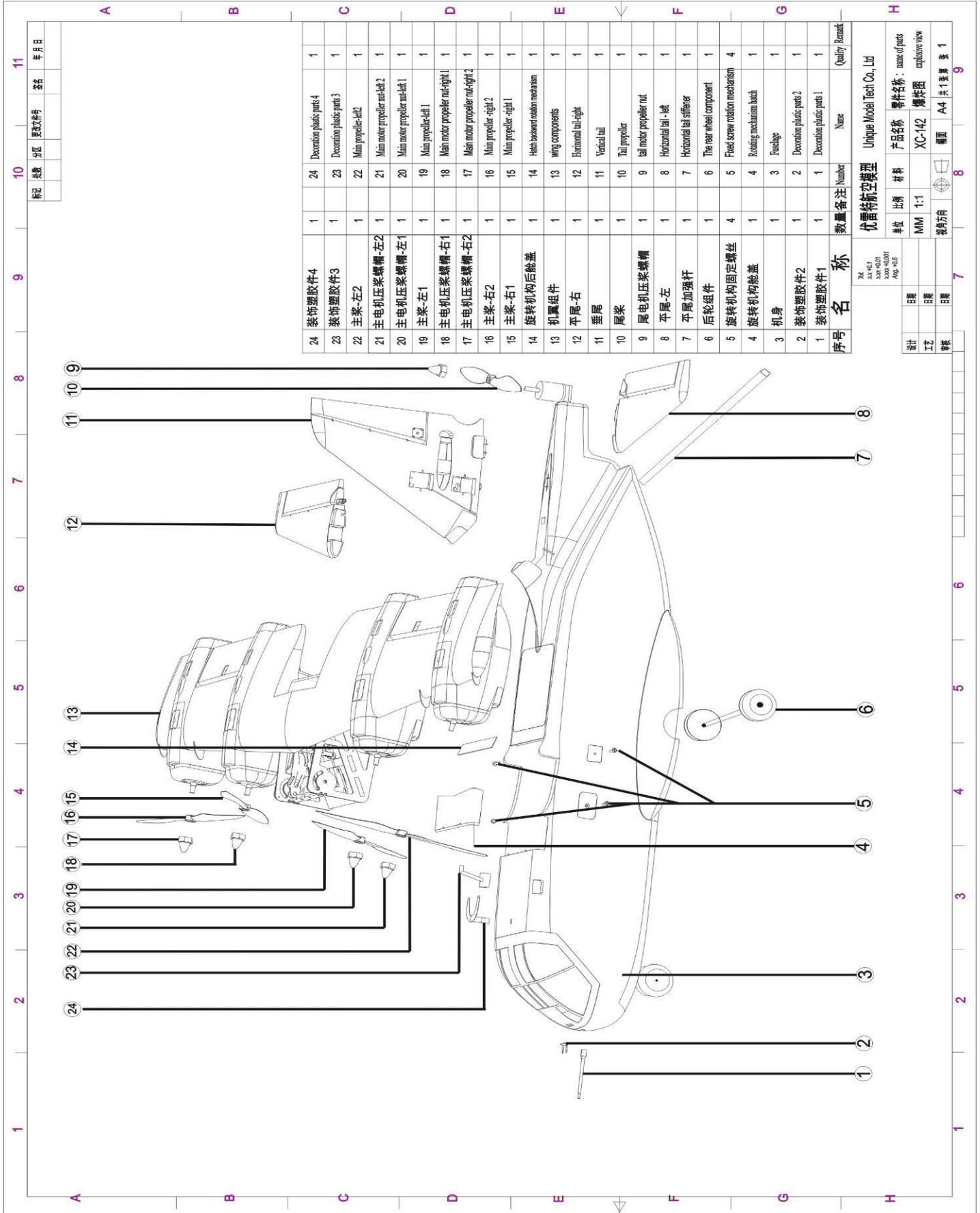
Buyer cannot performance differences due to personal thinking of products , material manufacturing, and other differences to requests changing or refunding.

- 4、公司尽最大努力保证我们的产品图册、网站上信息准确度，文件和图表有不准确或印刷错误，敬请见谅。

We make every effort to provide accurate and up to date information.If you are aware of any errors,please inform us.

产品组装分解图

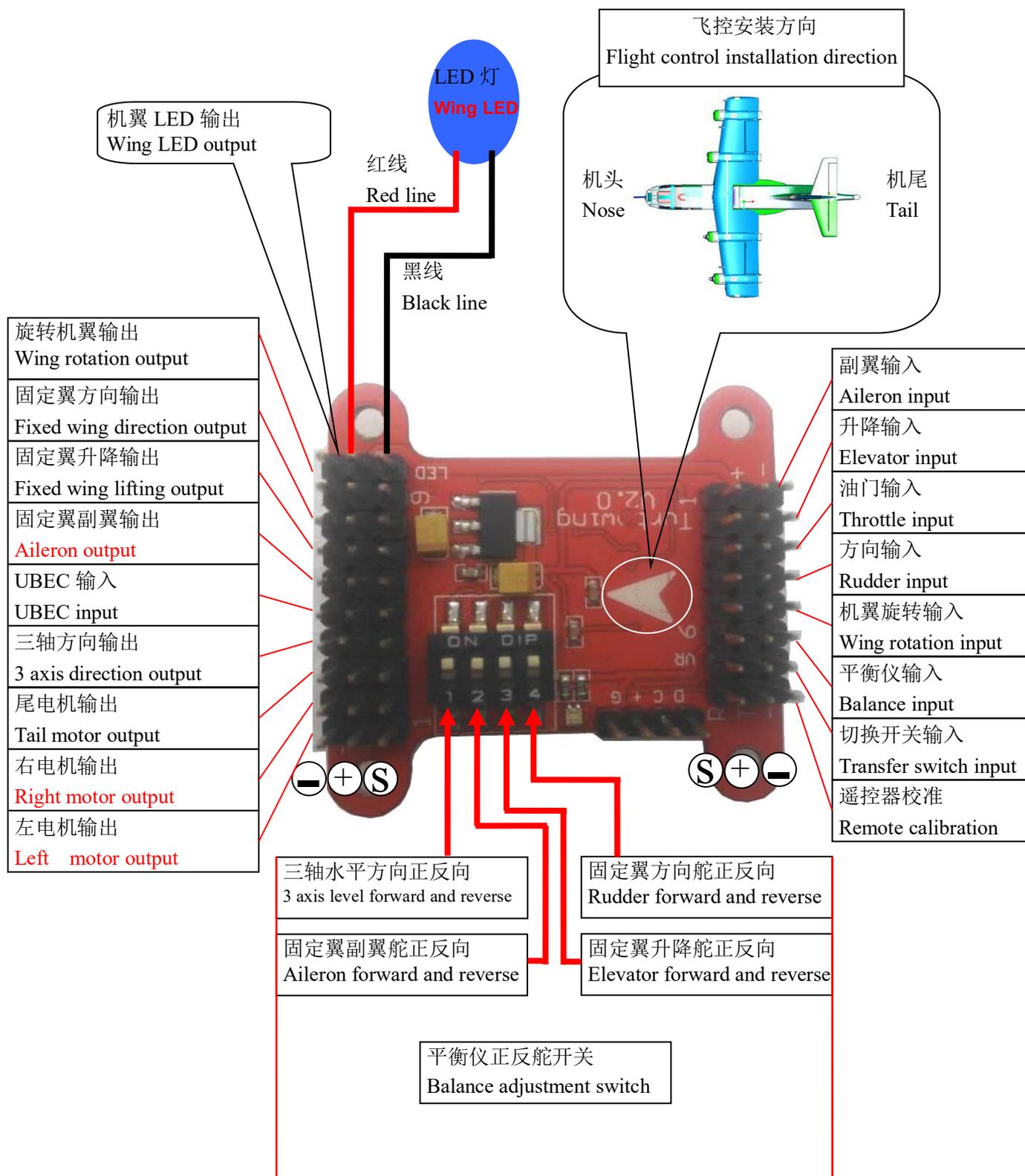
Product assembly diagram



图号: 045 日期: 2011.03.01 设计: 045 审核: 045 日期: 045		产品名称: 零件名称: name of parts 比例: 1:1 材料: XC-142 单位: MM 比例尺: 1:1 视图: 爆炸图 图框: A4 共1张第 1 张	
设计	日期	材料	零件名称
工艺	日期	比例	爆炸图
审核	日期	图框	爆炸图

飞控接线图

principle diagram of flight control

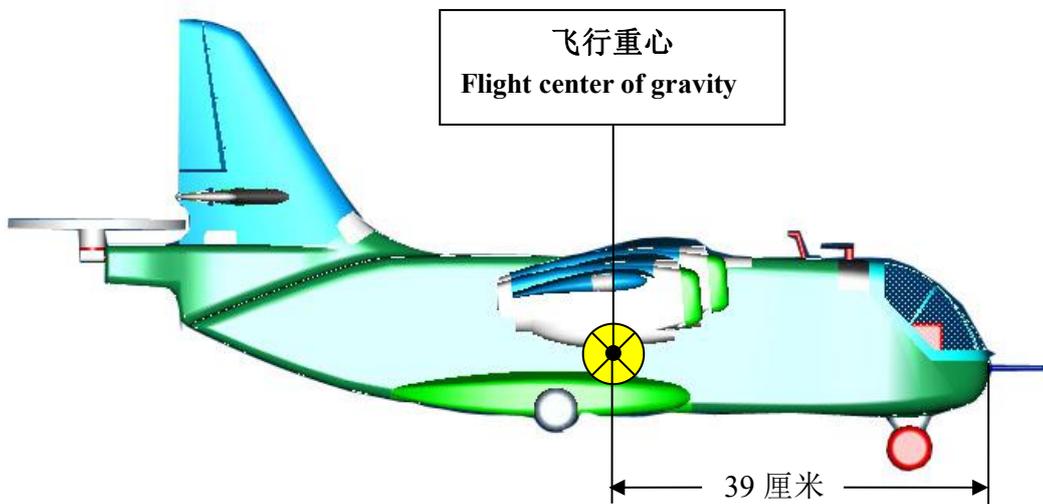


XC-142 产品主要技术参数

XC-142 Specifications

- 1、翼展: 1200 (mm)
Wing Span:1200mm 47.24in
- 2、机身长: 1000 (mm)
Length of Fuselage: 1000mm 39.37in
- 3、高: 430 (mm)
Height:430mm 16.93in
- 4、电机: 2212/550kv 5个 (3个正牙、2个反牙)
Motor:2212/550kv
- 5、电调: 30安5个(高压版系列)
ESC:30A*5
- 6、UBEC电源转换器 5V/3A 1个(支持6s电池)
UBEC:5V/3A
- 7、1045主桨: 4个(2个正向2个反向)
Propeller:1045 positive*2 negative*2
- 8、8060尾桨: 1个(正向)
tail 8060*1
- 9、舵机: 4个(9克)
Servo:9g*4
- 10、舵机: 1个(16克)
Servo:16g*1
- 11、空机重量: 2公斤
KIT weight:2kg
- 12、六通道遥控器(自配) 6ch Transmitter (Self distribution)
- 13、电池 6s/2600mAh 35c(自配)
Battery:6s/2600MAH 35C (Self distribution)

以下图是飞机飞行重心位置: Center of gravity:

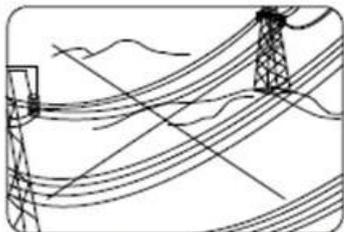


模型不能在以下环境中使用

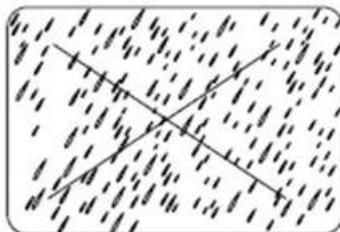
Flight Environment Warnings

示意图 schematic diagram

下列情况禁止飞行！ The following is prohibited flying！



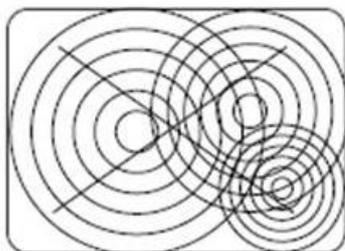
不要在高压电线附近飞行
Do not fly near power lines



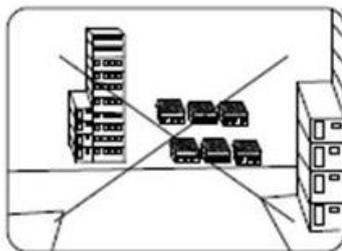
不要在下雨天飞行
Do not fly in rainy day



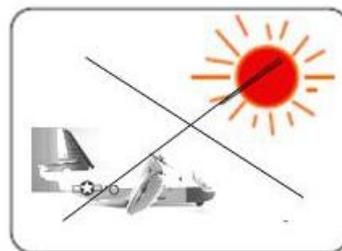
不要在 5 米/秒或者 18 千米/小时
3 级风以上的天气飞行
Do not fly in 5m/s or 18km/h
more than 3 level winds



不要在有电磁波干扰的地区飞行
Do not fly near sources of electromagnetic interference



不要在城市、村庄、建筑物附近飞行
Do not fly near trees or buildings



不要在阳光下暴晒
Do not store in direct sunlight



迎风起飞和切换
Windward Take-off and Switch

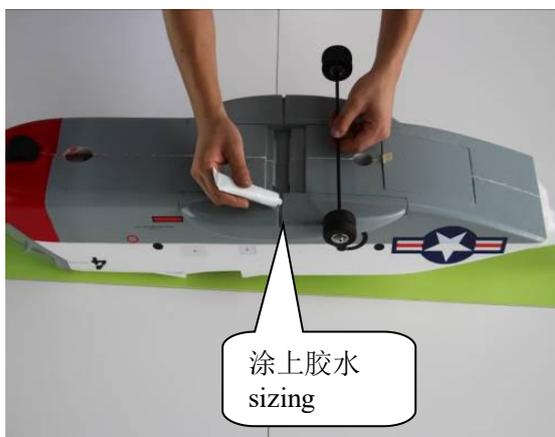
安装示意图 Installation Instruction

以下是开箱组件图:

The following is un-pack parts view

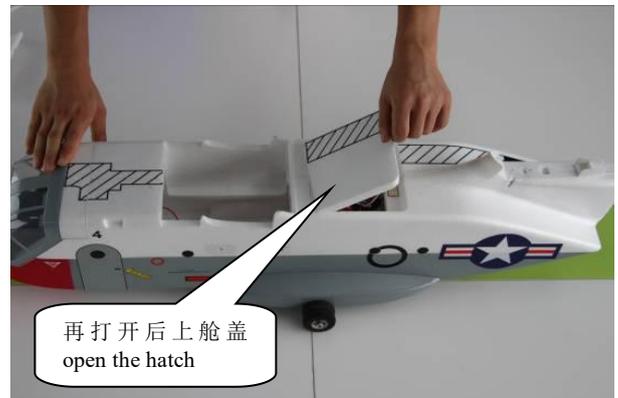
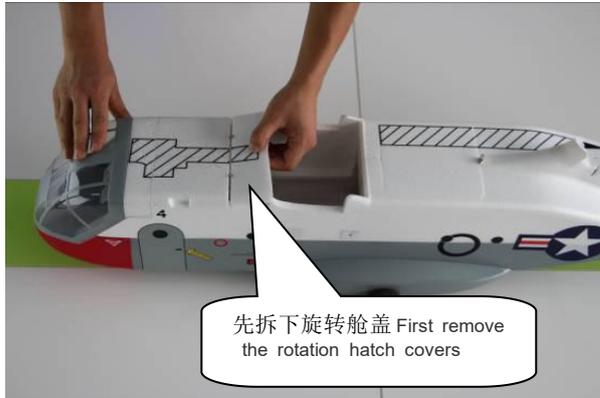


后轮组件安装 rear wheel component installation

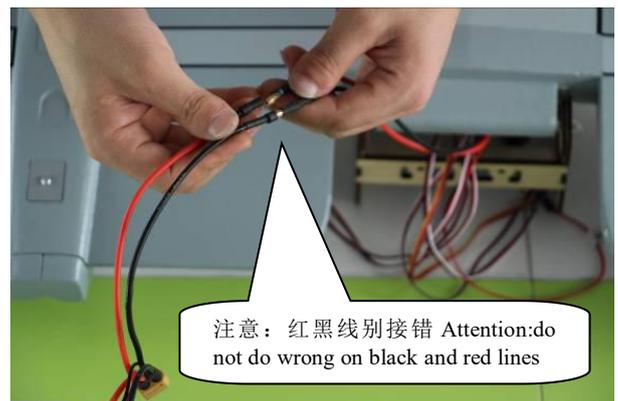
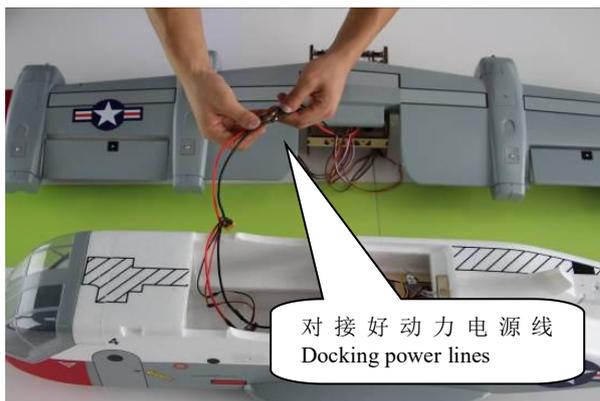


机翼安装 Wings Installation

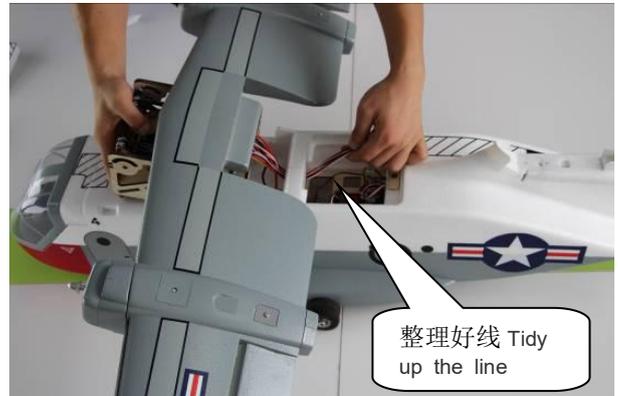
1、安装前准备：Prepare before Install:



2、机翼动力电源线接好：Docking power lines:



3、穿好机翼控制线：Get through well wing's control line



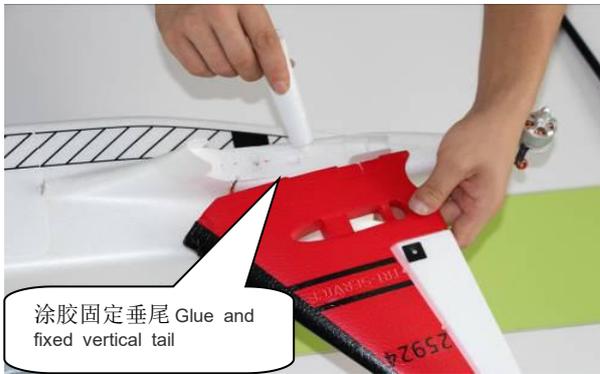
7、安装垂尾 Vertical tail Installation:



先把舵机线从这里穿过到机身里面 Get steering gear line and go through from here into the fuselage



翻过机身把舵机线对插好 Over the fuselage and plug steering gear for good

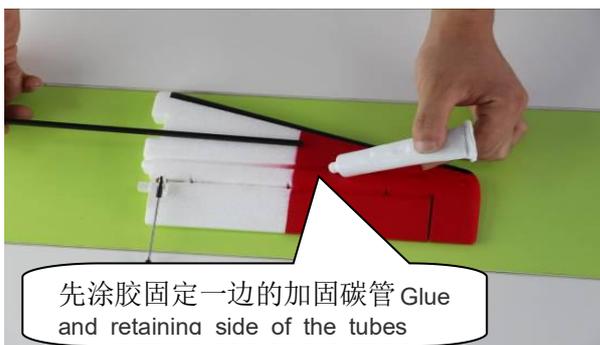


涂胶固定垂尾 Glue and fixed vertical tail

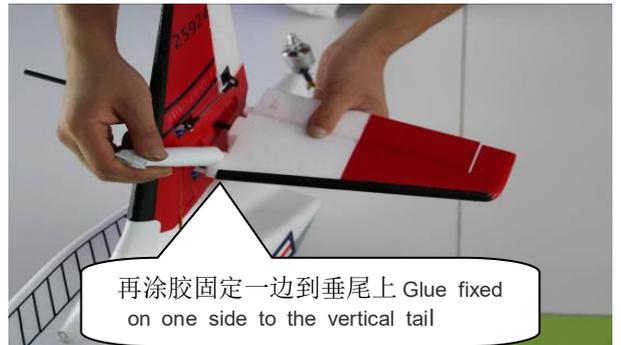


对齐固定垂尾到机身 Alignment fixed vertical tail to the fuselage

8、安装平尾 Horizontal Tail Installation:



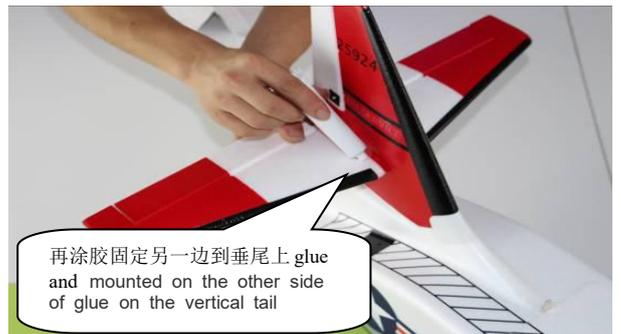
先涂胶固定一边的加固碳管 Glue and retaining side of the tubes



再涂胶固定一边到垂尾上 Glue fixed on one side to the vertical tail



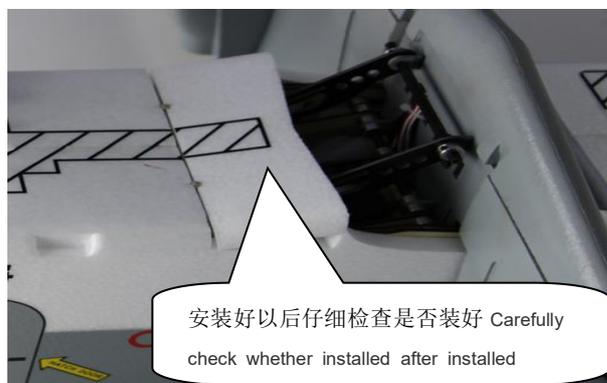
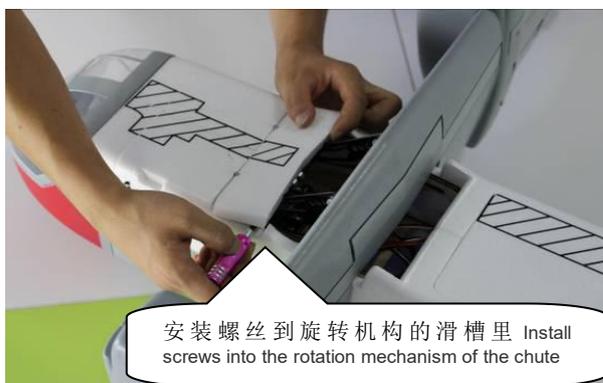
涂胶另一边的加固碳管槽里 glue on the other side of the carbon n anotubes reinforced tank



再涂胶固定另一边到垂尾上 glue and mounted on the other side of glue on the vertical tail

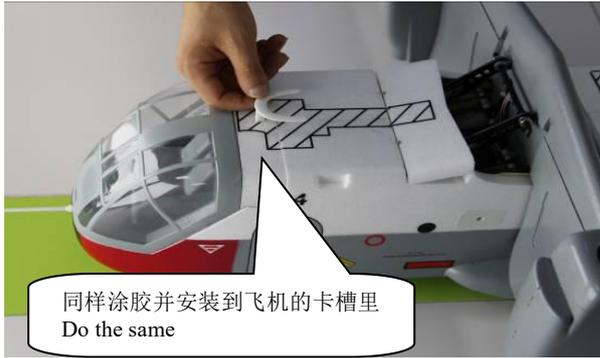


9、安装旋转机构舱盖 Installation of rotating mechanism hatch covers

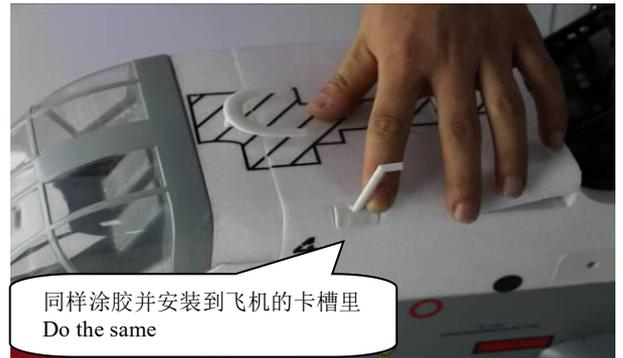


10、安装塑胶装饰件 Plastic decoration Installation





同样涂胶并安装到飞机的卡槽里
Do the same



同样涂胶并安装到飞机的卡槽里
Do the same



涂胶并安装到飞机机翼左端的卡槽里 Glue and install into the card slot at left airplane wings

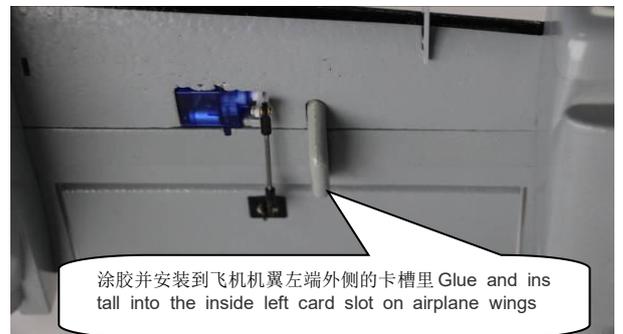


涂胶并安装到飞机机翼右端的卡槽里 Glue and install to aircraft wings to the right in the card slot

11、安装机翼泡沫装饰件 Foaming decoration parts on wings Installation



涂胶并安装到飞机机翼左端内侧的卡槽里 Glue and install into the inside left card slot on airplane wings



涂胶并安装到飞机机翼左端外侧的卡槽里 Glue and install into the outside left card slot on airplane wings



涂胶并安装到飞机机翼右端内侧的卡槽里 Glue and install into the inside right card slot on airplane wings



涂胶并安装到飞机机翼右端外侧的卡槽里 Glue and install into the outside right card slot on airplane wings

12、安装螺旋桨 Propeller Installation



飞机调试

Aircraft Testin

遥控器和飞机飞行控制器的中立位匹配调校方法

Radio system and control panel adjustment guidanc

特别提醒： 调试飞机之前请不要安装螺旋桨，避免危险发生！！

产品适用的电池是：6S/22.2/35C/2200 毫安时 毫安时锂电池（自配）

For your kindly reminder: for your own safety, pls do not install the propeller before you finish adjustment.

Battery specification: 6S/22.2V/35C/2200mah to 2600mah Li-polimer (Self distribution)

遥控器各个通道设置比例 Transmitter channel settings

遥控器要求：Requirement

- 1、六通道以上的遥控器操作此模型

Using 6ch or above radio to operate this model

- 2、遥控器设置在固定翼模型下飞行

Setting fixed wing plane mode

- 3、遥控器各个通道输出比例设置如右图：

Channel output setting shows in below

[E.POINT]	1: AIL	100/100	设置比例	1: 副翼	100/100
	2: ELE	100/100		2: 升降	100/100
	3: THR	100/100		3: 油门	100/100
CHI:AILE	4: RUD	100/100	显示调整	4: 方向	100/100
	5: GEA	100/100	显示	5: 开关	100/100
100%100%	6: FLP	100/100	100%100%	6: 开关	100/100

:

- 4、请把遥控器 1-5 通道全部设置为正向

Please put the remote control from 1 to 5 channels all set to positive

1 通道：副翼（1CH:AIL）、2 通道：升降（2CH:ELE）、3 通道：油门（3CH:THR）
4 通道：方向（4CH: RUD）、5 通道：开关（5CH:GEA）

- 5、遥控器各通道请微调到中立位置，各通道大小舵量请调整到正负 100

Trim the transmitter in neutral position, each channel adjusts to plus or minus 100.

- 6、参考第 4 页接线图纸连接接收机到飞控各通道接线，连接机翼各通道连接线
refer to page 4 connection drawings connect the receiver to each channel of the flight controller, each channel cable connection to wings

非常重要：Very Important

1、连接电池，拨动 5 通道开关，将飞机置于固定翼状态，（注意：连接电池后请保持飞机机身静止状态，不要晃动机身）

Connect to the battery, open channel 5 to make the plane under fixed wing mold. (Caution: keep the fuselage static after connecting the battery, do not shake the fuselage.)

2、断开电池连接

Disconnect the battery.

3、插上校准线 (接线图所示，在附件包内)

Plug to the calibration wire.(shown in wiring diagram, the attachment bags)

4、再次连接电池

Connect to the battery again.

5、飞控板上绿色的灯会有节奏闪烁，然后迅速将油门杆和升降杆同时打向 45 度左下方，飞控上的灯会高频率快速闪动，然后同时松开油门和升降杆，校准完成。

When the green lights on the control panel flashing rhythmically, then quickly lift both throttle and elevator 45 degrees to the lower left. After the light flash fast, release the throttle and elevator, then calibration finished.

6、断开电池电源

Disconnect the power.

7、拔掉校准线

Pull out the calibration wire.

8、再次连接电池

Connect the battery again.

请必须完成以下几条检验，以免给你造成损失：

Please complete the following a few test, in order to avoid losses to you

1、检查各通道反正舵面是否正确

方法是：（1）左打副翼摇杆，左边副翼舵面上翘为正确

（2）右打副翼摇杆，右边副翼舵面上翘为正确

（3）下拉升降摇杆，升降舵面上翘为正确

（4）上推升降摇杆，升降舵面下翘为正确

1、 Check each channel if it is correct.

Checking method:

- (1) Pull the aileron to the left, and then the left aileron surface will turn up.
- (2) Pull the aileron to the right, the right aileron surface will turn up.
- (3) Pull down the elevator, the elevator surface will turn up.
- (4) Pull up the elevator, elevator surface will turn down.

2、检查固定翼状态各舵面陀螺纠错舵面是否正确

- 方法是：
- (1) 飞机左倾斜，左边机翼低，右边的副翼舵面上翘为正确。
 - (2) 飞机右倾斜，右边机翼低，左边的副翼舵面上翘为正确。
 - (3) 飞机俯冲，机头低，升降舵面会向上翘为正确。
 - (4) 飞机抬头爬升，机头抬高，升降舵面向下翘为正确。
 - (5) 飞机机头水平左转，方向舵向右，
飞机机头水平右转，方向舵向左(请参考视频)。

2、Check the gyro error correction surface if it is right under fixed wing mold.

Checking method:

- (1) When plane turns left, the left wing is lower, right aileron surface should turn up.
- (2) When plane turns right, the right wing is lower, left aileron surface should turn up.
- (3) When the plane dives, the nose is lower, the elevator surface should go upward.
- (4) When climbing, nose turns up, the elevator surface should go downward.
- (5) The plane left the nose level, the rudder to the right,
the nose level right,Rudder to the left (please refer to the video).

3、将机翼垂直状态检查项目

- (1) 将机翼垂直状态，水平旋转机身，机头向左，尾电机向左偏转为正确。
- (2) 机头向右，尾电机向右偏转为正确（请参考视频）

3, check the vertical wing state projects

- (1) the vertical wing state, horizontal rotate the fuselage , head to the left, the tail motor deflection to the left is correct.
- (2) the head to the right, the tail motor turn to the right is correct (see video)

4、检查油门解锁，和上锁是否正常

方法： 向右打满方向舵遥控器摇杆 5 秒钟后，机翼灯亮为解锁，油门可以使用
向左打满方向舵遥控器摇杆 5 秒钟后，机翼灯熄灭，油门不可以使用

Check the throttle lock and unlock if they are correct.

Checking method:

After you pull the throttle to the right at biggest for 5 seconds, the wing LED lights, the throttle is unlock. Pull the throttle to the left at biggest for 5 seconds, then the wing LED goes out, the throttle is locked.

5、以上所有步骤调试完毕，可以两个人操作试验飞机 3 轴模式是否正常

方 法 是：在室内一个人手持飞机，另一个人加油门试验 3 轴模式飞行状态。
正确方法是：当你有意倾斜机身的时候，电机会自动加速自动保持平衡

当你有意让机身俯仰的时间，尾巴电机会做想对应的加速减速调整，保持飞机的俯仰平衡。

After all steps have finished, two people can work together to check if the three-axis mode is correct.

Checking method:

For indoor check up, one person hold the plane, the other checks the flight when up the throttle under three-axis mold.

How to do:

When you intend to tilt the fuselage, the motor will accelerate automatically to keep balance. When you intend to pitch, the tail motor will adjust correspondingly for acceleration and deceleration to keep balance in pitching.

问题排除解答 Problem out solutions

特别提醒！

在油门解锁的情况下切换机翼模式尾电机会自动旋转，请注意安全，避免造成伤害！

不正常问题的排除方法：

以上所有步骤调试后如果出现不正常现象，请对照接线图纸检查飞控的各连接线是否正确，如果接线正确，请按以上步骤重新调试，可以重新校准。

Reminder!

When throttle is unlocked, the tail motor will rotate automatically once you change flying mold; take care of your safety to avoid any injury!

How to solve the problems:

If you finish all the steps and there are still unusual things happen, pls check if all wires on the control panel are correctly connected. If all the wires connect correctly, pls repeat all the steps to recalibrate.

为了让您的飞行更加愉快，飞行前请仔细阅读以下事项

In order to make your flight more enjoyable, please read the following carefully before flight

1、请注意本产品适用的电池是：6S 22.2V/35C 2200 毫安时-2600 毫安时锂电池

1st、 battery specification: 6S 22.2V/35C 2200Mah to 2600mah lip-polimer

2、请注意按照螺旋桨标示安装螺旋桨。（很重要对飞行有很大影响）

2nd、 install the propellers according to the marks. (Correctly installation is very important and will affect the flight performance)

3、垂直起飞模式飞行飞机会向机头方向倾斜飞行，此状态为正确状态，请不要微调升降通道微调。

3rd、 the plane will fly to nose tilted under three-axis mode, which is correct, do not trim the elevator.

4、如果在室内飞行微调了升降通道，特别提醒到户外飞行必须将升降微调至于中立位置，切记！！！！

4th、 For your kindly reminder, if you trimmed the elevator for indoor flying, pls do remember to trim the elevator in neutral position when you change to outdoor flight.

5、因为本产品是固定翼飞机和多旋翼飞机的混合体，结构比较复杂，飞机比较重，所以在3轴飞行中请不要大幅度收油门，会造成飞机下坠无法挽回。

5th、This item owns both fixed wing and multi-copter features, the structure is complicated, and the aircraft is heavy, pls do not close the throttle in a biggest way when it flies in 3-axis mold, otherwise the plane will falling and might be crushed.

6、请不要在5米/秒或者18千米/小时3级风以上的大风天气飞行，此款机在大风情况下降落需要一定的技术。

6th、 Please do not fly in 5m/s or 18km/h more than 3 level winds, as landing in windy requires skillful experience.

7、在固定翼切换垂直降落时，要降低飞行速度切换，机翼垂直后，油门增加一些保持高度。

7th、 when switch the fixed wing to vertical landing, Please reduce the speed, when wings is vertical, add some maintain to accelerator.

8、请严格按照安装视频来操作。

8th、 pls follow our build guide strictly.

9、首先你不能固定翼的降落习惯，因为这款机切换到三轴模式后机翼没有滑翔性能，所以在远处切换飞机不会降落到自己面前。

9th、First, when you start to land the plane, pls don' t follow the fixed wing landing process, as this plane has no gliding function once you change to three-axis mode, if you switch to three-axis mode when the plane is far away from you, the plane will not land at your feet.

10、你应该用直升机的降落习惯，当固定翼飞过你眼前时候再切换到三轴模式，并且升降舵向前最大舵量。

10th、Second, pls follow up as helicopter landing process. When the plane flies above you, pls change the plane from fixed wing mold to three-axis mode, meanwhile, put the elevator forward at biggest.

11、如果风比较大，切换为垂直状态机翼风阻比较大，可以连续切换固定翼状态使飞机飞到自己附近，再停止切换保持垂直状态降落，请推最大升降舵向前，油门控制高度下降，因为低处风相对比较小，飞机低头需要克服机翼带来的风阻力。

11th、if the wind is bigger, switch to a state of vertical wing wind resistance is bigger, can be continuous switch fixed wing state to let plane flew near to yourself, then stop switch remain vertical landing, please push the biggest elevator forward, throttle control height decreased, because of lower wind is relatively small, the plane down to overcome the wings of the wind resistance.

12、此款机在固定翼状态飞行，转弯请用方向舵配合转弯。

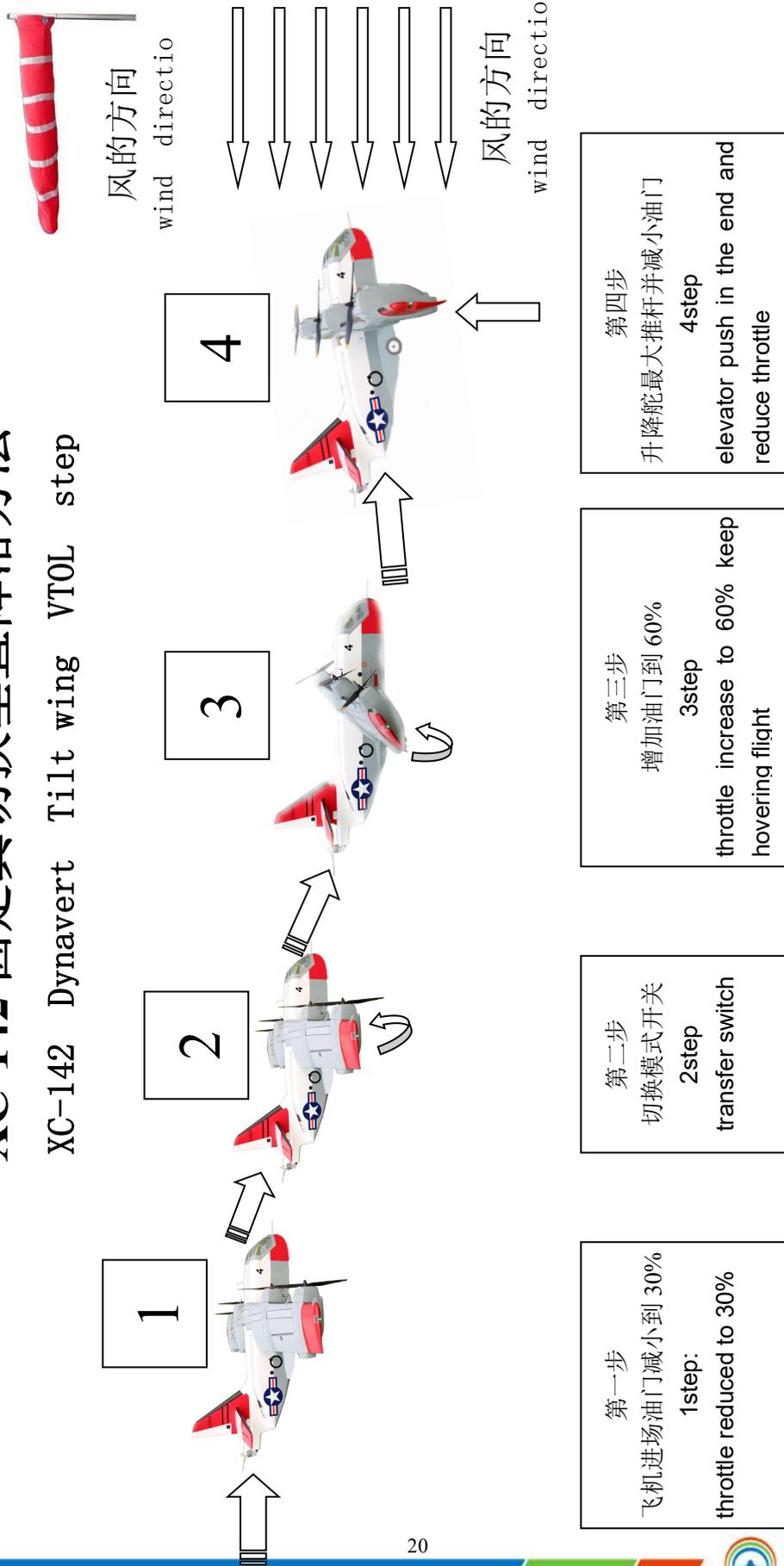
12th、this airplane in a fixed wing state flight, please use the rudder turning cooperate to turn

13、注意飞行时候要设定时间报警，8分钟内必须降落，如果电池电量太弱，会影响飞控对飞机的平衡控制。

Fourth, pls set up time limits when you flight the plane, you must land the plane in 5 minutes, if the battery is weak, it will affect the balance control performance.

XC-142 固定翼切换垂直降落方法

XC-142 Dynavert Tilt wing VTOL step



注意：请不要在 5 米/秒或 18km/小时 3 级风以上的风速下飞行

Attention: Do not fly in 5m/s or 18km/h more than 3 level winds

按照上面的步骤进行切换姿态会比较柔和

Accordance with above steps will be more softly when we convert position



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