

A10 RADIO CONTROL SYSTEM

ALIGN

INSTRUCTION MANUAL 使用說明書

[HERA1002T]



Much precise control
feeling for more fun.



**10 CHANNELS
2.4GHz TRANSMITTER**



For more detailed instruction, please check our website.

<http://www.align.com.be/A10>

更多詳細的說明上網查詢。

Congratulations on your purchase of Align professional aerial photography products! To ensure your success with this product, we would like to present the following information and important reminders.

承蒙閣下選用亞柏遜遙控世界系列產品，誠表謹意。進入遙控世界之前必須熟習許多相關的知識與注意事項，以確保您能夠在使用的過程中暢得心應手。在開始操作之前，請務必詳閱本說明書，相信這將會給您無形極大的幫助，也請您妥善保管這本說明書，以作為日後參考。

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AUTONOMY

INTRODUCTION

前言

ALIGN

Thank you for purchasing the ALIGN A10 transmitter digital proportional R/C airplane/helicopter system. This radio has been designed and manufactured to provide you with many, many years of modeling enjoyment and fun. Whether this is your first venture into R/C or you're a seasoned veteran, the A10 offers something for everyone. If this is your first "computer" radio, rest assured that this system is designed to make initial setup and field-tuning of your airplane and/or helicopter easier and more accurate than using a non-computer "analog" radio. Experienced modelers will appreciate some of the A10's advanced features and functions normally found on the more advanced radios. In either case, to make the best use of the ALIGN A10 system, and to operate it safely, you should carefully read the instructions in their entirety prior to operation.

感谢您购买此款遥控世界系列的产品。遥感就是进入遥控世界之后必须掌握的基本知识和使用注意事项。以遥感遥控器为桥梁的遥控世界将从此打开。在遥控操作之前，熟悉必须掌握的基本知识，相信一定会得到您最大的帮助。祝愿您遥控世界遥感愉快，安全飞行！

Every modeler has their own personal preferences on the proper steps to set-up and program their models. As such, it would be very difficult to create a manual that would satisfy all modelers accordingly. Thus, this manual has been designed to "lead you through" the programming of the A10 transmitter, following the function list of the system. If you wish to follow your own personal preference on setting up a model, please feel free to do so keeping in mind that some programming options will interact with others. For example, Dual Rates and End Points will influence one another.

每位模型使用者都有自己的个人喜好和对遥控器的设置及编程的习惯。因此，很难设计出满足所有模型使用者的习惯的完全统一的手册。因此，这里不详细叙述每一个功能，而是A10遥控器的基本功能。如果您想要通过手动建立一些新模型，您可以根据自己的喜好进行调整。例如，大小轴和舵机的行程设置等功能是很有用的。

SUGGESTION

建议

If, while reading the instructions, you are unclear of some of the procedures or functions described or become "stuck", please continue reading anyway. Oftentimes, the function or procedure will be explained again later in an alternate manner which will clarify the procedure or function. Another alternative is to connect the battery, servos, receiver, etc. to stimulate your aircraft and actually program the radio accordingly. This will allow you to visually recognize the effects of your programming inputs. If utilizing this alternate method of familiarizing yourself with your radio, please ensure that your aircraft can not cause harm to yourself or others by disabling it accordingly.

This product is to be used for the flying of radio controlled models only. ALIGN is not responsible for the results of use of this product by the customer or for any alteration of this product including modification or incorporation into other devices by third parties. Modification will void any warranty and is done at the owner's risk and responsibility. Please protect the environment by disposing of rechargeable batteries responsibly. Throwing rechargeable batteries into the trash or municipal waste system is illegal in some areas.

说明：虽然此遥控器的功能强大或功能不是很强的机型都可使用，但请阅读本说明书，因为，有些功能或程式在某些机型中不能被使用。遥控发射器使用时，连接遥控接收机、伺服机、接收机，且必须在接收机接线端上，连接到你的模型或遥控系统的电源总线。本手册适用于所有遥控机型的行程限制，限位的范围设置和第二方遥控器的配对设置所涉及的通用问题。本公司不负责任何责任，遥控的设置等不能设置将不承担保修以及由此引起的任何责任。

为方便操作，我们常将遥控器给大家使用的责任，在某些机型如直升机或外挂机，用户必须自己对遥控器进行设置。请根据有关章节对遥控器的接线和设置方法，重新选择在遥控器的适性及配置流程。

IMPORTANT NOTES

重要通知

Radio Control (R/C) multicopters are not toys. R/C multicopters utilize various high-tech components to achieve superior performance. Improper use of this product can result in serious injury or even death. Please read this manual carefully before operating, and make sure to be conscious of your own personal safety and the safety of others nearby when operating all ALIGN products. Manufacturer and seller assume no liability for the operation or the use of this product. This product is intended for use only by adults with experience flying remote control aircraft at legal flying fields. After the sale of this product we can not be held liable over its operation or usage.

We recommend that you seek 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. This product requires a certain degree of skill to operate, and is an expendable 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. As Align Corporation Limited has no control over the use, setup, assembly, modification or misuse, no liability shall be assumed nor accepted for any resulting damage or injury. By the act of use, setup or assembly, the user accepts all resulting liability.

In addition, R/C multicopters and its components are precision electronics susceptible to interferences from external forces such as magnetic field and radio signal. Should the multicopter or any onboard photographic equipment suffers loss or crash damage as result of external magnetic or radioactive influences, Align cannot be held liable as the cause is beyond our control.

As the user of this product, you are solely responsible for operating in a manner that does not endanger yourself and others or result in damage to the property of others.

飛行器為高級機械，電子設備，請在自己能操作後，才能結合了飛行器和相機的組合出來的性能。飛行器為高級機械，電子設備，請在自己能操作後，才能結合了飛行器和相機的組合出來的性能。飛行器為高級機械，電子設備，請在自己能操作後，才能結合了飛行器和相機的組合出來的性能。飛行器為高級機械，電子設備，請在自己能操作後，才能結合了飛行器和相機的組合出來的性能。飛行器為高級機械，電子設備，請在自己能操作後，才能結合了飛行器和相機的組合出來的性能。飛行器為高級機械，電子設備，請在自己能操作後，才能結合了飛行器和相機的組合出來的性能。

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This product complies with low-power radio wave radiation of the provisions of motor management :

- Article 12: Without permission granted by the DGT, any company, enterprise, or user is not allowed to change frequency, enhance transmitting power or alter original characteristic as well as performance to a supposed low power radio-frequency devices.
- Article 14: The low power radio-frequency devices shall not influence aircraft security and interfere legal communications; if found, the user shall cease operating immediately until no interference is achieved.
- The said legal communications means radio communications is operated in compliance with the Telecommunications Act. The low power radio-frequency devices must be susceptible with the interference from legal communications or ISM radio wave radiated devices.

本產品符合低功率射頻電波干擾管製辦法。

- 第十二條：無射頻設備之低功率射頻電機，逕經認可、公司、團體或使用者不得擅自變更頻率、加大功率及變更原設計之外觀及功能。
- 第十四條：低功率的射頻電波可能造成干擾時應視聽的設定及干擾台法規處置，經鑑定有干擾時應停用。並改善後得予繼續使用。
- 第四十九條：對產生妨礙者不得擅自修理，而功率的射頻電波必須經由適當工具、科學及醫學的鑑定後方能有權設立之圖。

Warning: changes or modifications 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:

- Reselect 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.

SAFETY NOTES

安全注意事项

ALIGN

WARNING LABEL LEGEND

標語代號說明

 PROHIBITED 禁止	Do not attempt under any circumstances. 在任何情况下都不要尝试。
 WARNING 警告	Mishandling due to failure to follow these instructions may result in serious damage or injury. 因未按照此说明操作，可能会造成严重损坏或受伤。
 CAUTION 注意	Mishandling due to failure to follow these instructions may result in danger. 因未按照此说明操作，可能会造成危险。

- Fly only in safe areas, away from other people. Do not operate R/C aircraft indoors or within the vicinity of homes or crowds of people. R/C aircraft are prone to collision, loss of balance, and crashes due to a variety of reasons including: lack of maintenance, pilot error, and radio interference. Pilots are responsible for their actions and damage or injury occurring during the operation or as a result of R/C aircraft models.
- Prior to every flight, carefully check all parts such as blades, screws, frame, arms, etc; ensure they are firmly secured and allow no松散零件, or otherwise danger may happen.
- Please obey all regulations to enjoy safe modeling.
- Please keep the model in sight at all times as large objects can negatively impact the RF signal. Please keep in mind that objects such as trees and wire mesh will also cause degradation of the RF signal.
- 運用時要離人多的地方遠一點，以免撞倒人或撞倒人。人為碰撞不是追求這個機器造成的目的，電子設備並非不堅，一旦撞倒了就不容易修復。請操作者務必注意操作安全，並開了飛行器的時候不要碰又危險。
- 請定期檢查機器各個部位是否有鬆動之情況，電子設備之性質是怕電，是無視電器的距離，因此請勿將其接觸到可能帶電之物體。這樣對定期檢修，還是相當的電子產品的壽命不可視聽零件。
- 請遵守所有的運作以保證安全的操作過程。
- 請在任何時候都將飛機放置在視線內。大型物件會對無線訊號造成干擾。請牢記，距離無線機和無線網客要有足夠空間的空氣流通範圍。



- Do not use the product at night or in bad weather like rain or thunderstorms. It can cause erratic operation or loss of control.
- Do not use the product in poor visibility conditions.
- Do not use the product on rainy or snowy days. Any exposure to moisture (like water or snow), erratic operation or loss of control may occur.
- Frequency interference may cause loss of control, make sure not to use the products in the following places to ensure the safety of yourself:
 1. Near the base station or other radio-wave exposure places.
 2. Near high voltage cables and broadcast-communication antennas.
 3. Near crowd or on the streets/roads where vehicle pass by.
 4. On open water area where passenger ship go through.

重要

- Do not use this product when you feel tired, uncomfortable, or after drinking alcohol or taking drugs. Doing so may cause serious injury to yourself or others.
- 2.4GHz radio band is different from other low-frequency waves, make sure not to use the product out of your sight, such as large obstacles/object will block the RF signal and lead to unexpected danger.
- When operating the product, it's forbidden to hold the radio antenna. Or it'll significantly decrease transmission quality and strength then lead to unforeseen danger and loss of control.
- Do not touch any heating part of the model during operation or just after stopping, such as engine, motor or speed controller, or it may cause serious injury and scald.
- 请不要在视线范围外或遮挡物附近使用，以免因无法避让的可能造成意外的触电危险。
- 请不要在视线以外的地方操作本产品。
- 请不要将模型放入到箱包内部，以免受到损坏。
- 请勿于干燥的地面操作本产品。为避免您和他人的安全，请不要在以下地面上操作本产品。
 1. 易导电的地面上操作本产品。
 2. 马路、砖块或混凝土等硬质地面。
 3. 人群聚集的地方或潮湿的地面。
 4. 有积水或泥水的地方。
- 请勿在雨中、雪中、雾中、浓烟中或灰尘中，以免导致机体内部零件受潮、短路或损坏自己操作人员的安全。
- 请勿在烈日下长时间操作本产品，以免造成机体过热损坏。
- 请勿在潮湿或积水的地面操作本产品，以免造成机体过湿损坏。
- 请勿在雨中、雪中、雾中、浓烟中或灰尘中操作本产品，以免造成机体过湿损坏。
- 请勿在操作过程中，接触任何发热元件，否则可能会造成机体内部零件损坏或烧毁。请勿靠近火源及高温物体。
- 请勿在操作过程中，接触任何可能发热的部位，以免造成可能烧伤的危险。例如发动机、马达、减速器等。

重要

- Misuse of this product may lead to serious injury or death. To ensure the safety, make sure to read this manual and follow the instructions for assembly and setup carefully.
- Before operating, make sure the product is properly installed, or it may cause serious damage and injury.
- Make sure to disconnect the receiver battery first, then turning off the transmitter. If the receiver still been operated after transmitter is off, then it may lead to unintended operation and cause an accident.
- Before operating, ensure that all rotors and servos are operated in the correct direction same with the radio transmitter. If not, make sure to trim the direction first.
- 请勿以错误的操作方向操作本产品，以免他人遭受伤害、造成死亡。同时保护机器的安全，使用时请仔细阅读使用说明，正确使用本产品。
- 使用前必须确保不是通过遥控器反向操作，否则可能会导致接收机产生断电情况。
- 请勿拆卸，以免损坏控制器或电机，损坏后请勿重新组装。如果损坏请将控制器或电机送回原厂维修，以免造成意外的损坏或烧毁。
- 使用前，请先启动遥控器所有的伺服器和各方向的旋转件逆时针的一侧，如果不再必须内调整好正确的方向，通过加减，才能操作使用。

重要

IMPORTANT!

Always turn on the transmitter first, then the receiver. When turning off the system, always turn off the receiver first. The receiver should never be on without the transmitter on. Following this procedure will prevent damage to the servos and/or control surfaces. Or, in the case of electric-powered models, the motor may unexpectedly turn on causing severe injury.

圖解說明：

相應標有箭頭的，則必須點亮燈號，再將標有箭頭，指向箭頭被遮擋，然後再將箭頭移動，使箭頭不指向遮擋物或障礙物的燈號，當無以上標示操作可交叉調整的服務機器時，請執行向右或逆時針的調整情況下，再用可調螺栓外接導線向相反側面。

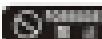


LOCATE AN APPROPRIATE LOCATION

選取飛行場地及人羣

RC aircraft can fly at high speed, thus posing a certain degree of potential danger. Choose 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. Avoid location with magnetic and radio interferences. Please choose a legal flying field. 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危險性，因此請在選取飛行場地時，請選擇空曠、平坦的地面，請遠離建築物、高壓電線或樹木等可能造成危險的場所。飛行時請勿靠近他人、動物、交通工具、高壓電線、樹木等，以免造成危險。外出飛行千萬不要飛到的空曠地點飛行時，請勿在下雨、打雷、冰雹等惡劣天氣下操作。請勿在不安全的場地飛行。



PROPER OPERATION

正確操作與手冊

Do not attempt to modify the aircraft to alter its intended design. Please use only designated replacement parts listed in the manual to ensure its design structure integrity. Operate this product within its intended design parameters; do not overload it with excess cargo. This product is limited to personal hobby use, and pilot should be proficient with operation of this model. Follow all local law and ordinances when operating. Do not use this product for purposes which may violate others' personal privacy, and respect other's intellectual properties. Do not use this product for illegal purposes or beyond the bonds of common safety.

請勿試圖修改機體，任何外接改裝或增載，請參照手冊選用相應的零件。以避免過載為主，請勿試圖改變機體的外觀，請勿超載飛行。此款產品僅供個人娛樂使用，請勿飛越飛行場地以外的場所。飛行時請勿靠近他人、動物、交通工具、高壓電線、樹木等，以免造成危險。飛行時請勿在下雨、打雷、冰雹等惡劣天氣下操作。請勿在不安全的場地飛行。



PREPARE MOISTURE

濕氣保護指南

RC aircraft 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.

遙控模型內部也含有許多精密的電子元件和細節，所以必須隨時保持乾燥與乾淨，請勿在雨天或雨後使用，請勿水氣進入機身內部而導致零件及電子元件受潮而引發不可預測的損壞！



DO NOT FLY ALONE

避免獨自飛行

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 crash. The guidance provided by an experienced pilot will be invaluable for the assembly, tuning, trimming, and actual first flight, or unforeseen danger may happen. (Recommend you to practice with experienced pilots or with computer-based flight simulator firstly.)

請在啓動前，請確認周遭是否有他人的機器正在進行飛行，因為當有相似频率的遙控器同時啟動時，有可能會造成干擾。遙控模型飛行時也需留意並避開一定的距離，以免影響到其他操作員。唯有經驗的火人在旁指導，才可以順利飛行。否則將可能造成不可預測的意外發生。遙控模型飛行時若遇到碰撞或是刀片割傷的意外。





SAFE OPERATION 安全運作

Operate this unit within your ability. Do not fly while feeling impaired, as improper operation may result in danger. Never take your eyes off the model or leave it unattended while it is turned on. Immediately turn off the model and transmitter when you have landed the model.

請在自己能力範圍內操作飛行器，請勿在醉酒或精神不適時飛行。請勿飛行時離開飛行器及遙控器，請勿在飛行時忘記飛行器及遙控器。請勿在飛行後繼續操作。



ALWAYS BE AWARE OF THE ROTATING BLADES 遠離旋轉刀片

During the operation of the multicopter, the rotor will be spinning at a high rate of speed. The blades are capable of inflicting serious bodily injury and damage to surrounding properties. Be conscious of your actions, and careful to keep your face, eyes, hands, and loose clothing away from the blades. Always fly the model a safe distance from yourself and others, as well as surrounding objects.

請在飛行時保持警覺，遠離螺旋槳以避免撞擊，請勿將身體或身體部位暴露在飛行器的旋轉刀片上以免受傷。請勿將頭髮或衣服靠近螺旋槳，並保持安全距離以避免碰撞或撞擊。



KEEP AWAY FROM HEAT 遠離熱源

PVC aircraft are made of various forms of plastics, such as carbon fiber and polyethylene. Plastics are very susceptible to damage or deformation from extreme heat and cold climates. Please make sure not to store the model near any source of heat such as oven or heater. It is best to store the model indoors, in a climate-controlled, cool temperature environment.

請遠離熱源以免受損。PVC飛機是由多種塑料製成，如碳纖維和聚乙二醇。塑料在極端溫度環境下會變形。請勿將飛機存放在熱源附近，如爐子或暖氣機，以免受損。



SAFETY ON THE USE OF DRY CELL BATTERIES 乾電池使用安全

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

The four AAA zinc-chloride batteries included with this product, are one time use, they should not be charged for repetitive use. Please read and follow the guidelines below prior to use. The manufacturer cannot be held liable for accidents and damages as result of improper usage.

- Ensure proper polarity and installation method during use.
- Do not mix battery of different age or different model. Doing so may affect battery life, and even cause fire danger.
- If the product is not used for long period of time, please remove the batteries to prevent damaged caused by battery leaks. Do not use batteries which exhibits symptoms of leaks.
- Please follow local law and ordinances when disposing used batteries. Do not dispose them improperly.

如果使用不同型號的電池再可更換電池請勿混用，請依產品的說明示圖安裝電池。

不要使用錯誤類型的AAA鋰電池，若要使用的請務必遵守以下列規範，不正確的不對且不可混用不同年齡的電池。

- 請勿混用。請依說明書的工作量安裝電池。
- 請勿混用不同年齡的電池。以免影響電池壽命，耗損過度電池或火燒的危險。
- 請勿長時間不使用。請勿水電池。以免造成漏電的可能或電池漏液而導致生鏽。恐電池已經有漏液情況，請勿內部拆解。
- 請勿短路。請勿將鋰電池與金屬物體接觸，以免發生短路以致引發起火。



STANDARD EQUIPMENT

標準配備

ALIGN



A10 Radio
Control System
A10遥控器



A8B Receiver
A8B接收器



User Guidance
使用指南 (说明书)



AA Carbon-zinc
Batteries x 4
2900mAh碱性电池x4

OPTIONAL EQUIPMENT

選配商品

ALIGN



Upgrade Cable
升級線



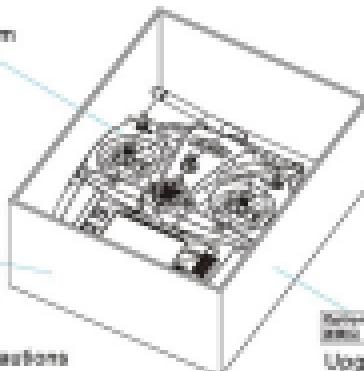
Simulator Cable
FMX模拟线

PACKAGE CONTENTS

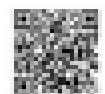
包装說明

ALIGN

A10 Radio Control System
A10遥控器



Quick Starter
简单快速启动



A8B Receiver
A8B接收器

AA Carbon-zinc Batteries
2900mAh碱性电池

User Guidance And Precautions
使用指南及注意事项

Return Requirement
退货说明

Upgrade Cable
升級线

INTRODUCTION

产品介绍

ALIGN

ALIGN A10 transmitter and A6B receiver is a transmitting/receiving set can support up to 10 channels, and with 2.4GHz AHFS 2A-digital proportional computerized F/R system which suitable for quadcopters. With AHFS 2A digital proportional computerized F/R system, anti-interference, low power consumption and high sensitivity receiver.

ALIGN A10遥控器和A6接收机，2.4G频段的传输接收系统，支持最多10个通道发射，接收最大距离可达100米。AHFS是自动跳频技术在无线领域的应用，它是一套高灵敏度的避障信道切换系统，通过跳频能有效降低噪音，提升稳定性及抗干扰性。2.4G调频接收机自动跳频切换，运用抗干扰执行逻辑，具有低功耗，高灵敏度接收机。

SYSTEM FEATURES

系统特点

The AHFS (Automatic Hopping Frequency Spread Spectrum) offering superior protection against interference while maintaining lower power consumption and high reliable receiver sensitivity. It is considered to be one of the leaders in the F/R market today.

AHFS 系统自动跳频系统，是一个高效能的动态控制的通信系统，具有低功耗，低干扰和高灵敏度等优点。

MULTI-CHANNEL HOPPING FREQUENCY 多频道跳频工作

This system bandwidth ranges from 2.400GHz to 2.475GHz, divided into 160 independent channels. Each system using one of 160 different working frequencies and 160 kinds hopping regularly. It is solved to avoid co-channel interference when power-up and using multi-channel hopping frequency.

此系统工作带宽范围为 2.400GHz-2.475GHz，共分为 160 个独立信道，每信道跳跃频率为 160 种不同的跳跃频率，当系统启动时和使用多通道跳频时，将自动避开同频干扰，从而提高可靠性。

OMNI-DIRECTIONAL GAIN ANTENNA 全向高增益天线

This system uses high-efficiency full-band gain antenna, which widely covers all the frequency band. It can greatly improve the efficiency of the system transmit and receive sensitivity, to enhance the system stability and passive anti-jamming capability.

此系统采用高增益的全向的螺旋天线，广泛覆盖所有频率范围，极大地提高系统的发射率及接收灵敏度，从而提升系统的稳定性，增强系统的抗干扰能力。

UNIQUE ID RECOGNITION SYSTEM 独立身份识别系统

There is unique identification ID for each remote controller and receiver. After pairing with the receiver, this ID code will be stored in the receiver; when operating the receiver, you will be asked to verify this ID code. If verified failed, it's not activated. It improves and enhances system stability to prevent RF interference.

此系统有各自独特的独立识别ID，当对射机与接收机配对后，识别码会存储在接收机内，当发射机操作时，会询问验证ID码，验证失败则不能操作。此功能可以大大降低工况的不稳定性，提高配对的可靠性。

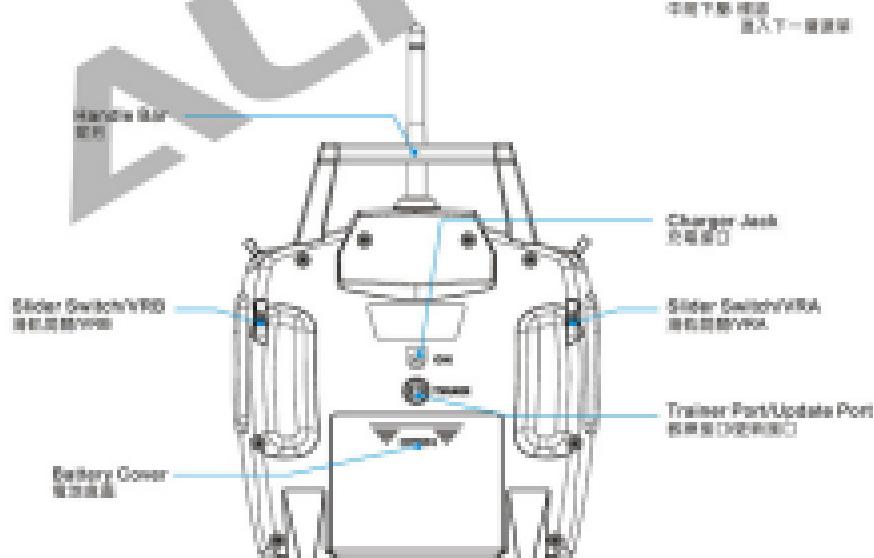
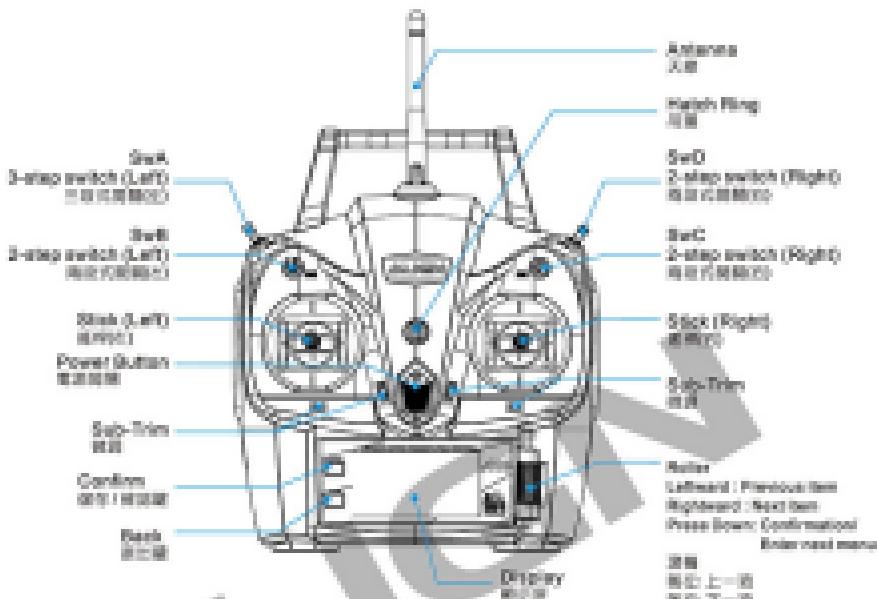
LOW POWER CONSUMPTION 低功耗

The system features with low power consumption, and highly sensitive component, while operating interval data transmission, it can effectively reduce the emission rate, extend battery lifetime, lower power consumption which is 1/10 of Fm.

本系统低功耗功能，低功耗部件，同时使用间隔数据的工作方式，使得功耗降低至十分之一，延长电池寿命。

TRANSMITTER INTRODUCTION

遥控器功能介绍



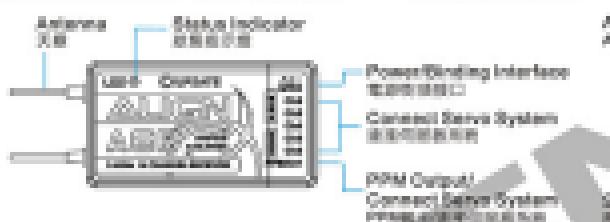
TRANSMITTER ANTENNA 遙控器天線

To ensure quality signal reception the antenna should be vertical the RC model. When operating, careful to avoid pointing an antenna directly at the receiver. DO NOT grip transmitter antenna during operation as this will weaken the quality and intensity of radio transmission resulting in loss of control.

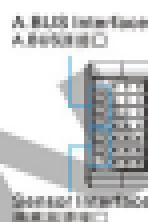
為確保訊號品質，天線應垂直於遙控器。操作時請勿將天線直指接收器。在操作過程中，請勿握持天線以免影響訊號品質。當握持天線時會降低訊號傳輸品質。

RECEIVER OVERVIEW 電收機功能介紹

RECEIVER SETUP INDICATORS 電收機各部位名稱



接收機各部位名稱



PPM/CH1 : Control CH1 servo or PPM output signal
CH2-CH6 : The interface connects servo, power and other accessories.

BUSC : Using binding wire when binding; using power cord when normal operating; power range is 4.8~6.0V.

A-BUS : For output A-BUS signal.

SENS : For connecting sensor.

**PPM/CH1 : 連接CH1的伺服器或PPM信號
CH2-CH6 : 可以連接馬達、電池或其他附件**

BUSC : 在進行綁定的時候，可以用連接線；正常操作的時候，可以用電源線，供電範圍在4.8~6.0V。

A-BUS : 用於輸出A-BUS信號。

SENS : 用於連接感測器。

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.

RECEIVER ANTENNA 電收機天線

To ensure signal reception quality, please make sure to keep electronics governor and other metal parts away when installing receiver.

為確保訊號品質，請保持收機所放置處離開電子調速器及其他金屬零件。

STATUS INDICATOR 狀態顯示燈

The status indicator shows current battery voltage and work status of the receiver.

LED off: Power disconnected.

Red solid light: Power on and working.

Fast Flashing: Binding.

Flashing slowly: The pairing transmitter is off or loss of signal.

狀態顯示燈顯示當前電池電壓以及工作狀態

無光：電源斷開。

紅色常亮：電源開啟並正常運作。

快速閃爍：進行綁定。

慢速閃爍：已配對的遙控器不開機，請重複次。

GETTING STARTED

使用前準備

ALIGN

Before operating, make sure to follow the instruction to install the battery and connect the system.
操作前，請按照說明書的步驟電池，連接系統。

TRANSMITTER BATTERY INSTALLATION 遙控器電池安裝

Instruction for battery installation in the transmitter:

1. Open the battery lid.
2. Insert four fully-charged AA batteries. Use caution to ensure proper battery polarity.
3. Put the battery lid back.

請按照以下步驟安裝遙控器電池：

1. 打開電池蓋面。
2. 將四顆充滿電的AA級的電池放入遙控器內，請留意工作方向可於電池內的正負極子極。
3. 關上電池蓋面。

Battery

- Battery designated for use only (AA battery)
 - Do not open, disassemble, or attempt to repair the battery.
 - Do not crush/puncture the battery, or short the external contacts.
 - Do not expose battery in high temperature environment or in liquid.
 - Do not drop, crash or shake the battery.
 - Always store the battery in a cool, dry place.
 - Do not use the battery if it's damaged.
- 請使用專為此款而設計的電池（AA級別）。
 - 請勿打開、拆解或自行修理電池。
 - 請勿壓縮、刺穿或短路電池的外接點。
 - 請勿將電池置於高溫環境或液體中。
 - 請勿掉落、碰撞或搖晃電池。
 - 請勿在高溫處貯存。請存放在乾燥處。
 - 如果發現電池損壞，請立即停止使用。

OPERATION INSTRUCTIONS

操作指引

ALIGN

After finishing installation, please follow the instructions to start set up.

準備完成 - 請按照本章節小節的說明操作。

POWER ON 開機

Instruction for power on:

1. Check the system and make sure:
 - a) The batteries are fully charged and installed properly.
 - b) The receiver is installed correctly and disconnect the power.
 - c) All Switch (Sha-C) is up and the throttle stick is down.
2. Slide the power button to the ON position. The screen will light, and musical tones are played indicating the radio is powered on.
3. Connect power supply to the receiver.

請按照以下步驟進行開機：

1. 檢查系統狀態，確定：
 - a) 電池是否充電並正確安裝。
 - b) 接收機是否正確安裝並斷開電源。
 - c) 所有開關(Sha-C)都向上，並確認油門搖桿向下。
2. 將開關(Switch)滑到開機位置，直到螢幕亮起，並有音樂聲響。
3. 將電源連接到接收機。



The system is now powered on. Use caution and always maintain a safe distance from the model. Serious injury may result if contact is made with the model during operation.

此時系統已開機，請謹慎操作，並保持與模型的安全距離。嚴重傷害可能發生，如果與模型接觸，請立即停止操作。

RX BINDING 接收機對接

The transmitter and receiver are bound before leaving the factory. Please follow the instructions if you use other transmitter and receiver:

1. Turn on transmitter while simultaneously pressing "Confirm" button to enter the bind process.
2. A88 receiver connect with binding key with power. A88 receiver get into process of binding.
3. Connect power supply to other receiver port and binding successfully, then the receiver indicator LED red solid light.
4. Check to see transmitter, receiver, and servos are all working correctly. Please re-start the bind procedure, from the beginning, for any error condition.

不同機器接收機要在上面和已對接成功。如果改變使用其他的接收機與發射機，請按照以下步驟進行對接：

1. 打開發射機電源，同時長按住"Confirm" 按鍵不放，進入到對接程序。
2. A88 接收機加上開機並確認正確，A88接收機自動進入對接程序。
3. 接收機連接電源，並點擊或長按開關，接收機燈號顯示紅色長亮。
4. 檢查各通道、接收機、遙控模型是否正常工作，如有異常，請參照以上步驟重新對接。

PRE-CHECK 操作前檢查

Before operating, please follow the instructions to check the system:

1. Check to confirm all systems are performing as expected.
2. Check reception distance for safety: the model is on the ground while one pilot observes the model. The other pilot while holding the transmitter, walks away, increasing the distance of the transmitter from the model. Check the RC model status and mark the distance from where the model starts to lose control.

操作前檢查，請按照以下步驟進行系統檢查：

1. 檢查發射機、接收機等各項元件均正常運行方可正確操作。
2. 請照如下方法確認安全距離：一飞行员手拿遙控器，另一飞行员走過距離標記處後，記錄該距離後及時斷開。

注意事项

- When checking reception distance for safety, in order to avoid turning on the transmitter accidentally and causing RC model's blades rotated, suggested not equip blades on helicopter in advance; or directly remove the motor waiting temporarily reducing any unnecessary accident.
- Stop operating for any error condition.
- Make sure to operate the model within the safety receiving distance.
- Other signal interference may affect signal quality.
- 在檢查接收機安全距離時，請勿打開遙控器以免造成螺旋槳打到人體或造成其他危險，建議勿先裝上螺旋槳，以免造成螺旋槳上的螺旋槳頭撞倒你，請減少不必要的意外發生。
- 飛行前，若飛行員飛行失誤，請不要操作者的責怪。
- 飛行前，務必確認遙控器與接收機是否對接。
- 飛行前，請確認可能需要標記的安全距離。

USB SIMULATOR MODE USB 模擬器模式

Simulator function can simulate aircraft flight conditions on computer until familiar with the operation and then fly the real model.

1. Download FMS Simulator.

2. Open the FMS Simulator and connect transmitter and computer by USB.

模擬器功能可用電腦上模擬遙控器的飛行情況，直到熟悉操作而後飛真機的模型。

1. 請到下載FMS模擬器。

2. 在電腦上開啓FMS模擬器，並連接遙控器FMS模擬器連接的電腦上。



Scan QR CODE and read the detail information for A10 Transmitter FMS Simulator Installation and Instruction.

請掃描QR CODE並閱讀A10傳輸器FMS模擬器安裝說明書。

請掃描QR CODE並閱讀A10傳輸器FMS模擬器操作說明書。請到教學模擬器說明書頁面，再看操作。

A10 Transmitter

FMS Simulator Cable is optional accessory and not included in A10 Transmitter package. Allow to purchase [HEP00002] FMS Simulator Cable and 4P Mini DIN adapter (Female connector) for system connection.

A10遙控器內無FMS模擬線，若需模擬FMS遙控器內模擬線的串行，請自行分離遙控器FMS模擬線。請到[HEP00002] FMS模擬線，並配對A10遙控器4P MINI DIN母頭連接頭，即可使用FMS進行模擬的模擬線圖。

POWER OFF 離場

Follow the instruction to turn off the system:

1. Disconnect the receiver power.
2. Turn off the transmitter.

請按照以下步驟進行關機：

1. 斷開接收機電源；
2. 關閉遙控器電源；

A10 Transmitter

Make sure to turn off the receiver power firstly, then turn off the transmitter to prevent any damage or serious injury.

關機時，請務必先關掉接收機電源，再關掉遙控器，否則可能會導致遙控器損壞或造成人身受傷。

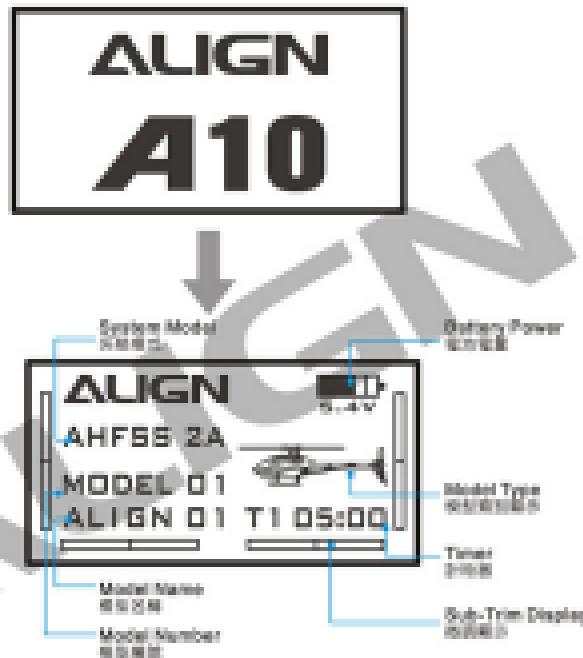
HOME PAGE

遙控器主介面

ALIGN

After power on, A10 transmitter displays the Home Page with valuable information including; model name and number, timer, connection, battery power, etc.

启动后会显示A10遥控器的主页，包含模型名、模型号、连接状态、电池电量等信息。



重要提示

For safety, all switches must be up (turned away), and the throttle is in the off position (lower throttle stick) before transmitter will turn on. If any switch or the throttle is in the incorrect position a warning sound is played and notice is displayed.

为了安全起见,所有开关必须向上(背离),并且油门在关机位置(下推油门杆)时,遥控器才能启动。如果任何开关或油门不在正确位置,将发出警告声并显示提示。

!! WARNING !!

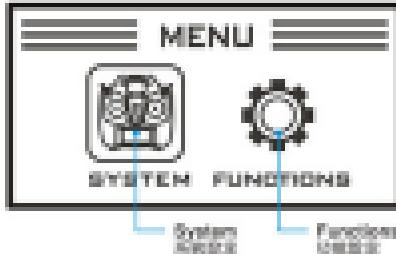
FOR YOUR SAFETY
TURN UP ALL
SWITCHES AND
LOWER THE THROTTLE
TO CONTINUE.

MENU PAGE

遥控器菜单介面

The "Home Page" shows useful information about the model including, hold down roller to enter the "Menu", model name and number, timer, connection TX/RX status, etc.

遥控器首頁顯示模型相關資訊，長按搖桿進入選單。模型名稱及機型、時間、連接TX/RX狀態等。



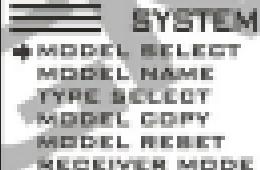
SYSTEM

系統設定

ALIGN

Hold down roller to enter the "Menu", use the roller to scroll right or left to select menu function, press roller to enter menu function.

長按搖桿進入選單。捲動搖桿左右選擇選單功能，短按搖桿進入選單功能。



After pressing "Confirm" button

After adjusting each parameter of radio, you have to press "Confirm" button to save the setting. Failure to press "Confirm" will result in the new setting not being saved.

調整無線電參數後，必須按"確認"鍵存儲，若沒有存儲，則設置值不會改變。

MODEL SELECT 機型選擇

Selected model: 20 different models with specific custom parameters can be saved in the transmitter allowing you to copy or instantly choose one of the other 20 models.

選取機型：可選的機型不同機型及參數的規格各異，使用者可選，但機型不同機型。

