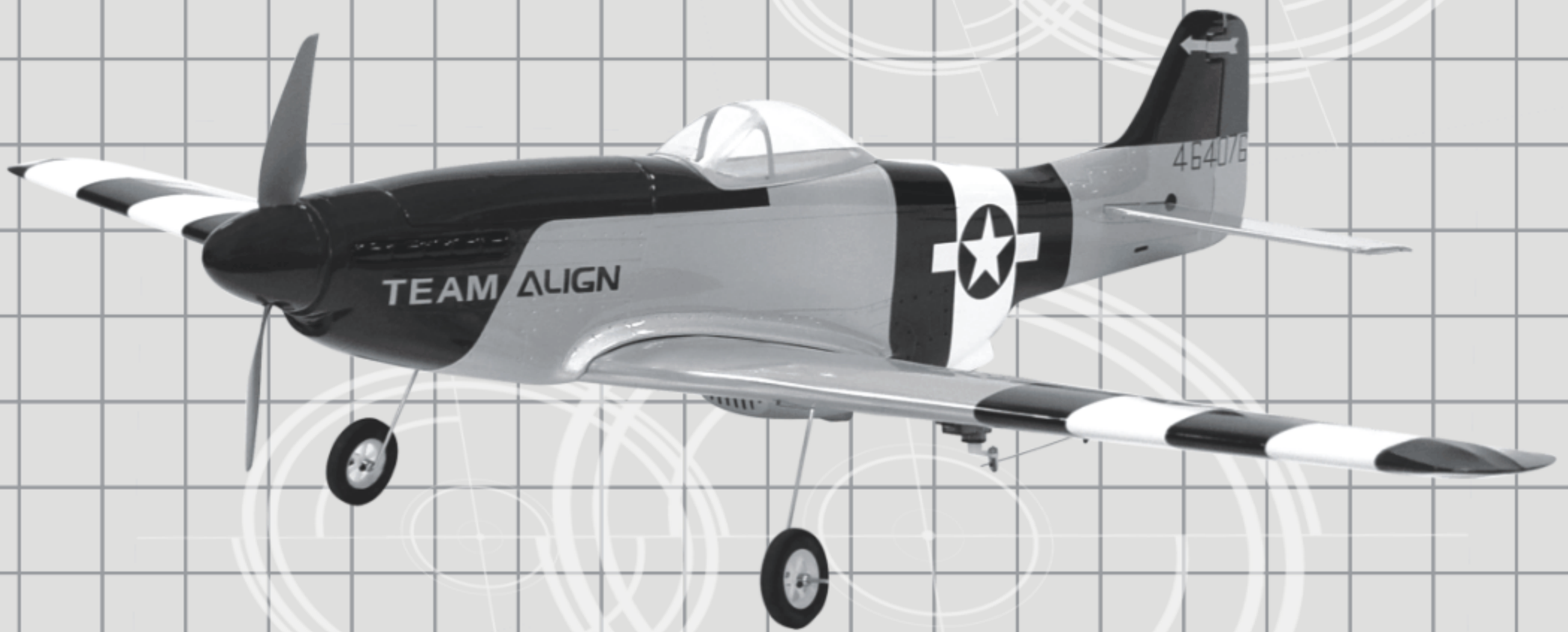


# ALIGN

# **P-51D 400** **INSTRUCTION MANUAL** **使用說明書**



**Thank you for buying ALIGN products. Please read this manual carefully before assembling. We recommend that you keep this manual for future reference regarding tuning and maintenance.**

承蒙閣下選用亞拓遙控世界系列產品，謹表謝意。進入遙控世界之前必須告訴您許多相關的知識與注意事項，以確保您能夠在學習的過程中較得心應手。在開始操作之前，請務必詳閱本說明書，相信一定能夠給您帶來相當大的幫助，也請您妥善保管這本說明書，以作為日後參考。

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**Thank you for buying ALIGN Products. The P-51D 400 R/C AIRPLANE is designed as an easy to use, Please read the manual carefully before assembling the model, and follow all precautions and recommendations located within the manual. Be sure to retain the manual for future reference, routine maintenance, and tuning. The P-51D 400 AIRPLANE is a new product developed by ALIGN. It provides flying stability for beginners, full aerobatic capability for advanced fliers, and unsurpassed reliability for customer support. P-51D 400 AIRPLANE is your best choice.**

感謝您選購亞拓產品，為了讓您容易方便的使用競速翱翔遙控飛機，請您詳細的閱讀完這本說明書之後再進行組裝以及操作這台飛機，同時請您妥善的保存這本說明書、作為日後進行調整以及維修的參考。競速翱翔飛機是由亞拓自行研發的新產品，不論你是需求飛行穩定性的初學者或是追求性能的飛行愛好者。競速翱翔飛機將是你最佳的選擇。

**THE MEANING OF SYMBOLS 標誌代表涵義**

|  |  |
|--|--|
|  | <p><b>Mishandling due to failure to follow these instructions may result in damage or injury.</b><br/>因為疏忽這些操作說明，而使用錯誤可能造成財產損失或嚴重傷害。</p> |
|  | <p><b>Mishandling due to failure to follow these instructions may result in danger.</b><br/>因為疏忽這些操作說明，而使用錯誤可能造成危險。</p>                  |
|  | <p><b>Do not attempt under any circumstances.</b><br/>在任何禁止的環境下，請勿嘗試操作。</p>  |

**IMPORTANT NOTES 重要聲明**

**R/C models are not toys. R/C models utilize various high-tech products and technologies to provide superior performance. Improper use of this product can result in serious injury or even death. Please read this manual carefully before using and make sure to be conscious of your own personal safety and the safety of others and your environment when operating all ALIGN products.**

**Manufacturer and seller assume no liability for the operation or the use of this product.**








**Intended for use only by adults with experience flying remote control airplanes at a legal flying field. After the sale of this product we cannot maintain any control over its operation or usage.**

遙控模型並非玩具，它是結合了許多高科技產品所設計出來的休閒用品，所以商品的使用不當或不熟悉都可能會造成嚴重傷害甚至死亡，使用之前請務必詳讀本說明書，勿輕忽並注意自身安全。注意：任何遙控模型的使用，製造商和經銷商是無法對使用者於零件使用的損耗異常或組裝不當所發生之意外負任何責任，本產品是提供給有操作過模型飛機經驗的成人或有相當技術的人員在旁指導，於當地合法遙控飛行場飛行，以確保安全無虞下操作使用，產品售出後本公司將不負任何操作和使用控制上的任何性能與安全責任。

**We recommend that you obtain the assistance of 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 R/C model requires a certain degree of skill to operate, and is a consumer item. 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 for free technical consultation and parts at discounted rates when you experience problems during operation or maintenance.**

模型商品屬於需高操作技術且為消耗性之商品，如經拆裝使用後，會造成不等情況零件損耗，任何使用情況所造成商品不良或不滿意，將無法於保固條件內更換新品或退貨，如遇有使用操作維修問題，本公司全省分公司或代理商將提供技術指導、特價零件供應服務。

**RADIO TRANSMITTER AND ELECTRONIC EQUIPMENT REQUIRED FOR ASSEMBLY 自備遙控及電子設備**

|   |   |   |
|---|---|---|
|  <p><b>Transmitter(3-Channel or more)</b><br/>發射機(三動以上)</p>                      |  <p><b>Receiver(3-Channel or more)</b><br/>接收機(三動以上)</p>        |  <p><b>9g Servo x2pcs</b><br/>9g伺服器x2</p>                  |
|  <p><b>Li-Po Battery 11.1V(1800mAh or more)</b><br/>Li-Po電池 11.1V(1800mAh以上)</p> |  <p><b>Brushless Motor(Aprox. 2550KV)</b><br/>無刷馬達(約2550KV)</p> |  <p><b>Brushless ESC(20A or more)</b><br/>無刷調速器(20A以上)</p> |
| <p><b>Y type servo harness x1</b><br/>伺服Y型連接線x1</p>   | <p><b>Servo extension wire x2</b><br/>伺服延長線x2</p>   |  <p><b>Propeller</b><br/>螺旋槳 7x5" .8x5.5"</p>              |



### Caution for the use of batteries 注意電池的使用

Please note the polarity of the battery. Avoid reverse polarity and shorting positive with negative terminals. It is critical not to over charge or over discharge lithium polymer batteries. Cells discharge voltage should not lower than 3.0v/cell. Cell temperature should also be monitored to avoid overheating. When cells are used, the amp draw should not exceed the maximum ratings of the cells. Cells will need to cool down after use before they can be recharged. Damages to the cell (such as swelling, fire, etc) may result if manufacturer's instructions are not followed. Lipo batteries should not exhibit rise in temperature during charge process. Should drastic temperature increase is detected during the charge process, the cells may be damaged and will need to be disposed properly. Please use only lipo compatible chargers to charge lipo batteries. Depleted batteries should be disposed at designated location to avoid environmental contamination.

安裝電池時請注意電池的極性切勿裝反，避免發生短路現象。  
 鋰聚合物電池使用時嚴禁過充、過放(截止電壓低於3.0V/cell)以及溫度過高產生，放電使用前確認已將電池充飽，使用時注意負載電流不可超過該電池所能承受的範圍，使用後的電池會有發熱的現象，請待電池冷卻檢查後，再進行充電。如未依原廠規定使用，都可能造成電池損壞、膨脹或意外危險發生。  
 正常鋰聚合物電池於充電時並不會發熱，所以充電中的電池有發熱情形時，表示該電池已損壞，請停止對該電池充電。  
 請使用鋰聚合物電池專用的充電器進行充電。  
 廢棄的電池請勿隨意丟棄，需依照環保單位的指示做好回收動作，以避免環境污染。



### Charging environment requirements 充電環境的選擇

For safety, charging location should subject to proper airflow and within visual range. Avoid flammable material in the charger's vicinity, and keep out of reach of children. Do not charge batteries unattended. Stop the charging process should you need to attend to other tasks and unable to monitor the charger.

為確保安全，充電時請選擇通風良好安全的環境，並遠離熱源及易燃物品，務必在視線範圍內進行充電；若需離開時應將電池取出，也離開孩童可以拿取到的範圍，以免產生不可預期的危險及損失。



### Charger Storage 充電器的收藏及保護

Care should be taken not to modify, damage, pull with excess force, twist, or tie knots with the wires on the charger. In addition, do not place heavy objects on the charger. To avoid electrocution or short, wires and plugs which are damaged should not be used.

電線的保存上請小心，請盡量避免自行加工、破壞、拉扯、任意扭曲或扎成束狀，還有，不要在電線上放置重物、剪破，如果電池及充電插頭有破損時，請勿使用，避免觸電、短路、損壞危險的產生。



### KEEP AWAY FROM HEAT 遠離熱源

R/C models are made up various forms of plastic and wooden. Those are 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.

遙控飛機多半是以 PVC、木質或聚乙烯、電子商品為主要材質，因此要盡量遠離熱源、日曬，以避免因高溫而變形甚至熔毀損壞的可能。



### LOCATE AN APPROPRIATE LOCATION 遠離障礙物及人群

R/C models fly at high speed, thus posing a certain degree of potential danger. Choose an a legal flying field consisting of flat, smooth ground without obstacles. Do not fly near buildings, high voltage cables, or trees to ensure the safety of yourself, others and your model. For the first practice, please choose a legal flying field and can use a training skid to fly for reducing the damage. Do not fly your model in inclement weather, such as rain, wind, snow or darkness.

遙控模型飛行時具有一定的速度，相對的也潛在著危險性，場地的選擇也相對的重要，請需遵守當地法規到合法搖控飛行場地飛行。必須注意周遭有沒有人、高樓、建築物、高壓電線、樹木等等，避免操控的不當造成自己與他人財產的損壞。初次練習時，務必選擇在空曠合法專屬飛行場地，這對飛行失誤所造成的損傷將會大幅的降低。請勿在下雨、打雷等惡劣天候下操作，以確保本身及機體的安全。



### ALWAYS BE AWARE OF THE ROTATING BLADES 遠離運轉中零件

Care should be taken to avoid contact with RC model's rotating parts, such as aircraft's propellers, car's tires, or servos.

當遙控產品在運轉時(螺旋槳、車輪、伺服機)，切勿觸摸並遠離任何物件，以避免造成危險及損壞。



### PREVENT MOISTURE 遠離潮濕環境

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 loss of use, or a crash. Do not operate or expose to rain or moisture.

遙控飛機內部也是由許多精密的電子零組件組成，所以必須絕對的防止潮濕或水氣，避免在浴室或雨天時使用，防止水氣進入機身內部而導致機件及電子零件故障而引發不可預期的意外！



### PROPER OPERATION 勿不當使用本產品

Please use the replacement of parts on the manual to ensure the safety of instructors. This product is for R/C model, so do not use for other purpose.

請勿自行改造加工，任何的升級改裝或維修，請使用亞拓產品目錄中的零件，以確保結構的安全。請確認於產品限界內操作，請勿過載使用，並勿用於安全、法令外其它非法用途。



## 2.SAFETY NOTES 安全注意事項

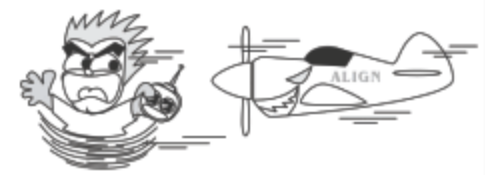
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### OBTAIN THE ASSISTANCE OF AN EXPERIENCED PILOT 避免獨自操控

Before turning on your model and transmitter, check to make sure no one else is operating on the same frequency. Frequency interference can cause your model, or other models to tuning, trimming, and actual first flight. (Recommend you to practice with computer-based flight simulator.)

至飛行場飛行前，需確認是否有相同頻率的同好正進行飛行，因為開啓相同頻率的發射機將導致自己與他人立即干擾等意外危險。遙控飛機操控技巧在學習初期有著一定的難度，要盡量避免獨自操作飛行，需有經驗的人士在旁指導，才可以操控飛行。(動線電腦模擬器及老手指導是入門必要的選擇)



### SAFE OPERATION 安全操作

Operate this unit within your ability. Do not fly under tired condition and improper operation may cause in danger.

請於自己能力內及需要一定技術範圍內操作這台飛機，過於疲勞、精神不佳或不當操作，意外發生風險將可能會提高。



## 3.SAFETY CHECK BEFORE FLYING 飛行前安全檢查重要事項

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### CAREFULLY INSPECT BEFORE REAL FLIGHT 實機飛行前請嚴格執行飛行前檢查義務

- ☆ **Before flying, please check to make sure no one else is operating on the same frequency for the safety.**
- ☆ **Before flight, please check if the batteries of transmitter and airplane are enough for the flight.**
- ☆ **Before turn on the transmitter, please check if the throttle stick is in the lowest position.**
- ☆ **When turn off the unit, please follow the power on/off procedure. Power ON- Please turn on the transmitter first, and then turn on airplane. Power OFF- Please turn off the airplane first and then turn off the transmitter. Improper procedure may cause out of control, so please to have this correct habit.**
- ☆ **Before operation, check every movement of the model is smooth and directions are correct. Carefully inspect servos for interference and broken gear.**
- ☆ **Check for missing or loose screws and nuts. See if there is any cracked and incomplete assembly of parts. Carefully check main rotor blades, rotor holders and adapters. Broken, bent and premature failures of parts possibly cause resulting in a dangerous situation.**
- ☆ **Check all ball links and servo horns to avoid excess play and replace as needed. Failure to do so will result in poor flight stability.**
- ☆ **Check the battery and power plug are fastened. Vibration and violent flight may cause the plug loose and result out of control.**
- ☆ **CG check: The location of the CG will determine the flying characteristics of an airplane. To check the proper balance of the airplane, hold the airplane with finger at the CG location of each wing, and observe the plane's balance. The balance can be changed by shifting battery location inside the airplane's fuselage, or adding weights to either the tail or nose of the airplane.**

- ★ 每次飛行前應先確認所使用的頻率是否會干擾他人，以確保你自身與他人的安全。
- ★ 每次飛行前確定您發射機與飛機電池的電量是在足夠飛行的狀態。
- ★ 開機前確認油門搖桿是否位於最低點。
- ★ 務必遵守電源開關機的程序，開機時應先開啓發射機後，再開啓飛機電源；關機時應先關閉飛機後，再關閉發射機電源。不正確的開關程序可能會造成失控的現象，影響自身與他人的安全，請養成正確的習慣。
- ★ 開機請先確定飛機的各個動作是否順暢，及方向是否正確，並檢查伺服器的動作是否有干涉或崩齒的情形，使用故障的伺服器將導致不可預期的危險。
- ★ 飛行前確認沒有缺少或鬆脫的螺絲與螺帽，確認沒有組裝不完整或損毀的零件，仔細檢查螺旋槳是否有確實固定或損壞，轉接頭是否彎曲變形。損壞或組裝不完整的零件不僅影響飛行，更會造成不可預期的危險。注意：對損耗、有裂痕零件更新及定期保養檢查具有相當的重要性。
- ★ 檢查所有的連桿與舵角片是否有鬆脫的情形，否則將造成飛機無法操控的危險。
- ★ 確認電池及電源接頭是否固定牢靠，飛行中的震動或激烈的飛行，可能造成電源接頭鬆脫而發生失控的危險。
- ★ 重心檢查，重心位置決定了一架飛機的飛行特性，用手指頂在主翼的兩端重心處，檢查機身前後是否水平，如果有偏差可以藉由調整電池的位置或使用配重零件來修正重心。

### Radio Range Check 接收距離測試

Radio range check is an important preflight check to ensure proper function of the radio. First turn on the transmitter and check to ensure battery is within safe range. With the transmitter antenna retracted, turn on the receiver power inside the airplane. While wiggling the transmitter sticks, walk 10M from the airplane and observe any unusual movement which may indicate interference. Range check is complete if the plane does not exhibit any abnormal movements up to the 10M mark.

打開遙控器電源開關，先檢查電力是否充足；接著將飛機也接上電源後暫時放在地上，先將遙控器天線收起來，之後距離飛機約10公尺的地方撥動遙控器搖桿，觀察看看飛機是不是有正常反應，如果反應都正確，那代表遙控距離沒有問題，接著就可以安心的使用。

The antenna is retracted  
天線完全收起



Wiggling the transmitter sticks for observing any unusual movement.  
搖動搖桿確認動作是否確實。

**Flying Training 教飛練習**

Some radio transmitters come equipped with trainer port. With the help of an experienced pilot, beginners can utilize this function during the training process to avoid unnecessary crashes. A pair of similar transmitter from same make is required. Transmitter A will be transmitting, which is used by the trainer. Transmitter B will not be powered up (not transmitting), which is used by the trainee.

With the two transmitter connected by a training cable, transmitter A is turned on to verify aircraft function, take off and land, just as during normal flight sessions. After the aircraft is airborne, the trainer can give control to trainee by holding the training switch (usually a momentary switch). In case the trainee gets into trouble with the aircraft, the trainer can regain control simply by releasing the training switch.

部分遙控器具有教練連接埠，利用此功能可藉由有經驗的老手來帶領飛行，避免不熟悉而造成損壞或意外。首先必須準備兩支相同的發射器，例如A遙控器為主要發射器，具有發射電波及操控的功能，B遙控器則給初學者使用，發射器本身不需要開啓電源。使用方式很簡單，使用教練連接線將A、B兩支發射機連線，A發射器依照正常程序開啓電源、飛機電源，檢查飛機各項動作無誤之後，將左方教練開關往自己方向推，此時控制權會轉換到B遙控器，但是依舊是由A遙控器發射電波，所以在教練連線的過程裡，連接線要確實連接不可鬆動。教練開關是使用彈跳開關，平時不開啓時會固定在主操控權位置，當開啓時會將搖桿的控制權轉移到B發射器，當放開開關後又會自動彈回主操控權。當正常使用時，若您所帶領的初學者在飛行上出現危險動作或操控錯誤時，趕緊將操控權奪回，來避免意外的發生。



**One by one online teaching is the best to practice and simulate flying condition.**

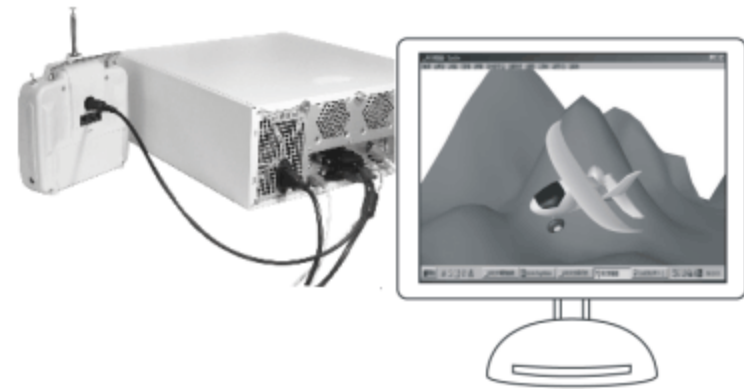
一對一連線教學是最可以體驗現場狀況的應變及練習。



**Flight Simulator Training 模擬練習**

Computer RC flight simulators provide a safe way to learn the skills required to fly RC aircraft. Currently simulators such as FMS, Realflight G2, G3, XTR, etc, are confirmed to function with Align's products. Due to the different interface which connects the transmitter to computer, please follow the simulator's instruction for proper connectivity.

目前確定可使用的電腦模擬器有FMS、RealFlight G2、G3、XTR等，但這些都必須透過模擬介面才可以，而每一家的模擬軟體使用的介面都不一樣，必須依照您另外購買的模擬軟體來決定設定方式，但是基本連線方式都是相同的，僅需要將專屬介面的傳輸線連接至發射器背面的教練連接埠即可，其餘的設定請參考模擬軟體所提供的設定資訊。



This instruction manual is an assembling illustration for P51-D 400 AIRPLANE. Some power and electric equipment are option parts:

1. Check for all the parts in the list come with the manual.
2. Some basic tools are needed to help the assembly.

本說明書以競速翱翔空機組作為示範，其中動力及電子相關配件皆屬選購配備：  
1. 組裝之前請先確認內容物是否缺失，仔細詳對後方可進行組裝。  
2. 組裝過程裡需要一些簡單的工具協助組裝。

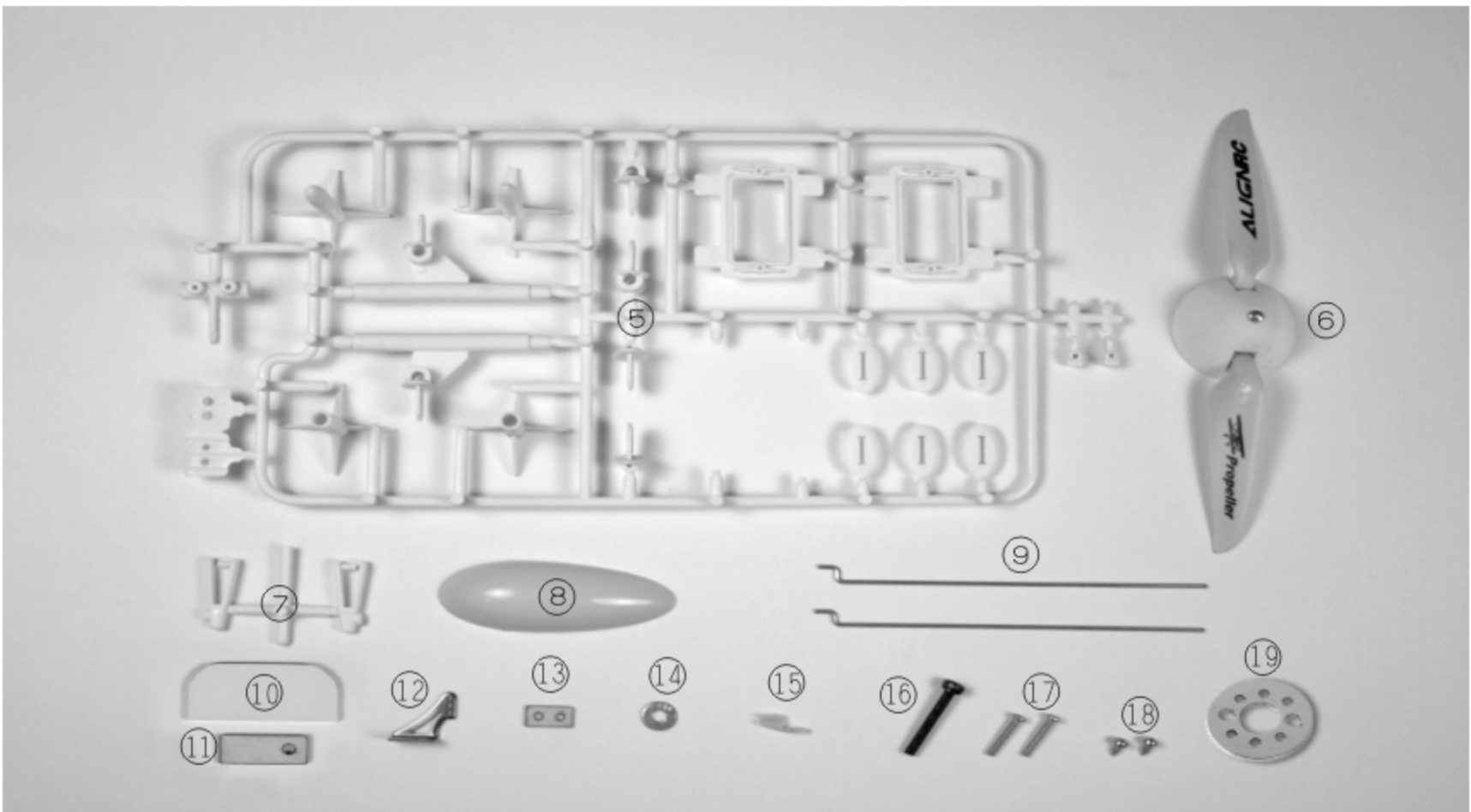
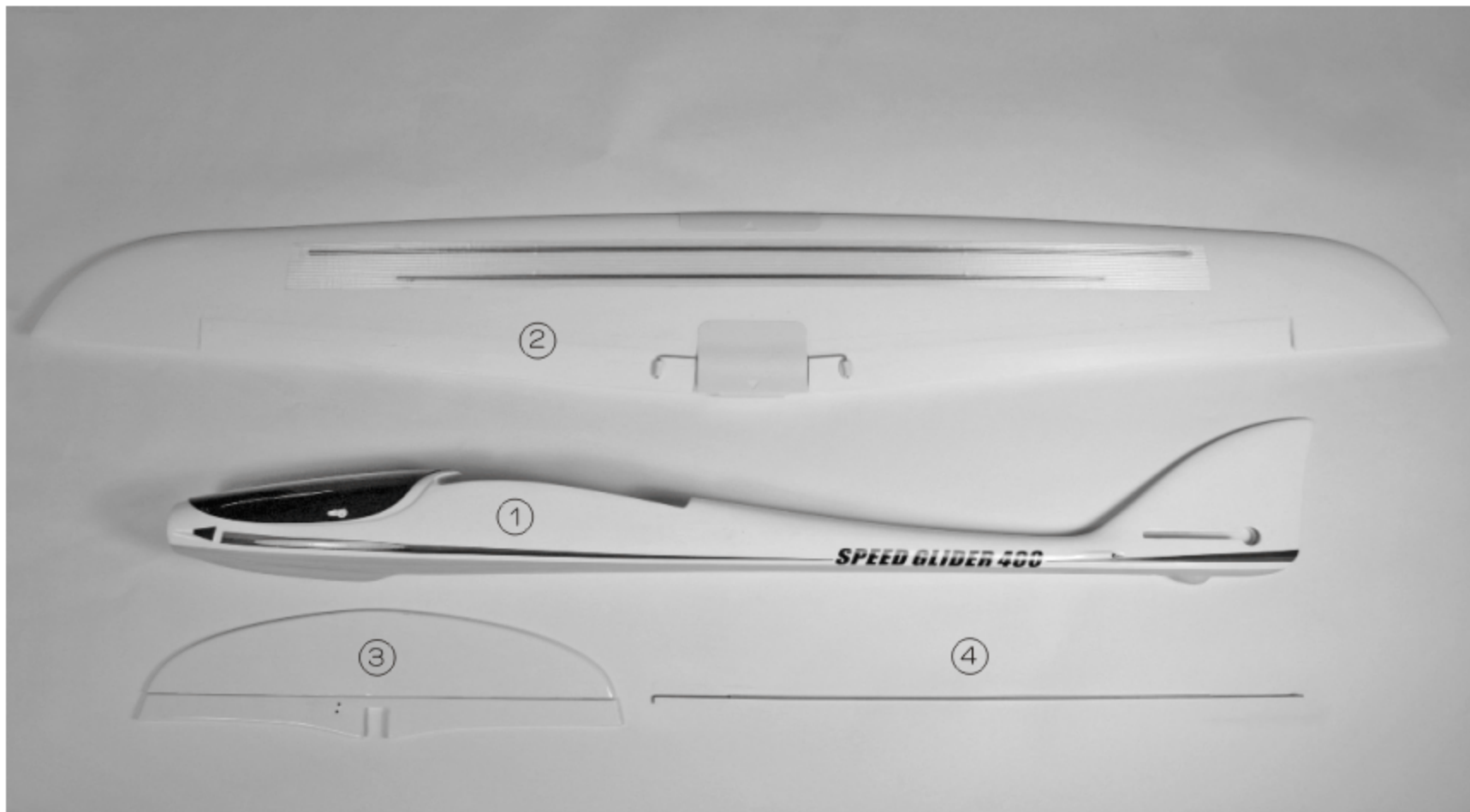
**ADDITIONAL TOOLS REQUIRED FOR ASSEMBLY 自備工具**

|  |  |   |   |
|--|--|---|---|
| <br><b>Scissors</b><br>剪刀 | <br><b>Cutter Knife</b><br>刀子 | <br><b>Diagonal Cutting Pliers</b><br>斜口鉗                | <br><b>Needle Nose Pliers</b><br>尖嘴鉗                       |
| <br><b>AB Glue</b><br>AB膠 | <br><b>CA</b><br>瞬間膠          | <br><b>Hexagon Screw Driver</b><br>六角螺絲起子<br>2.5mm/1.5mm | <br><b>Phillips Screw Driver</b><br>十字螺絲起子<br>#1 (φ 3.0mm) |

# 5. PREPARATION BEFORE ASSEMBLING 組裝前的準備事項

飛行練習方式

ALIGN



1. Fuselage x1
2. Speed Glider Wing x1
3. Horizontal Stabilizer x1
4. Elevator control pushrod (w/ sleeve)x1)
5. Hardware accessories x1
6. folding prop 5x3inx15x3
7. Pushrod clevises x2
8. Servo Cover x1
9. Aileron Pushrods  $\phi 1.2 \times 90\text{mm}$  x2
10. Wing bolt mounting plate x1
11. Pushrod mounting bulkhead x1
12. Control Horn x1
13. Control Horn base x1
14. Washer  $\phi 3 \times \phi 8 \times 0.8\text{mm}$  x1
15. Pushrod snap-on connectors x1
16. M3x16mm x1
17. M2x8mm x2
18. T2x4mm x2
19. x1

1. 機身 x1
2. 翱翔競速翼 x1
3. 水平尾翼 x1
4. 升降舵控制連桿(含套管)x1)
5. 機身改裝套件(附贈品)x1
6. 摺疊槳5x3inx15 x3
7. 連桿夾片 x2
8. 整流罩 x1
9. 副翼控制連桿  $\phi 1.2 \times 90\text{mm}$  x2
10. 主翼壓板 x1
11. 連桿套管固定片x1
12. 舵角片 x1
13. 舵角片下座 x1
14. 華司  $\phi 3 \times \phi 8 \times 0.8\text{mm}$  x1
15. 連桿壓扣 x1
16. 圓頭十字螺絲M3X16mm X1
17. 圓頭十字螺絲M2X8mm X2
18. 圓頭十字螺絲T2X4mm X2
19. 馬達固定片X1

## 1.Wing Assembly 主機翼組裝



**Cut open the aileron servo bay with knife.**

以美工刀將主機翼預留的副翼伺服機安裝孔切開。



**Push 9g servo into aileron servo bay as shown in photo above, leaving topmost of servo 6mm from wing surface.**

依上圖的方向將9g伺服機壓入已割開的安裝孔，並使伺服機凸出主翼正面約6mm。



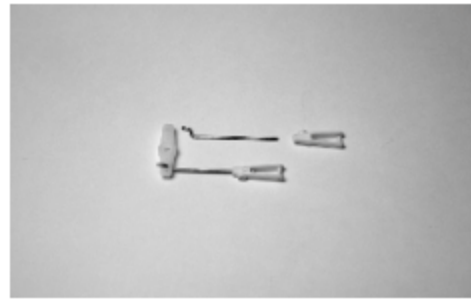
**Apply hot glue or epoxy around servo area to fix the servo in position.**

於伺服機的四周圍與底部塗上熱熔膠或AB膠，同時固定伺服機與整流罩。



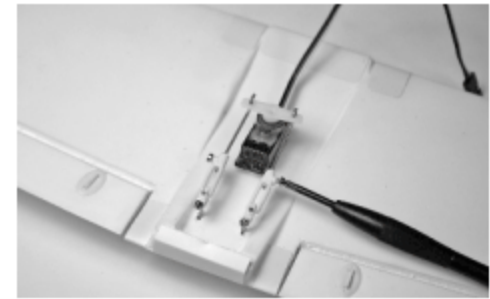
**Mount servo cover with hot glue or epoxy.**

上膠後立即蓋上整流罩，並使整流罩與機翼平貼固定。



**Assemble clevises onto aileron pushrod and servo horn with distance shown in above photo.**

依上圖示將伺服舵片與連桿夾片裝入副翼控制連桿。



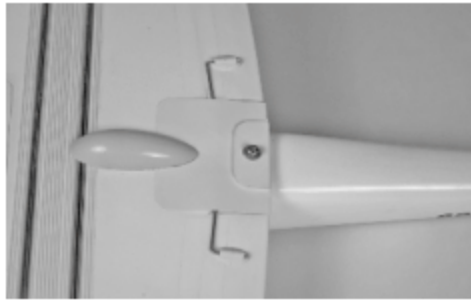
**Center the aileron servo. Install the clevises onto aileron horn brackets. Adjust the length of each rod until aileron has 0 degrees offset, then tighten the two T2x4 screws on clevises.**

將伺服機歸中立點，扣上左右連桿夾片，調整連桿長度使左右副翼呈0度水平，再以圓頭十字螺絲T2x4鎖緊固定。



**Mount the wing onto fuselage. Drill a hole on the wing's plastic reinforcement plate to allow M3 screw through.**

將主機翼裝入機身，並於機翼後方補強膠片的三角形缺口，以尖銳的工具挖孔，使M3螺絲可穿入鎖附。



**mount the wing to fuselage with M3x16 screws and M3 washer through wing bolt mounting plate**

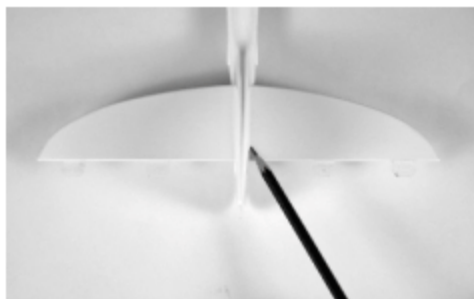
以圓頭十字螺絲M3x16穿入M3華司與機翼壓板，將主翼固定於機身。



**Check to ensure wing is square relative to fuselage by measuring distance A and A1 in photo above**

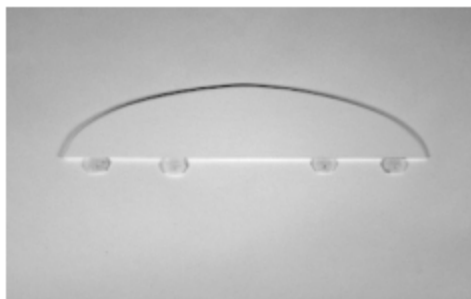
檢查主翼兩側與尾部的距離須等距。

## 2 Tail Assembly 尾翼組裝



**Temporarily slide the horizontal stabilizer into the fuselage. With the stabilizer centered, mark the area covered by fuselage.**

先將水平尾翼穿入機身尾部，調整至中心位置後，上下面均作上記號。



**Using a knife remove the protective film from the area covered by fuselage to ensure good adhesive area for Glue.**

將作上記號的範圍，以美工刀將水平翼的披覆膜刮下，使膠可以確實的黏著固定。



**Slide elevator through fuselage first, followed by horizontal stabilizer. With stabilizer centered, apply epoxy to top and bottom at area covered by fuselage.**

先將升降舵穿過機身，再將上下面塗上適量AB膠的水平翼固定於機身的中心位置上。



**Check again to ensure wing is square to fuselage. Adjust as needed.**

檢查主機翼兩側與水平尾翼的距離須等距。



**Insert elevator hinges into horizontal stabilizer, and apply drop of CA on each hinge to fix in place.**

將升降舵插入活頁片內,如上圖翻折升降舵,並以CA膠於活頁片正反面各滴一滴即可固定。



**Insert the pushrod assembly (with sleeve) from tail end of the fuselage.**

將升降舵控制連桿與套管由機身尾部預留孔穿入。



**Temporarily fix the control horn so it lines up with pushrod.**

安裝舵角片時,注意連桿與舵角片需在同一直線上。



**Position the control horn so the pushrod mounting holes line up with edge of elevator. Fix the control horn in place with two M2x8 screws and control horn base.**

舵角片的連桿安裝孔須對準水平尾翼與升降舵的結合面,調整好後,以圓頭十字螺絲M2x8與舵角片下座將舵角片鎖緊固定。

3 Installation Of Electronics 電子設備組裝



**Mount the 9g servo in place as shown. Slide the elevator pushrod sleeve through the pushrod mounting bulkhead. Then slide the pushrod through sleeve, and connect it to servo horn as shown.**

如圖裝上9g伺服機,之後先將連桿套管固定片穿入連桿,再將連桿、伺服機舵片安裝於伺服機上。



**With the elevator at 0 degree offset position, bend the pushrod 90 degrees to fit into the control horn. Cut off excess pushrod and fix it in place with pushrod snap-on connector**

將升降舵置於0度水平的位置,對準舵角片的穿入孔,將連桿折彎90度後減去多餘的長度,接著穿入舵角片,並以連桿壓扣將連桿固定。



**Position the motor mount plate and fix the motor in place with screws included with motor.**

套入馬達固定片,以馬達隨附的螺絲將馬達鎖緊固定。



**Install the 5x3 folding prop while leaving 1mm space between the spinner and fuselage as shown**

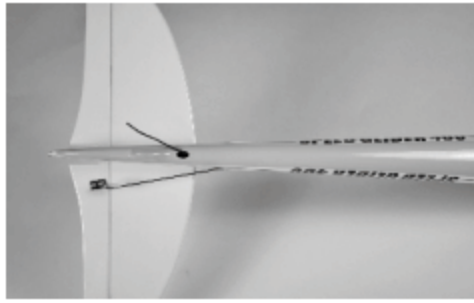
裝上5x3in摺疊槳,注意槳座須與螺絲保持1mm的距離。



**Recommended mounting position for electronics shown above.**

其它電子設備建議安裝位置如上。





Route the receiver antenna through the opening in fuselage rear.

接收機天線由機尾後方的預留孔穿出



The canopy is fixed in place by sliding toward the back into locking position

蓋上機艙罩，並往後方推至定位即可卡緊固定



Check the horizontal stabilizer is perpendicular to vertical stabilizer. Also check the distance between horizontal stabilizer and wing is the same on left and right

size.

最後再次確認垂直尾翼與水平尾翼相互直，主機翼與水平尾翼須等距

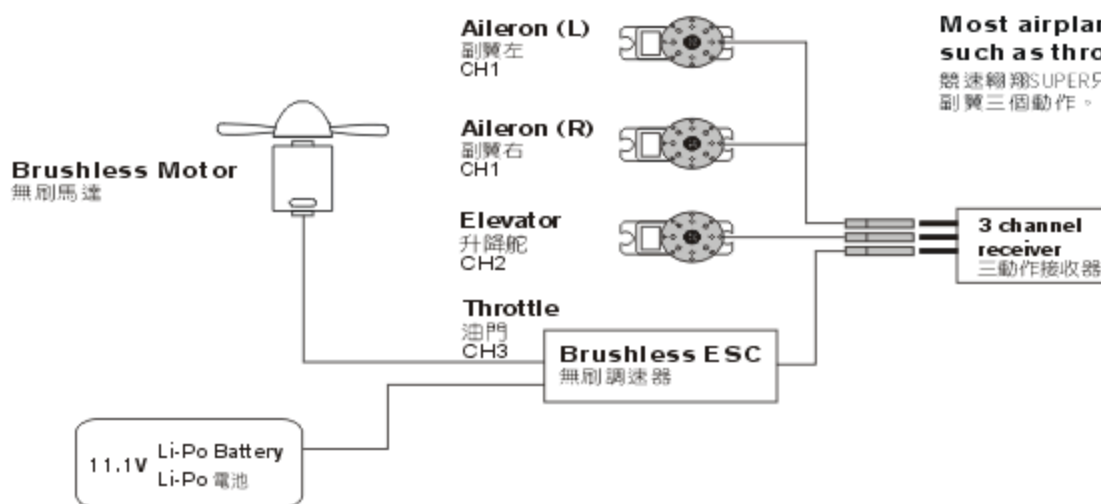
C. G. Center of Gravity 重心

The gravity is set center at about 68mm from main wing, and use batteries' position to adjust the center of gravity.

重心位置位於主機翼前緣68mm處，利用移動電池的位置來調整重心。



4 Channels Receiver Operation Description (Using Electric Airplane as Example) 四動作接收器頻道說明 (電動飛機使用範例)



Most airplane can be operated with 4 channels such as throttle, rudder, elevator and Aileron.

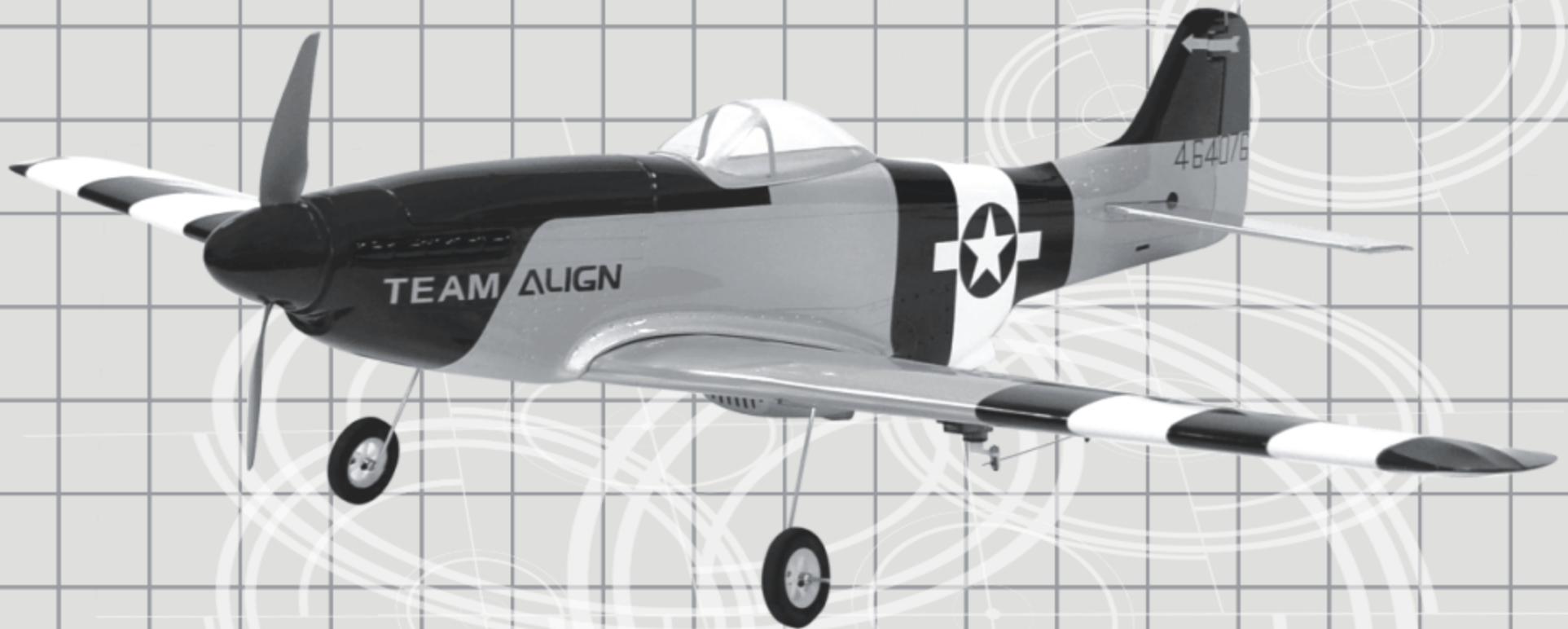
競速翱翔SUPER只需用到三個動作，也就是油門、升降舵、副翼三個動作。

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**Specifications & Equipment/規格配備:**

**Length/機身長: 720mm**

**Height/機身高: 270mm**

**Wing span/主機翼長: 990mm**

**Wing square/翼面積: 14.6dm<sup>2</sup>**

**Weight/空機重: 370g**

**Recommended Power and Electric Equipment (Not included):**

自備動力及電子設備規格:

**Transmitter/發射器: 4 channel or more/4動以上**

**Receiver/接收器: 4 channel or more/4動以上**

**Servo/伺服器: 9gx4pcs**

**Brushless ESC/無刷調速器: 20A or more/20A以上**

**Brushless motor/無刷馬達: Approx. 1400KV**

**Battery/電池: Li-Po 11.1V(1800mAh or more/以上)**

**Propeller/螺旋槳: 7x5", 8x5.5"**

