MR25 / MR25P

[RM42501XET] [RM42503XST]

ALIGN

INSTRUCTION MANUAL

使用說明書

FPV RACING QUAD

For more detailed instruction, please check our website.
http://www.align.com.tw/multicopter-en/mr25/
更多詳細說明請上官網。

ANDROID APP ON Google play

Download on the App Store

Congratulations on your purchase of Align professional aerial photograph 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，以確保您能夠在使用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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INTRODUCTION
前言

We appreciate your patronage of Align professional aerial photography products. To ensure your success with this product, we would like to present the following information and important reminders.

Align MR25/MR25P with flight controller born from the integration of cutting edge electronics and innovative technology. Utilizes a 32 bits high speed processor, combining ESC, power distribution system, OSD, Bluetooth connectivity, and gimbal control function. Featuring a high precision 6-axis gyroscopic sensor and barometric sensor which is derived from Align's core technology. The highly intelligent attitude calculations results in a highly stable and reliable performance.

Compact design with tight fitting body. Unique canopy slip over design giving the ability to swap out batteries with ease while giving a sealed enclosure to all core electronics to prevent damage from crashes. Multi injection molding allowed for newly designed anti shock landing gear that has rubber over the plastic arms to allow for smoother landings and prevents sliding and skidding.

In order for you to thoroughly enjoy the product, please read through this manual prior to assembly and setting up. Keep this manual handy for future reference.

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亞拓MR25/MR25P穿越機結合高科技與尖端IT工業的MRS飛控系統，採用32位元高速運算處理器，整合ESC控制、電源管理系統、OSD、藍牙與雲台控制功能。內置高精準六軸陀螺儀與氣壓計，承襲亞拓核心技術，高智能姿態控制演算法，發揮出高智能、高穩定、高可靠度與全方位的性能。

簡潔的機體設計，完美收線於機身內；獨家機殼防滑設計，拆裝時更得心順手，能完整包覆保護機體。採用獨家埋設技術的避震腳架，有效緩衝反做用力，使起飛及降落時的動作更平穩。

為了讓您容易方便使用，在開始操作之前，請您詳細的閱讀完這本說明書之後再進行安裝與設定，同時請您妥善保存這本說明書，作為爾後調整的參考。

QR CODE LINKS TO INSTRUCTIONAL VIDEOS
QR CODE教學影片

While this manual provides instructional information and references for this product, Align also produced instructional videos covering various topics pertaining to this model. The videos are available at the following link:

Http://www.align.com.tw/multicopter-en/mr25/

說明書詳細介紹了本產品的使用說明，供您組裝時參考。另外，亞拓提供了各步驟的組裝教學影片，請利用下方連結處觀看，以確保您是安全且正確的使用本產品。

網頁瀏覽http://www.align.com.tw/multicopter-en/mr25/

Assembly Tutorial 組裝教學	Program Download Tutorial 下載教學	Configuration Tutorial 設定教學	Operation Tutorial 操作教學

IMPORTANT NOTES
重要聲明

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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 cannot 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 radio interferences, 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.

遙控飛行機包括遙控直昇機與多軸飛行機（以下簡稱遙控飛行機）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！任何遙控飛行機的使用，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遙控飛行機經驗的成人或有相當技術的人員在旁指導，並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。

遙控飛行機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。對使用者的不當使用、設定、組裝、修改、或操作不良所造成的破損或傷害，本公司無法控制及負責。且遙控飛行機與配件之精密電子產品，易受外力、磁場、訊號干擾，在使用過程中如外力、磁場、訊號干擾，導致飛行機本身、及其搭載之攝影設備、器材之損壞或滅失，本公司亦無法控制及負責。

做為本產品的使用者，您，是唯一對於您自己操作的環境及行為負全部的責任之人。

WARNING LABEL LEGEND
標誌代表涵義

FORBIDDEN 禁 止	Do not attempt under any circumstances. 在任何禁止的環境下，請勿嘗試操作。
WARNING 警 告	Mishandling due to failure to follow these instructions may result in serious damage or injury. 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。
CAUTION 注 意	Mishandling due to failure to follow these instructions may result in danger. 因為疏忽這些操作說明，而使用錯誤可能造成危險。

SAFETY NOTES
安全注意事項

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- 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 accidents, failures, 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 of 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 show no unusual wears, or unforeseen danger may happen.
- 遙控飛行機屬高危險性商品，飛行時務必遠離人群，禁止於室內飛行。人為組裝不當或未定期檢修造成的機件損壞、電子控制設備不良，以及操控上的不熟悉、都有可能導致飛行失控損傷等不可預期的意外，請飛行者務必注意飛行安全，並需了解自負疏忽所造成任何意外之責任。
- 每趟飛行前須仔細檢查機身各部位之零/配件/電子設備之性能是否正常，及無損耗老化現象，並確實將螺絲鎖緊才能升空飛行。並做好定期檢修，避免零件或電子產品異常所造成不可預期意外。

FORBIDDEN 禁止 LOCATE AN APPROPRIATE LOCATION
遠離障礙物及人群

R/C 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.

遙控飛行機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遙控飛行場地飛行。必須注意周遭有沒有人、高樓、建築物、高壓電線、樹木等等，避免磁場干擾、外力訊號干擾及操控的不當造成自己與他人財產的損壞。請務必選擇在空曠合法專屬飛行場地。請勿在下雨、打雷、沙塵等惡劣天候下操作，以確保本身及機體的安全。

FORBIDDEN 禁止 PROPER OPERATION
勿不當使用本產品

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，本產品為休閒娛樂專用之精密電子遙控飛行產品，僅限熟練遙控飛行器之個人使用，使用時請遵守當地法律規定，並嚴禁在任何違反公共安全區域操作，請勿利用本產品侵犯他人隱私/公開權、並遵重他人智慧財產權、著作權，且勿用於安全、法令外之其它非法用途。並充分了解您任何的使用與操作必須負完全的責任。

FORBIDDEN 禁止 NOTE ON LITHIUM POLYMER BATTERIES
鋰聚電池注意事項

Lithium Polymer batteries are significantly more volatile than alkaline or Ni-Cd/Ni-MH batteries commonly used in RC applications. All manufacturer's instructions and warnings must be followed closely. Mishandling of Li-Po batteries can result in fire. Always follow the manufacturer's instructions when disposing of Lithium Polymer batteries.

鋰聚電池跟一般在RC使用的鹼性電池、鎳鎘電池、鎳氫電池比較起來是相對危險的。請嚴格遵守鋰聚電池說明書之使用注意事項。不恰當使用鋰聚電池，可能造成火災並傷及生命財產安全，切勿大意！

FORBIDDEN 禁 止 PREVENT MOISTURE
遠離潮濕環境

R/C 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.

遙控飛行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！

WARNING 警 告 DO NOT FLY ALONE
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 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.)

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。遙控飛行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，否則將可能造成不可預期的意外發生。(勤練電腦模擬器及老手在場指導是入門必要的選擇)

WARNING 警 告 SAFE OPERATION
安全操作

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.

請於自己能力內及需要一定技術範圍內操作這台遙控飛行機，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。不可在視線範圍外飛行，降落後也請馬上關掉遙控飛行機和遙控器電源。

CAUTION 注 意 ALWAYS BE AWARE OF THE ROTATING BLADES
遠離運轉中零件

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.

遙控飛行機主旋翼/螺旋槳運轉時會以高轉速下進行，在高轉速下的主旋翼/螺旋槳會造成自己與他人在身體上或環境上的嚴重損傷，請勿觸摸運轉中的主旋翼/螺旋槳，並保持安全距離以避免造成危險及損壞。

CAUTION 注 意 KEEP AWAY FROM HEAT
遠離熱源

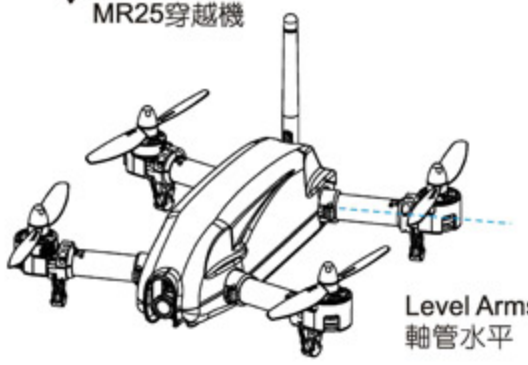
R/C aircraft are made of various forms of plastics, such as carbon fiber and polyethylene. Plastics are very susceptible to damage or deformation from extreme heat and cold climate. Make sure not to store the model near any source of heat such as oven or heater. It is best to store the model indoors,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

遙控飛行機多半是以碳纖維、PA 纖維或聚乙烯、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。

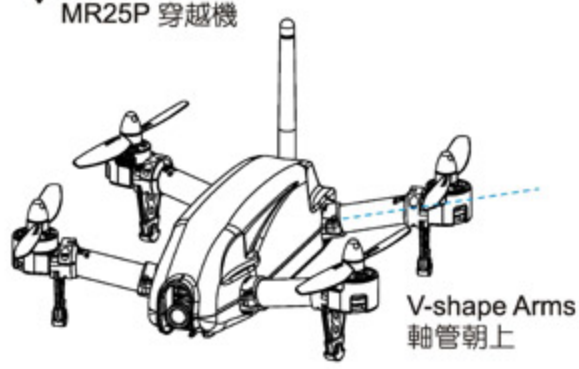
INTRODUCTION
機型介紹

ALIGN

MR25 Racing Quad
MR25穿越機



MR25P Racing Quad
MR25P 穿越機



Align MR25/MR25P with flight controller born from the integration of cutting edge electronics and innovative technology. Utilizes a 32 bits high speed processor, combining ESC, power distribution system, OSD, Bluetooth connectivity, and gimbal control function. Featuring a high precision 6-axis gyroscopic sensor and barometric sensor which is derived from Align's core technology. The highly intelligent attitude calculations results in a highly stable and reliable performance.

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FEATURES 產品特色

- Cutting Edge All Inclusive Flight Control System
  高智能全方位飛控系統
- Parameter Settings through App
  APP設定調整
- Bluetooth Functionality
  藍牙功能
- Customizable LED
  個性化LED燈
- DV Camera Gimbal
  DV鏡頭雲台
- FHD High Quality DV Video Recorder
  FHD高畫質DV攝影機
- Live Flight Data
  飛行即時資訊
- FPV
  第一人稱飛行
- Motors featuring high torque, high speed, and high efficiency
  高扭力/高轉速/高效率馬達
- Intelligent Power Management System
  智慧型電源管理系統
- Impact Resistant Aerodynamic Shell
  耐衝擊流線造型防潑水外殼
- Adjustable Motor Tilt Angle
  可調式馬達傾角
- Camera Multi-function Settings
  相機多功能選單
- Remote Control Photo/video Function
  遙控拍照/錄影功能
- Stunt Mode Function
  特技飛行功能
- Lost Aircraft Finder
  尋機功能

EQUIPMENT REQUIRED
自備設備

ALIGN

1 RADIO TRANSMITTER AND ELECTRONIC EQUIPMENT REQUIRED
自備遙控及電子設備

Basic operation-
6 Channel or more
基本功能操作-六動以上

or
或

Full-featured operating-
8 Channel or more
全功能操作-八動以上

R/C Transmitter (aircraft / multicopter system)
發射機（具飛機 / 多軸模式遙控器）

Receiver
(6 channel or more)
接收器(六動作以上)

or
或

Satellites Receiver
衛星天線

or
或

FPV Goggle
FPV 眼鏡

FPV Monitor
螢幕接收器

or
或

RCC-3SX
Balance Charger
分壓充電器

RCC-4SD
Balance Charger
平衡充電器

1300 ~1800mAh
Li-polymer Battery 3S
3S鋰電池

PACKAGE CONTENTS
包裝說明

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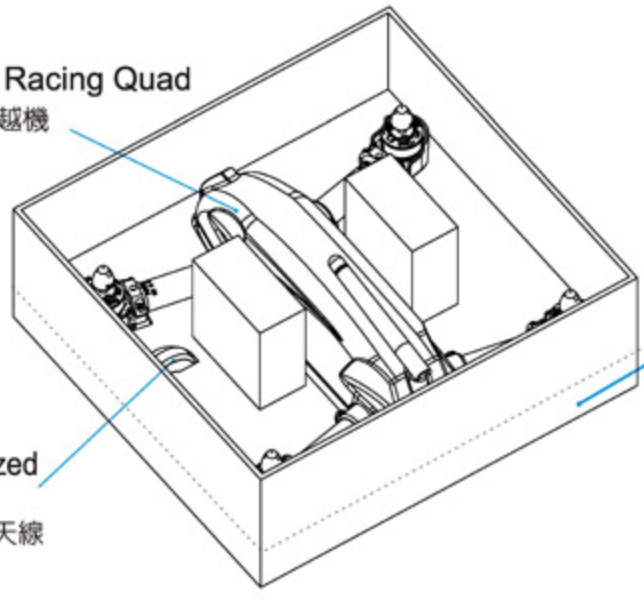


MR25/MR25P Racing Quad
MR25/MR25P 穿越機

5.8G Circular Polarized
Gain Antenna TX
5.8G無向性增益發射天線

MR25 Propeller
5045 x4(R Propeller x2 / L Propeller x2)
6040 x4(R Propeller x2 / L Propeller x2)

MR25螺旋槳
5045x4 (正槳x2/ 反槳x2)
6040x4 (正槳x2/ 反槳x2)

MR25 Sticker
MR25機身貼紙

Spare Parts
備件包

STANDARD EQUIPMENT
標準配備

ALIGN

MR25/MR25P Racing Quad
MR25/MR25P 穿越機

R rotation propellers specific recognized circle.
R向螺旋槳專用識別圓圈

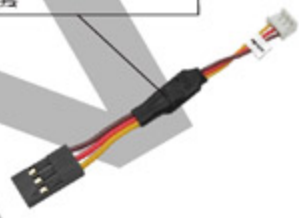
MR25 Propeller
5045 x4(R Propeller x2 / L Propeller x2)
6040 x4(R Propeller x2 / L Propeller x2)
MR25螺旋槳
5045x4 (正槳x2/ 反槳x2) 6040x4 (正槳x2/ 反槳x2)

5.8G Circular Polarized Gain Antenna TX x1
5.8G無向性增益發射天線 x1

Receiver Signal Wire x2
接收器訊號線 x2

S.BUS Connector x1
S.BUS連接線 x1

Heat Shrink Sleeve-Black
黑色熱縮套



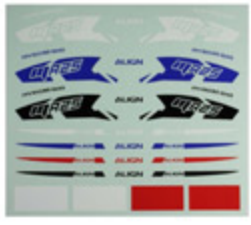
Align MR25 JR/Spektrum Satellite Adapter x1
Align MR25 JR/Spektrum專用的衛星天線轉接線 x1

Hook and Loop Tape x3
(Hooked x1 / Fuzzy x2)
魔術沾x3 (勾狀x1/纖毛狀x2)

Double Sided Tape x1
固定泡棉 x1

Hook and Loop Strap x1
魔術束帶 x1
Dual Lock Fastener x2
子母扣 x2

Trimmed Image
圖型已裁切完成



MR25 Sticker x1
MR25機身貼紙 x1

Hex Head Wrench
L型六角扳手 (2mmx1/ 1.5mmx1)

Spare Parts
維修配品

Head Damper x2
墊圈(ϕ 1.9x ϕ 6.2x3.6mm) x2
Socket Button Head Screw
半圓頭內六角螺絲 M2.5x6mm x2

ASSEMBLY SECTION
組裝說明

ALIGN

MR25 is the conventional flat arms and MR25P is a V arms. But both MR25 and MR25P are 95% ready-to-fly racing quad with same specification, assembly, setup and flight performance. The manual takes MR25 as example for more instruction description.

MR25與MR25P穿越機屬於相同規格系列的商品，出廠前已完成95%組裝，除外觀軸管方向呈水平及朝上的不同，在組裝、設定、性能與飛行表現，都是一致的，在此我們以MR25作為操作範例。

1 MAIN FRAME ASSEMBLY
機身組裝

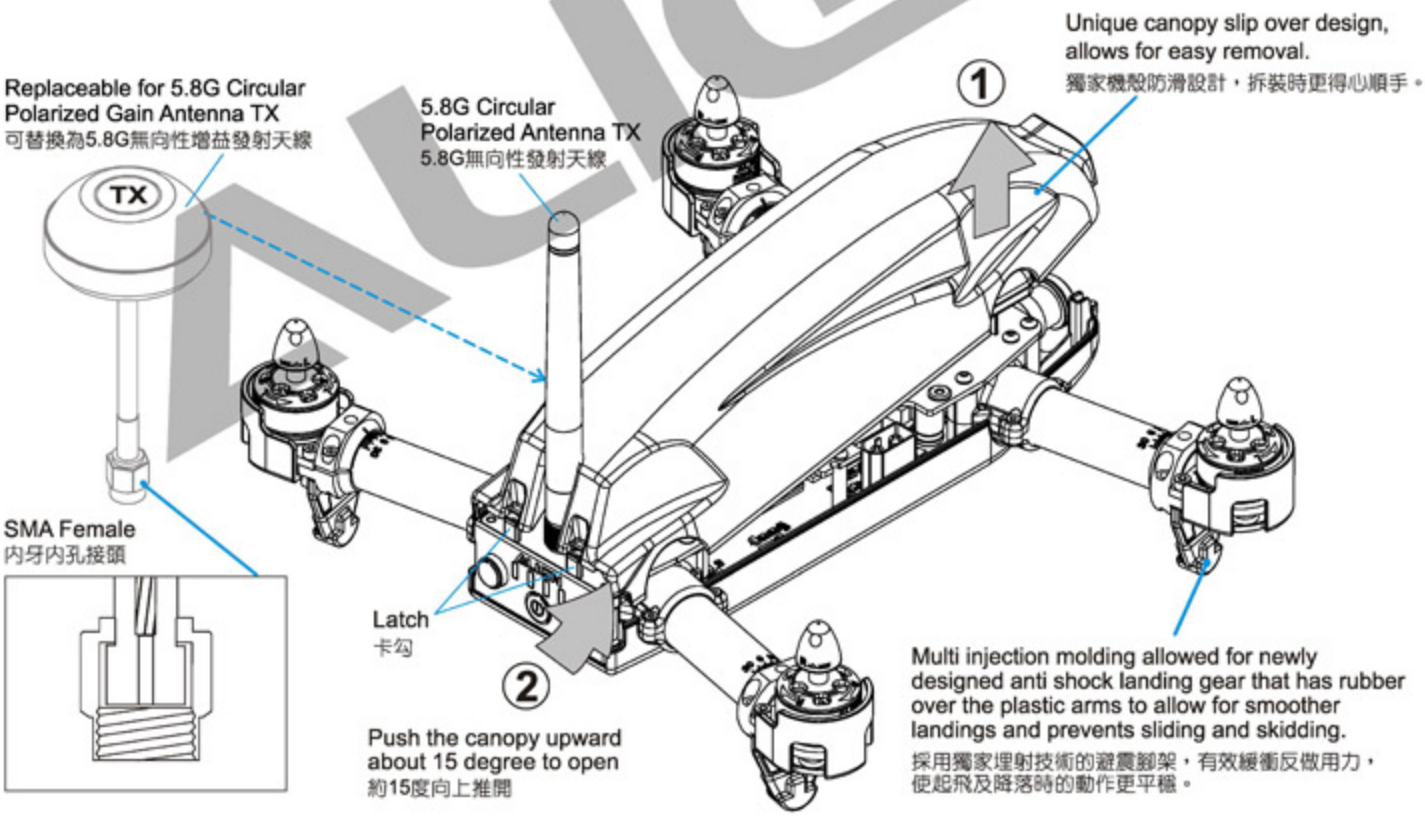
1 REMOVE CANOPY
拆開機殼

Remove main frame assembly from box. Temporarily remove canopy from frame.

1. Gently hold the front of the canopy notch and pull it up.
2. Slightly remove two rear latch and push upward to open.

取出機身組，先將機殼拆下。

1. 抓取機殼前方凹槽處，朝上拉起機殼的前端。
2. 以手指輕輕撥開機身後面的兩個卡勾，將機殼朝前向上推開，即能將機殼上蓋拆開。



WARNING 警告

Before turn on the power, make sure the antenna is mounted on the video transmitter correctly, because it helps to release the accumulated current, otherwise too large power may burn out the 5.8G video transmitter.

在打開電源之前，必須將圖傳天線裝上來釋放功率，以避免5.8G圖傳發射器因功率過大而燒毀。

2 REMOVE DV CAMERA RIBBON CABLE
拆開DV攝影機排線

Temperately remove DV camera ribbon cable apart from DV main board and camera lens:

1. Remove the latch apart to the front.
2. Then gently remove DV camera ribbon cable.

將DV攝影機主版上連接鏡頭的排線暫時拆開：

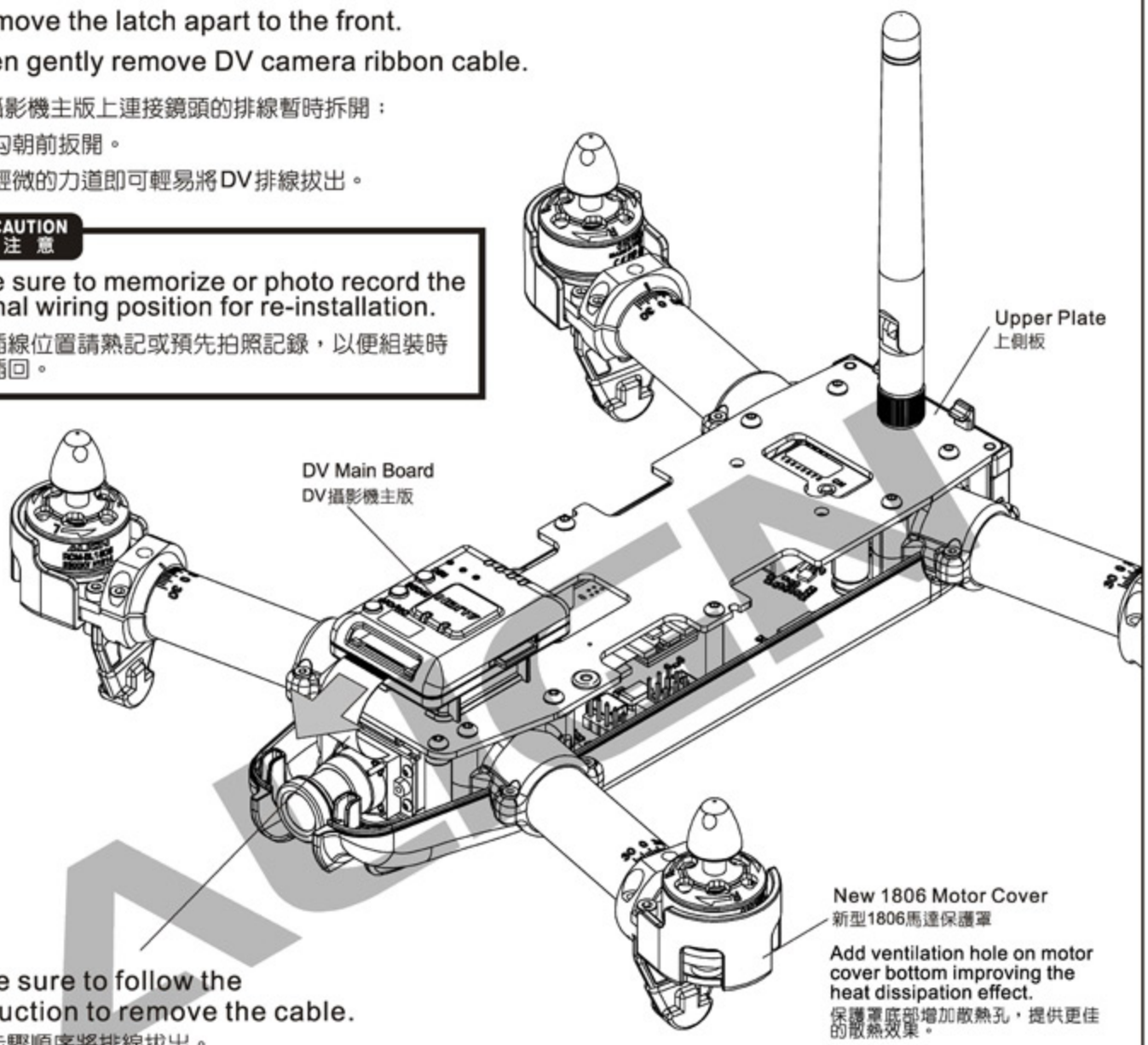
1.將卡勾朝前扳開。

2.使用輕微的力道即可輕易將DV排線拔出。

CAUTION 注 意

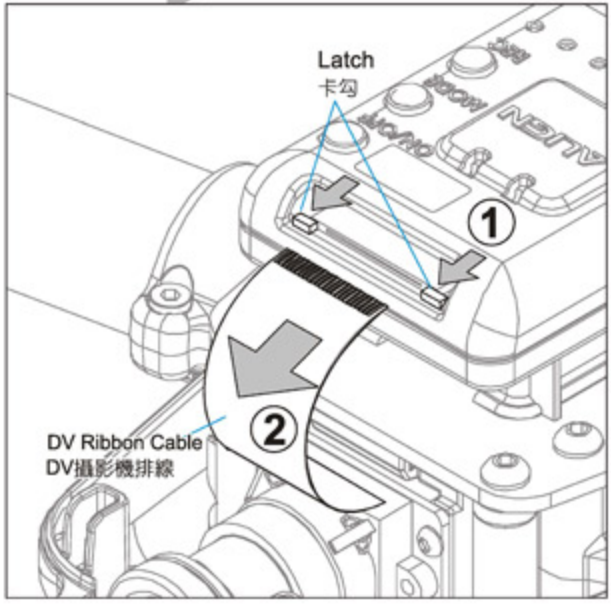
Make sure to memorize or photo record the original wiring position for re-installation.

原來插線位置請熟記或預先拍照記錄，以便組裝時順利插回。



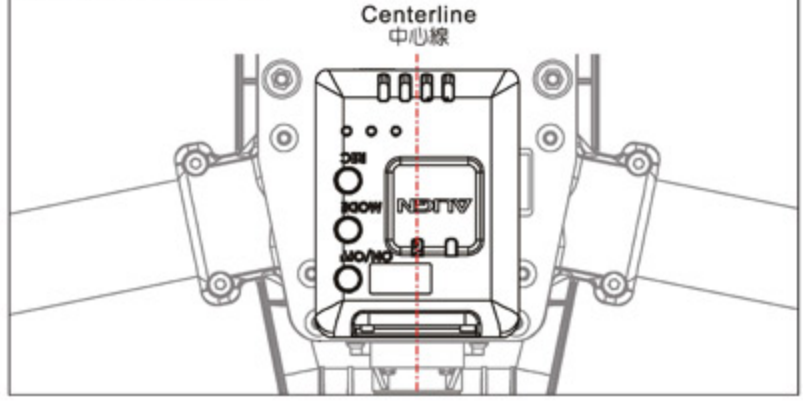
Make sure to follow the instruction to remove the cable.

請依步驟順序將排線拔出。



The DVR camera main board is mounted at the center position where Micro SD memory card has inserted and aligned to the bottom center position.

DV攝影機主版黏貼的位置，是以插入Micro SD記憶卡後的寬度，對齊底板的中心位置。



3 RECEIVER ASSEMBLY
接收器組裝

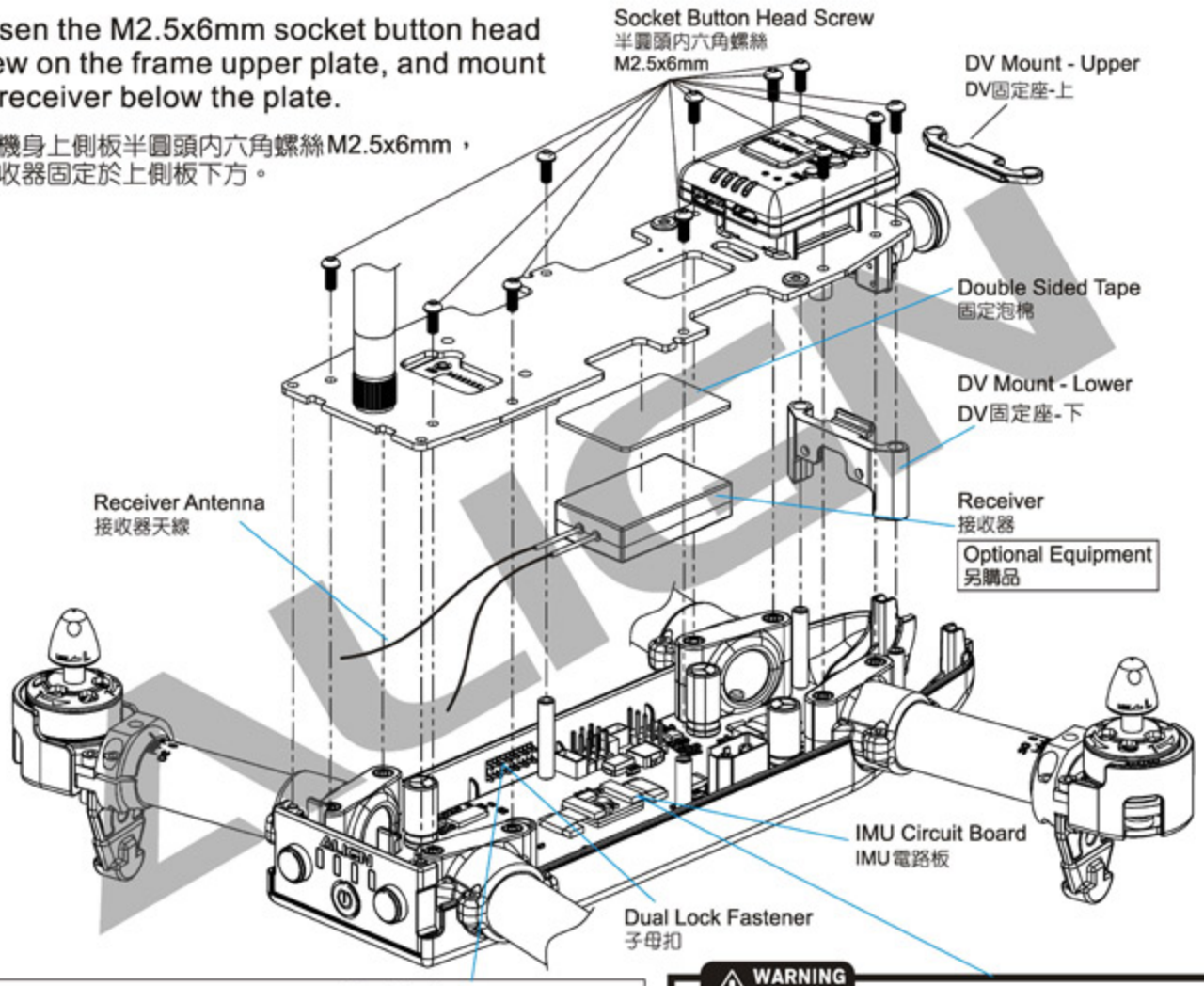
CAUTION 注 意

1. The way of binding varies from different receiver brands. Please refer to the instruction from receiver supplier for binding and wiring.
2. For DSM2 satellite, please make sure to connect satellite receiver with MR25/MR25P main board first for binding via App system. (Please refer to page 26.)

1. 各廠牌接收器的對頻方式不同，請依照原廠指示對頻完成後再進行接線。
2. 如選用DSM2衛星天線時，請將衛星天線連接至MR25/MR25P主控板上，再使用APP操作對頻即可。(請參考第26頁)

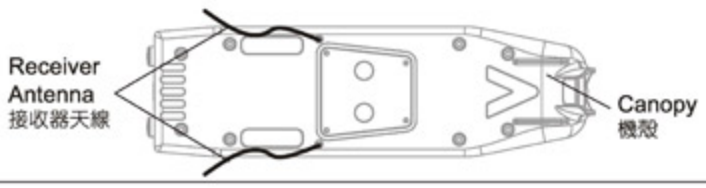
Loosen the M2.5x6mm socket button head screw on the frame upper plate, and mount the receiver below the plate.

鬆開機身上側板半圓頭內六角螺絲M2.5x6mm，將接收器固定於上側板下方。



1. Secure the antenna inside the body with Dual Lock.
可利用子母扣將天線固定於身殼內。

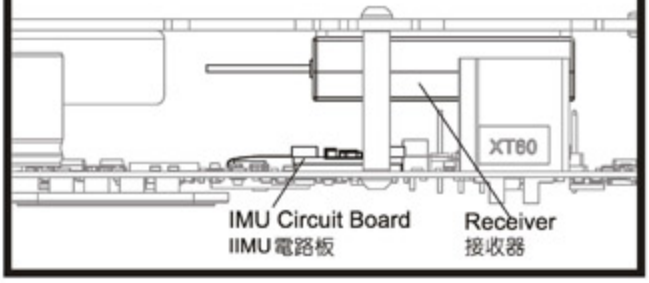
2. Get the antenna through the lower plate and outside of the canopy.
也可將天線穿過機殼下蓋的孔位，露於機身外面。



WARNING 警 告

When installing the receiver do not let it touch the IMU Circuit Board, or it will cause abnormal flight performance or crashes, and possibility of danger.

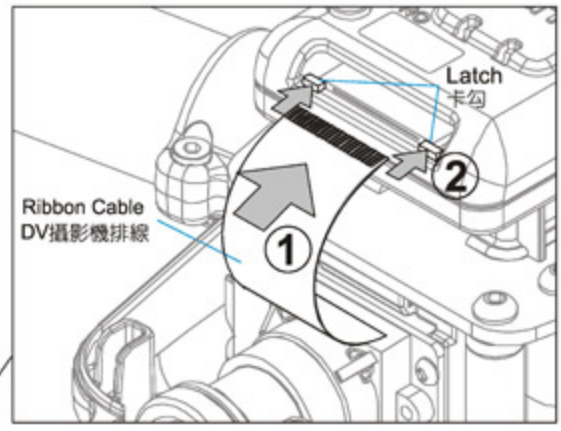
接收器安裝時不可碰觸或壓迫到IMU電路板，否則將造成MR25飛行異常或摔機，而發生不可預期的危險。



4 MAIN FRAME ASSEMBLY
機身上側板組裝

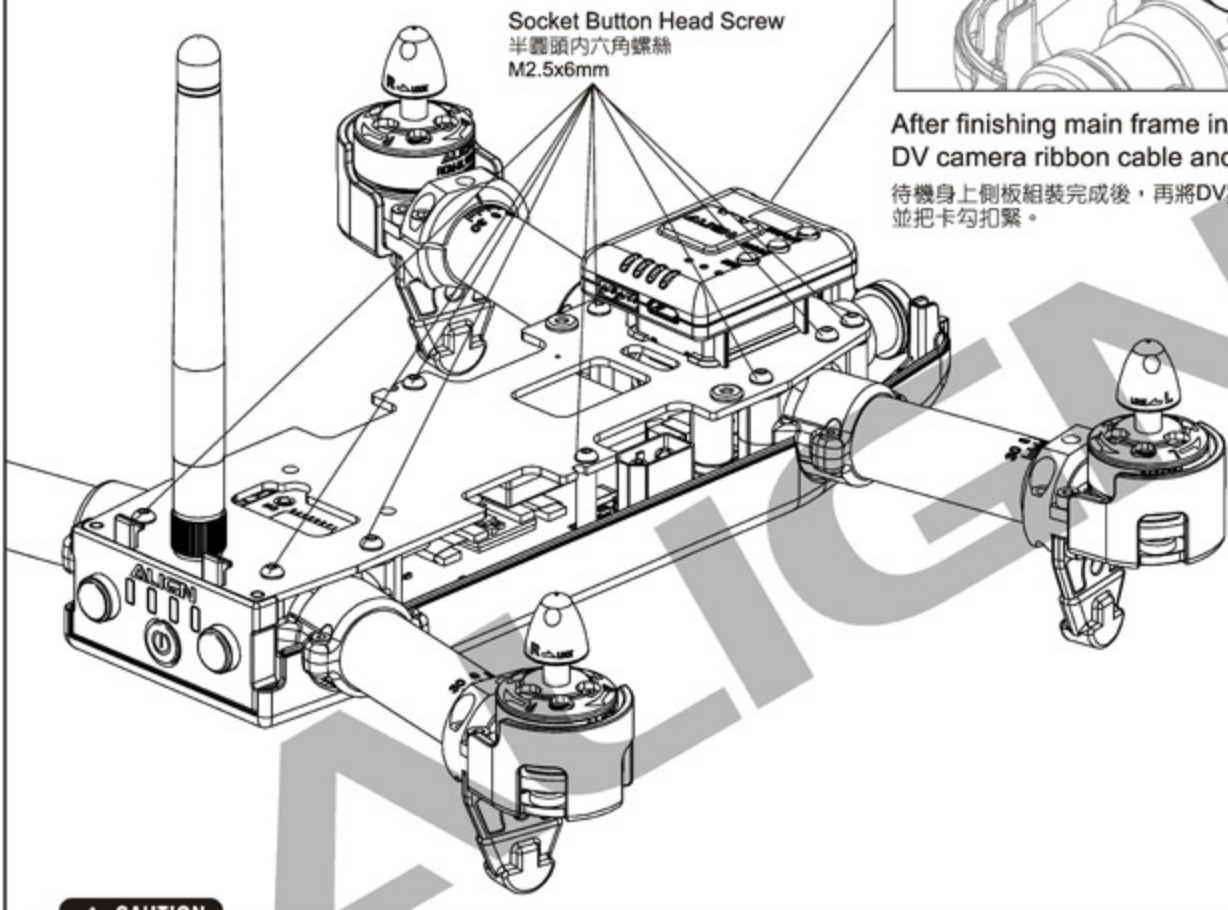
After receiver assembly, then reinstall the lower & upper DV mount back to the main frame. Mount the socket button head screw M2.5 x 6mm back to the main frame to fix the main frame.

接收器組裝完成後，依序將DV固定座-下、DV固定座-上，裝回機身原位置。再將原拆下的半圓頭內六角螺絲M2.5x6mm 鎖回，固定機身上側板。



After finishing main frame installation, put the DV camera ribbon cable and latch back firmly.

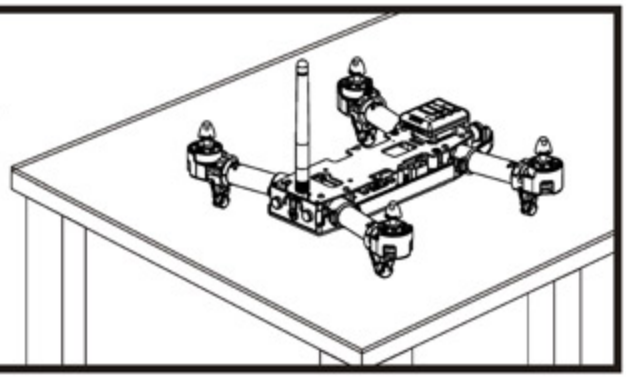
待機身上側板組裝完成後，再將DV攝影機排線接回，並把卡勾扣緊。



CAUTION 注 意

For main frame re-installation, make sure to keep the aircraft on the ground/table better with flat glass to ensure aircraft in level position preventing unstable balance during assembly, then double check all screws are firmly assembled,

上側板鎖回機身時，一定要把穿越機放在平穩的桌面上，最好是有加上玻璃墊的，再確實將螺絲鎖緊，以避免四根馬達管腳不等高造成機身搖晃，確保機身完全平衡。



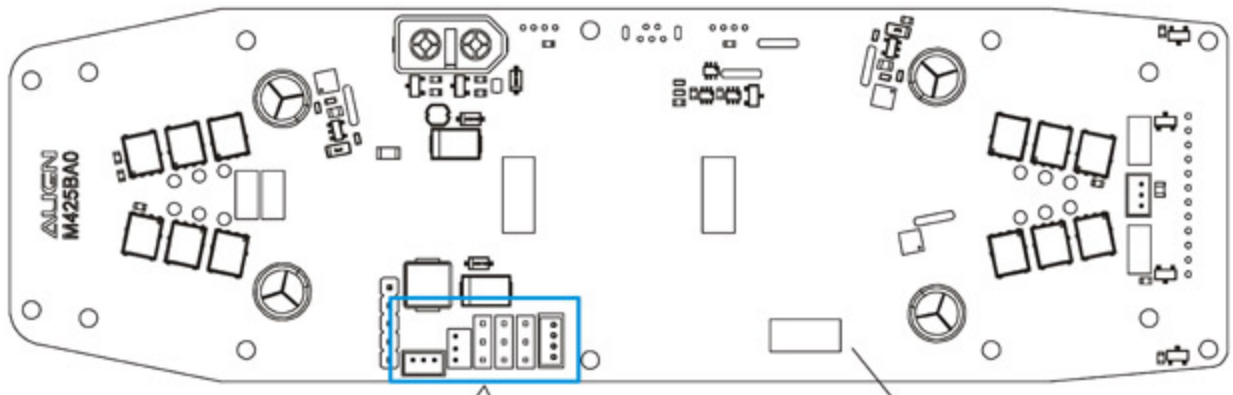
WARNING 警 告

Prior to every flight, carefully check all parts such as propellers, propeller nuts, arms, main frame and other components, ensure they are firmly secured and show no unusual wears, or unforeseen danger may happen.

每趟飛行前須仔細檢查：螺旋槳螺帽及機身各部位螺絲確實鎖緊、螺旋槳沒有損壞變型、且電子零件接線沒有鬆動的現象，才能升空飛行。

5 RECEIVER CONNECTIONS
接收器接線示意圖

Connect your receiver to the appropriate MRS port as indicated.
接收機接線方式，請依所使用的接收器類型接於指定孔位。

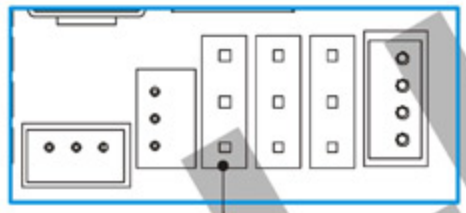


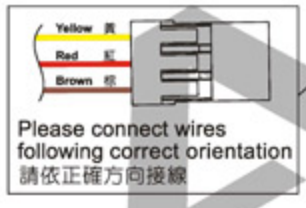
Receiver Port Positions
接收器接線位置

Intelligent Integrated Circuit Board
高智能整合式電路板

Receiver Port Positions
各類接收器接線位置

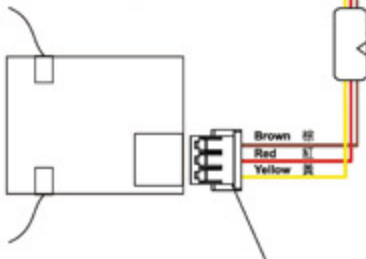
a) JR/Spektrum Satellite
JR/Spektrum 衛星天線





Please connect wires following correct orientation
請依正確方向接線

Heat Shrink Sleeve -Black
黑色熱縮套

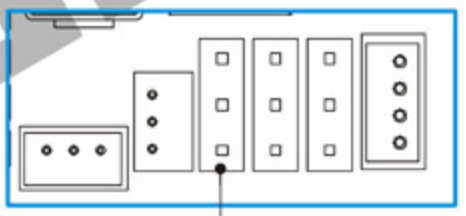


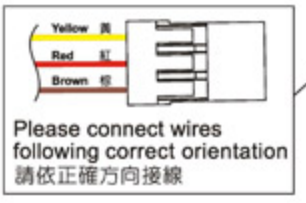
Satellite Adapter
衛星天線轉接線

WARNING 警告

Please make sure to use the specific Align MR25 JR/Spektrum satellite adapter, or it may cause unforeseen burned out and danger.
必須使用Align MR25 JR/Spektrum專用的衛星天線轉接線，否則將導致衛星天線燒毀造成不可預期的危險。

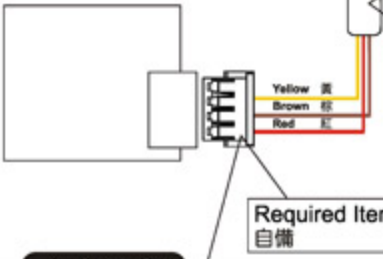
b) JR DMSS Satellite
JR DMSS 衛星天線





Please connect wires following correct orientation
請依正確方向接線

Heat Shrink Sleeve -Black
黑色熱縮套



Satellite Adapter
衛星天線轉接線

Required Items
自備

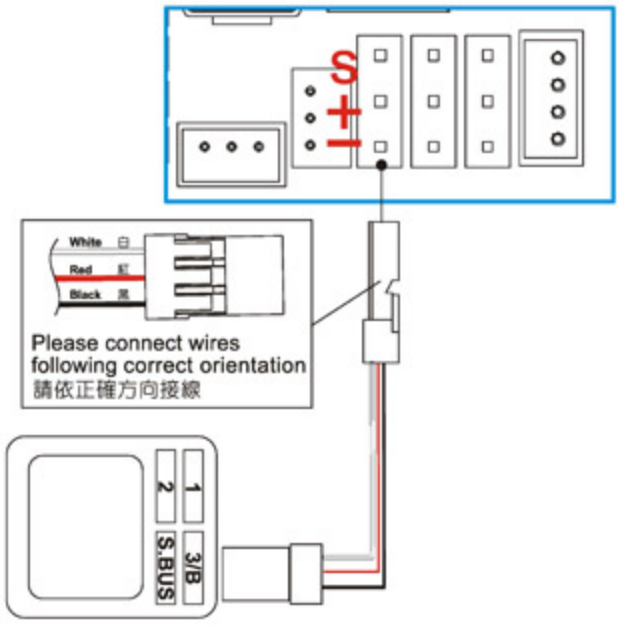
Switch to 4 pin plug.
更換為4pin插頭

CAUTION 注意

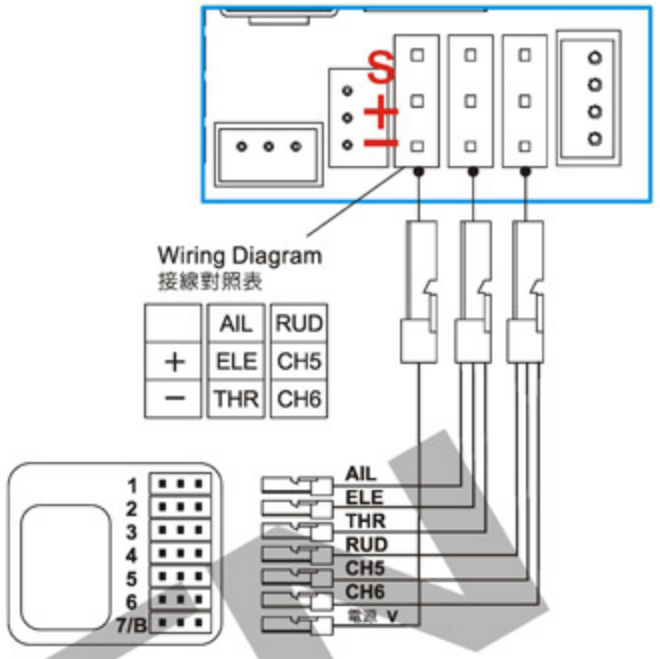
When switch to 4 pin plug, make sure to follow the connection instruction, or it may cause unforeseen burned out and danger.
更換4pin插頭時，請依照圖示訊號線顏色順序安裝，安裝錯誤會造成天線燒毀。

Receiver Port Positions 各類接收器接線位置

c) Futaba S.BUS/ JR X.BUS/ FS iBUS
Futaba S.BUS/ JR X.BUS/ FS iBUS



d) Standard Receiver
傳統接收器



WARNING 警 告

The direction of channel receiver plug varied depending on receiver's brand, make sure to read manual carefully before wiring. Refer to the manual instruction, firmly connect receiver plug S,+,- to receiver outlet S, + , - correspondingly. Incorrect "S, +, -" wiring direction will result in burned receiver and other unexpected danger and damage.

各廠牌接收器頻道插座的正負極方向不盡相同，接線前請務必詳閱您的接收器使用說明書，將連接線＂S、+、-＂正確又緊實地插入接收機相對應的＂S、+、-＂插槽，正負極方向錯誤將導致接收器燒毀或其他不可預期的危險及損失。

CAUTION 注 意

1.When using JR X.BUS connection or DMSS satellite antennas, please select MODE A in your transmitter.
2.The standard receiver only support to Channel 6.

1.使用JR X.BUS接線或DMSS衛星天線時，遙控器請選擇"MODE A"模式。
2.使用傳統接收器，只支援至第6頻道。

Receiver Port Positions
各類接收器接線位置

FORBIDDEN 禁 止

Please follow the instruction manual carefully when installing receiver. Traditional receiver channel ports are reserved specifically for the multi-colored ribbon cable. Do not directly connect standard servo plug into this port where power may be introduced into the MRS. Doing so may cause irreversible damage to the MRS.

安裝接收器時，請遵循說明書組裝方式接線，傳統接法的接口為專用訊號頻道，禁止接入電源否則會造成MRS飛控系統燒毀。

CAUTION 注 意

MR25 with highly intelligent integrated circuit board design, has to avoid any dust or water vapor from MR25. Allow to clean and maintain MR25 PCB by using special cleaner such as high-pressure air filter or air guns ...etc. to remove dust, grass or dry the moisture from MR25 surface.

MR25主控板為高智能整合式電路板，應避免水氣或塵土進入MR25機體內。可以利用清潔電腦專用高壓除塵空氣罐，或附有空氣濾清器的高壓空氣槍，噴清表面塵土、異物或水氣。

2 BATTERY INSTALLATION
電池安裝

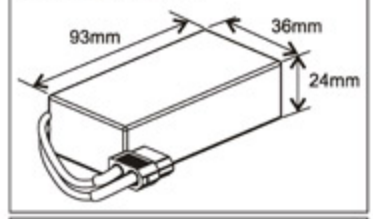
Mount the battery on the frame upper plate.
Use the battery position to achieve the best CG.

將電池固定於機身上側板。電池可前後移動，將機身重心調整為正確位置。

Optional Equipment
另購品

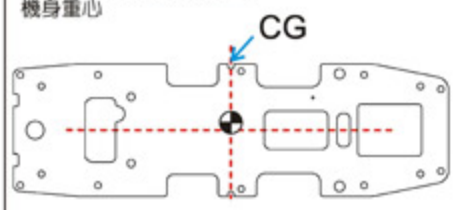
Battery
電池

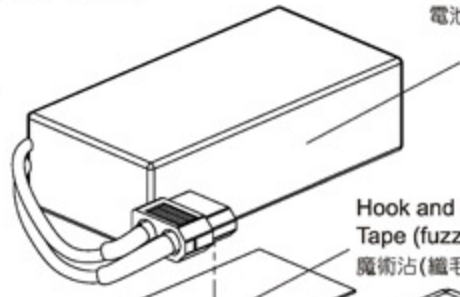
Max battery size
可容納電池最大尺寸



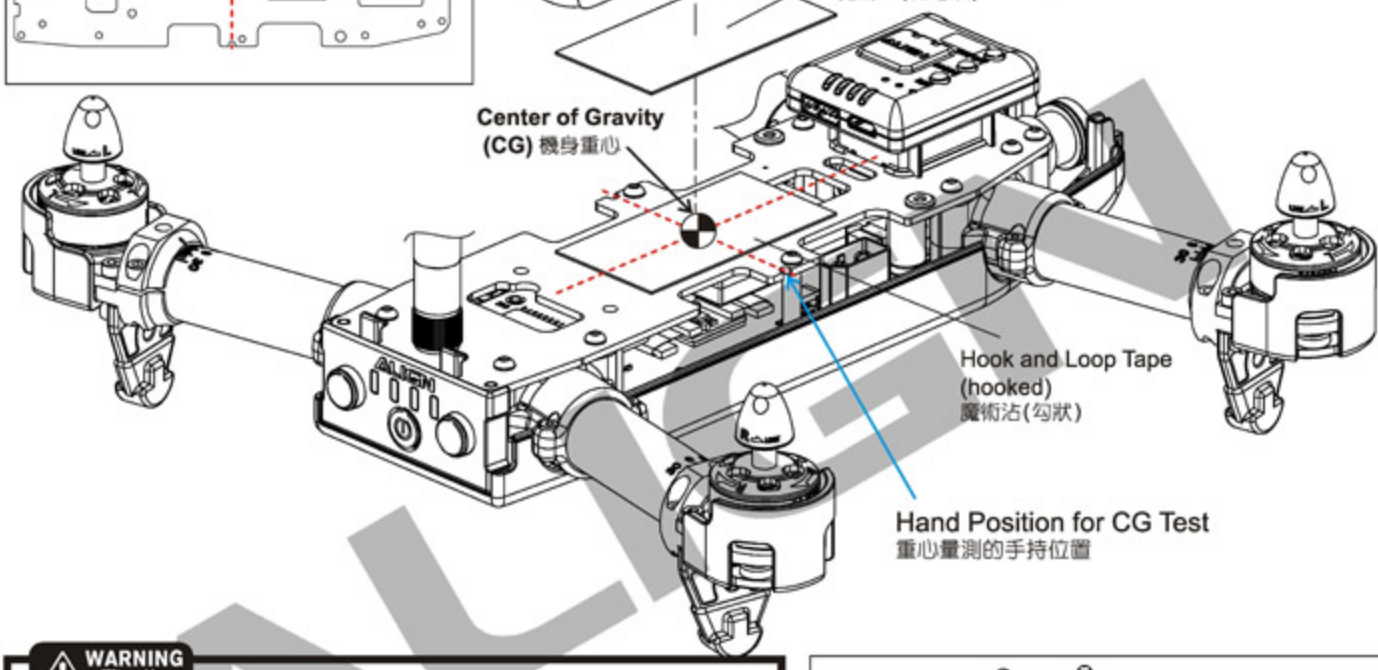
Compatible Battery/ 適用電池
3S 11.1V 1300mAh ~ 1800mAh

Center of Gravity (CG)
機身重心





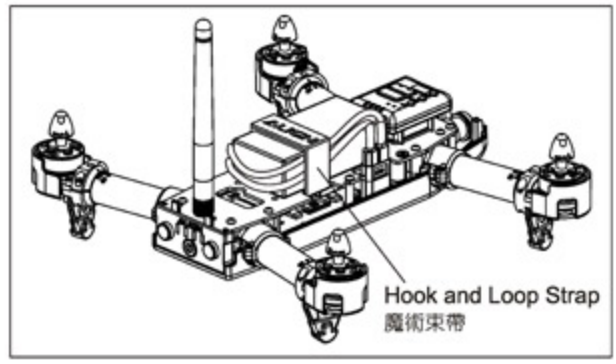
Hook and Loop Tape (fuzzy)
魔術沾(纖毛狀)



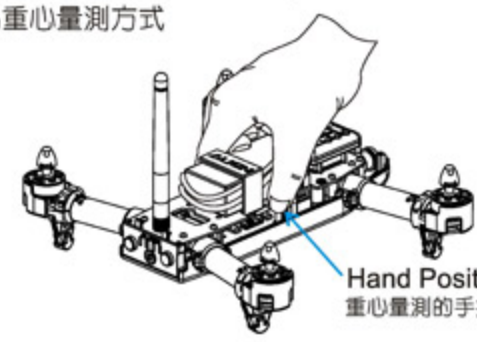
WARNING 警告

CG adjustment can affect flight stability and performance, especially in manual mode, make sure to keep the CG in the correct level position.

重心調整將會影響飛行性能的穩定性，特別是在手動模式下更有明顯反應，務必讓重心落在機體的正確位置。



Simple Center of Gravity Test Method
簡易重心量測方式



Lift with two fingers in the center of each side of the frame to check the CG. Adjust the battery position to have a balanced aircraft.

從機身重心位置雙側提起，調整電池適當位置讓機身保持水平。

MR25 POWER TIP　MR25動力搭配表

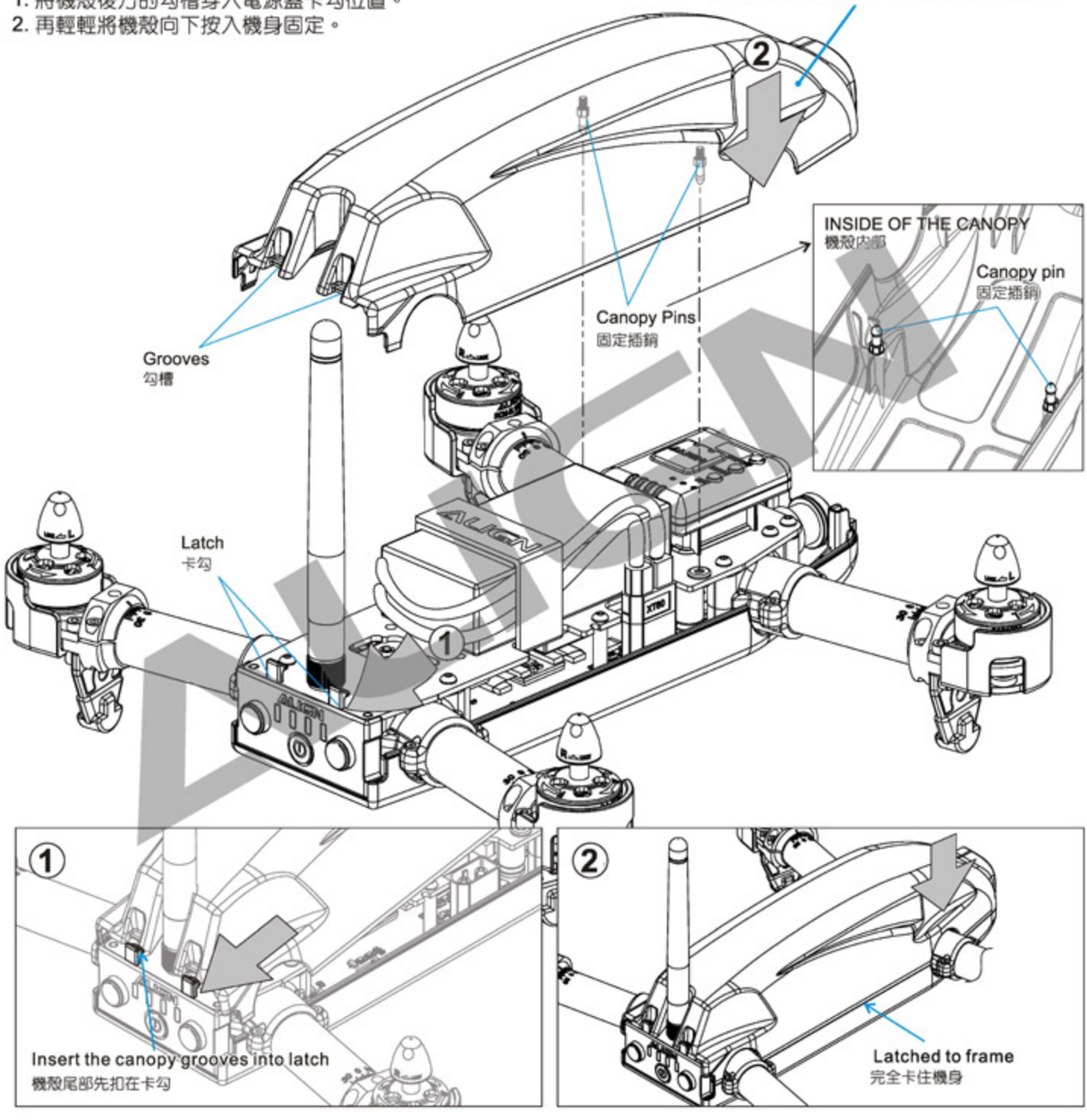
Align Motor 亞拓馬達	Battery 電池	Propeller 螺旋槳	
		5045	6040
RCM-BL1806	3 Cell	V	V
	4 Cell	V	Prohibited 嚴禁使用
RCM-BL2205 (Optional Equipment) (另購品)	3 Cell	V	V
	4 Cell	V	Prohibited 嚴禁使用

3 CANOPY INSTALLATION
機殼組裝

1. Place the enclosure rear hook groove penetrates the power supply cover the hook position.
2. And then gently down into the body casing fixed.

1. 將機殼後方的勾槽穿入電源蓋卡勾位置。
2. 再輕輕將機殼向下按入機身固定。

Unique canopy slip over design, allows for easy removal.
獨家機殼防滑設計，拆裝時更得心順手。



CAUTION 注 意

Ensure canopy is latched to the frame plate to prevent accidental separation during flight.

機殼裝上機身時，請務必確認機殼完全卡住機身，避免飛行時脫落，而導致不可預期的意外。

CAUTION 注 意

Canopy must be installed to avoid turbulance disturbance and ensure optimal flight performance.

飛行時必須蓋上機殼，以確保飛行機不受氣流干擾達到最佳的飛行效能。

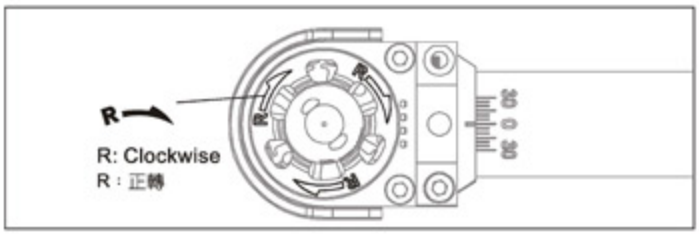
4 PROPELLER ASSEMBLY
螺旋槳組裝

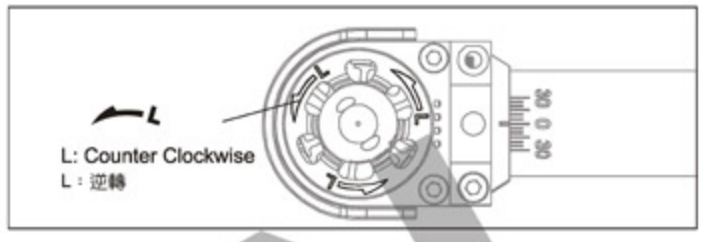
1 MOTOR ROTATION DIRECTION
馬達正逆轉方向

CAUTION 注 意

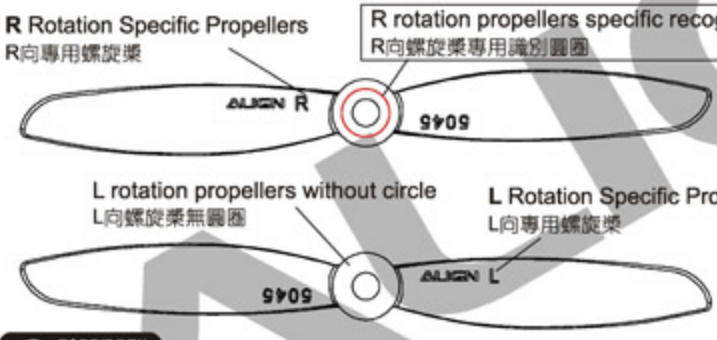
Identify the direction identifier on each motor mounts: R (clockwise) rotation motor must match R rotation blades; L (counter-clockwise) rotation motor must match L rotation blades.

組裝前請確定馬達上所標示的正、逆轉方向符號：R向馬達組必須搭配R向螺旋槳；L向馬達組必須搭配L向螺旋槳。

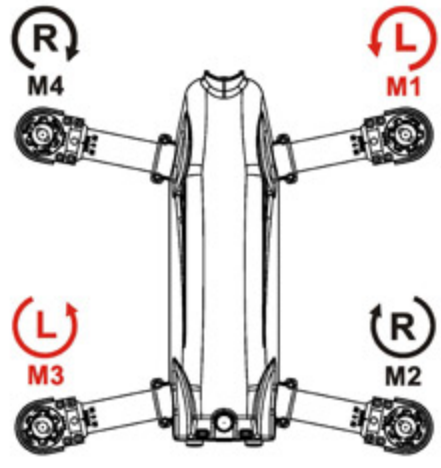




2 PROPELLER ROTATION DIRECTION
螺旋槳正逆轉方向



Motor Rotation Direction Diagram
馬達轉向示意圖



FORBIDDEN 禁 止

Make sure to always be aware to keep your eyes and body away from propeller rotation, also keep the rotating propeller away from crowds to prevent unexpected accidents.

請隨時注意，無論在任何時候，都不能將運轉中的螺旋槳對著眼睛，並且要遠離身體及人群，否則將導致不可預期的意外發生。

WARNING 警 告

The propeller material is designed to be cracked or broken possibly in collision in order to protect the motor and electronic equipment, reducing the damage impact on aircraft. It's consumable product, so must check and replace propeller regularly. Must stop flying especially after an collision or rotational imbalance or abnormal sound to prevent any danger and loss of personnel and property.

螺旋槳使用的材質在碰撞時會發生斷裂，是為了保護馬達及電子設備，以降低損壞程度。因屬於消耗品，所以在發生碰撞後或有旋轉不平衡、發生異音等狀況，務必暫停飛行，請隨時檢查並定期更換，以防發生危險而造成人員及財物的損失。

WARNING 警 告

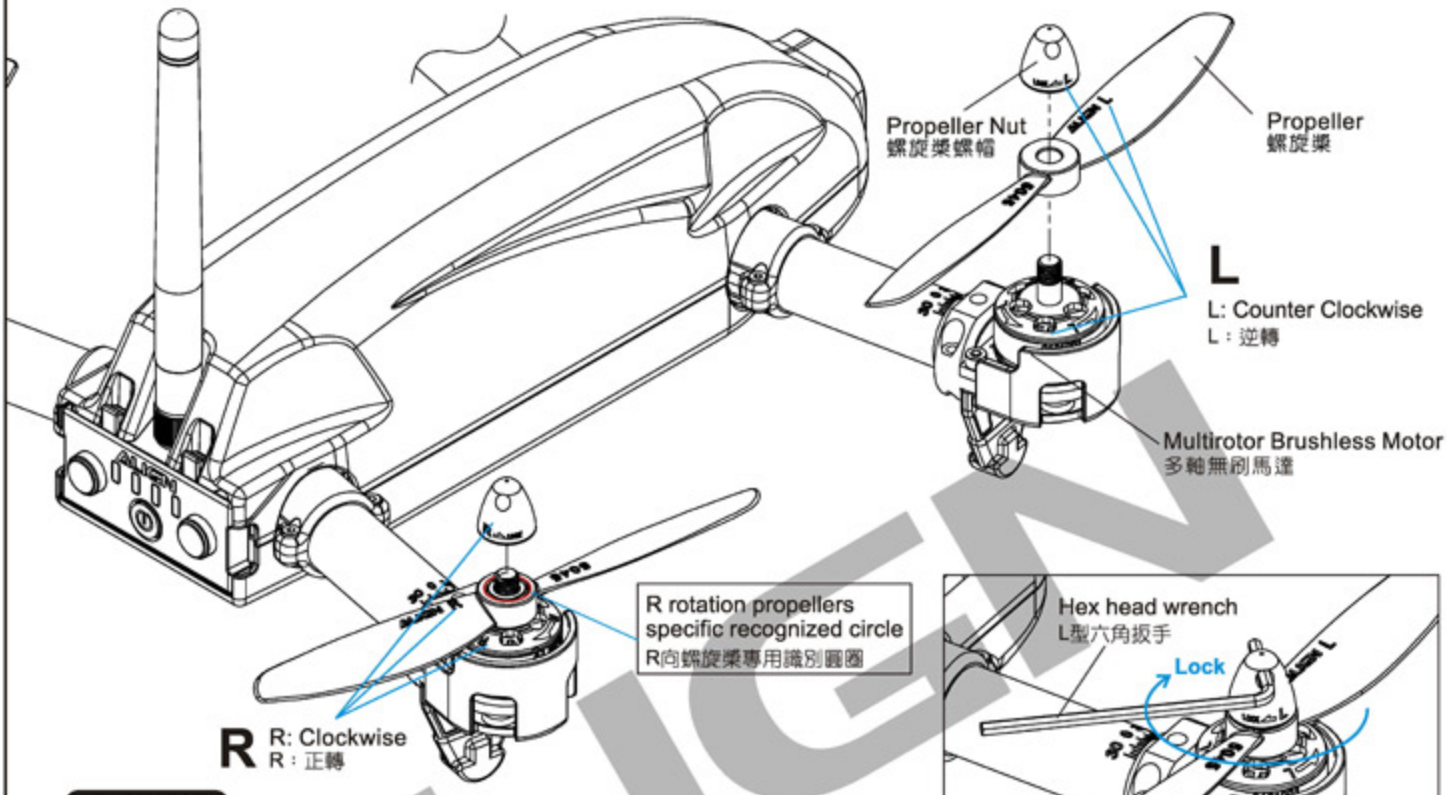
Incorrect sequence of motor tube assembly or changes made to rotational directions of motor / blades may cause immediate flip-over on takeoff, and result in unforeseen dangerous situations.

螺旋槳組裝錯誤或自行更改馬達、螺旋槳R/L轉向，將會造成機體升空後翻滾、撞毀，嚴重的將導致不可預期的意外發生。

3 FIXED PROPELLER
螺旋槳固定

Loosen the propeller nuts. Following the L/R label of motors, insert the corresponding propeller onto motor prop shaft and tighten.

鬆開螺旋槳螺帽，依照馬達上所標示的正、逆轉方向符號，將正確轉向的螺旋槳穿過馬達軸心，固定於馬達上正確位置，務必將螺旋槳螺帽鎖緊。



Make sure to screw propeller nut back tightly.

組裝時務必將螺旋槳螺帽鎖緊。

FORBIDDEN 禁止

Strictly prohibit to use other propellers instead of Align standard 6040 propellers, for instance 6045, 6050; improper usage will lead to ESC power outage, and motor, electronic burn out as well as other unforeseen danger and accidents.

嚴格禁止使用6040以上螺旋槳，包含非原廠6040，例如6045、6050：不當的使用將導致於動力最大輸出時，ESC斷電、馬達、電子零件燒燬等不可預期的意外發生。

WARNING 警告

Double check the motor rotation direction, prop nut directional label, and blades directional label during assembly, ensure the install matches exactly with the instruction manual. Incorrect assembly or modifications may cause unexpected result or bodily injuries.

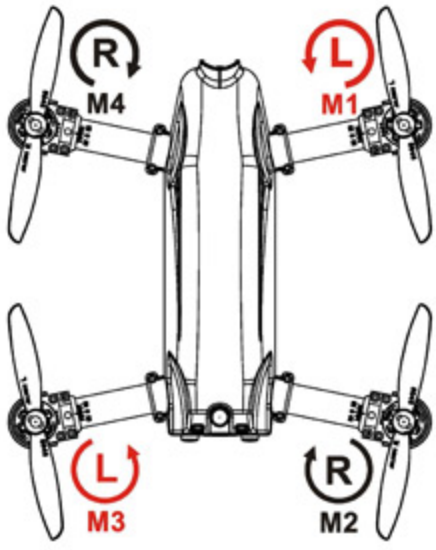
組裝螺旋槳時，務必再次檢查及確認，馬達轉向、螺旋槳、及螺旋槳螺帽上的轉向標示一致，錯誤或任意變動機體，將會導致不可預期的意外或人員傷害。

FORBIDDEN 禁止

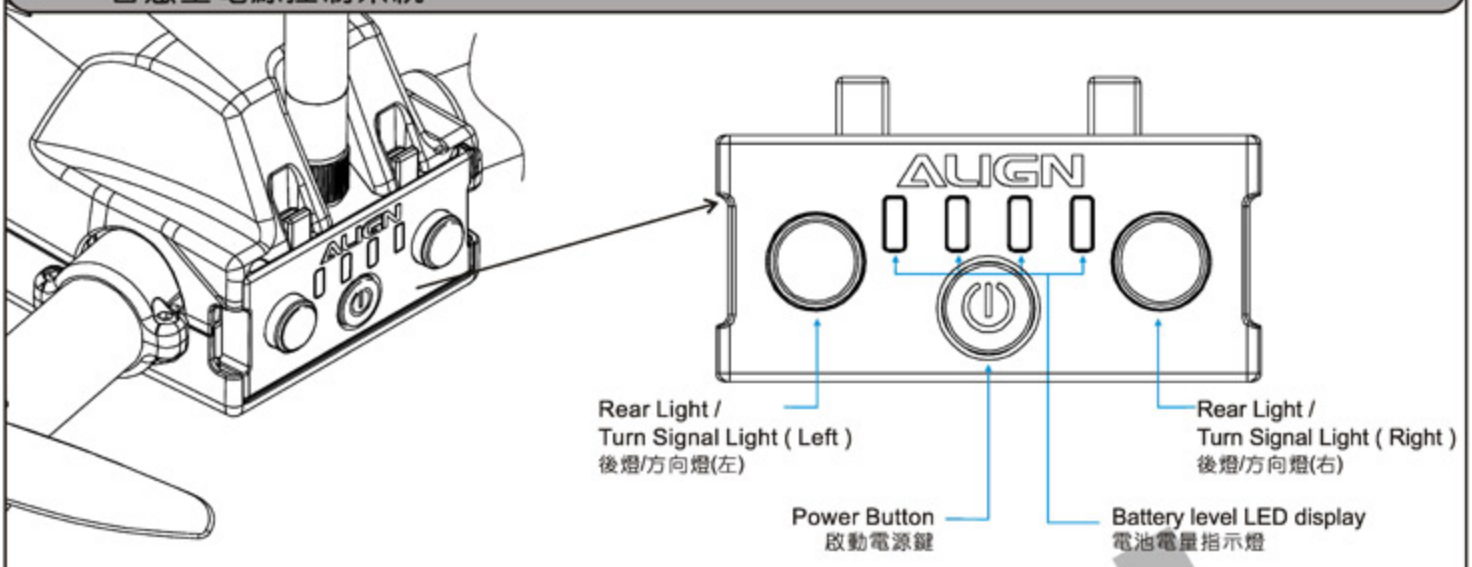
When checking for motor and propeller rotation, make sure not to hold the aircraft in hand for testing. Make sure there is no obstacles nearby the propellers.

調整或檢測馬達螺旋槳轉動過程中具有危險性，嚴禁以手握穿越機進行調整或檢測。請確認穿越機旁沒有雜物、並且避開螺旋槳轉動範圍，以免發生危險，否則將會導致不可預期的意外或人員傷害。

Propeller Rotation Direction
螺旋槳轉向示意圖



5 INTELLIGENT POWER MANAGEMENT
智慧型電源控制系統



BATTERY LEVEL INDICATOR DESCRIPTION
電池電量指示燈說明

Battery level LED display 電池燈號顯示	Battery level indicator 電量顯示
■ ■ ■ ■	75%~100%
■ ■ ■ □	50%~75%
■ ■ □ □	25%~50%
■ □ □ □	0%~25%

POWER UP AUDIBLE ALARM
開機聲音提示

Status 開機狀況	Audible Indicator 聲音提示
Power ON 開機完成	After audible sounds - two beeps comes afterwards. (The battery LED solid display after scrolling text.) The bottom and motor mount LED light flash slowly from dark to light, and repeatly just like respiratory rate. 音樂後－滴滴 音 (兩聲確認音)。 (跑馬燈後，電池電量指示燈恆亮)底燈與馬達座燈重複慢速由暗轉亮狀態。(如同呼吸頻率)。
Abnormal Power-ON 開機異常	After audible sounds - LED rapidly flas. 音樂後-LED呈快速閃爍。

POWER ON 電源開啓

Battery level check: Momentary press of power button to check remaining power.
Power On: Press and hold power button for 3 seconds until battery indicator LEDs light up and Status LEDs flash.
Power Off: Press and hold power button for 3 seconds until all LEDs shut off.

檢查電量：短按電源鍵檢視剩餘電量。
開啓電源：長按電源鍵3秒，電池電量指示燈亮起與模式燈閃爍，即完成開機動作。
關閉電源：長按電源鍵3秒，所有燈號熄滅，即完成關機動作。

AUTOMATIC POWER SHUT-OFF 智慧型電源自動關閉

MR25/MR25P equipped with intelligent power management system will automatically power off in a pre-determined time after landing. MRS's factory default hibernation function is OFF, which can be adjusted based on actual needs

MR25/MR25P具備智慧電源管理功能，當穿越機降落閒置時，會執行電源關閉保護。自動關閉時間原廠預設值為關閉，您可以依實際需求設定關機時間。

6 FLIGHT NAVIGATION LIGHT
飛行指示燈

High intensity LEDs at the bottom, motor mounts, and back plate. With more than 16,777,216 colors customizable through smartphone app providing outstanding and twinkle among others by personal mixing LED lights!

The LED color of bottom light, rear light and rear motor mount light are set to be the same color that can be selective from the system. The front motor mount light color will automatically be changed correspondingly to show where the nose is.

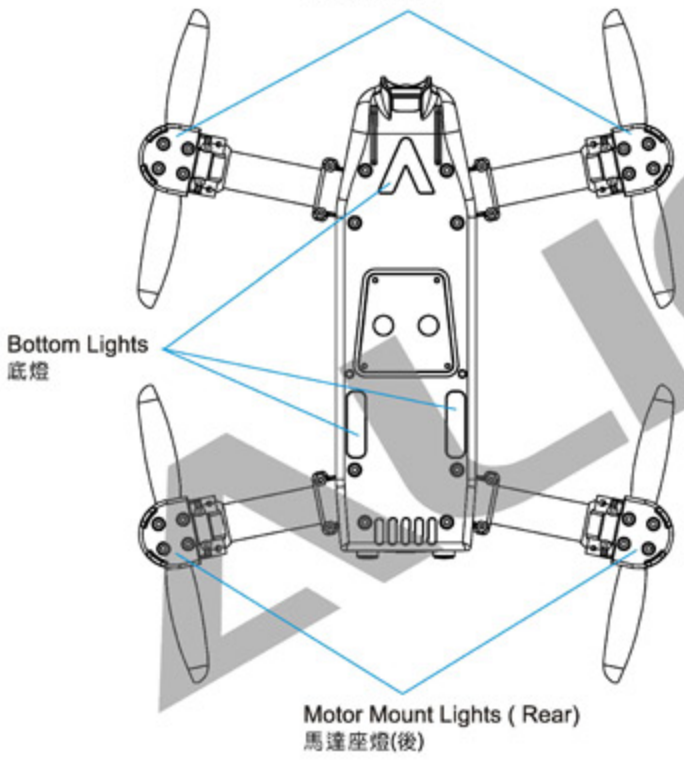
MR25/MR25P於機身底部、後控制面板與馬達固定座，配備個性化智慧型高亮度LED燈設計。透過手機APP可調整LED燈的顏色，高達256^3的調整方式，可做出16,777,216種變化，創造與衆不同的風格，突顯個人特色。

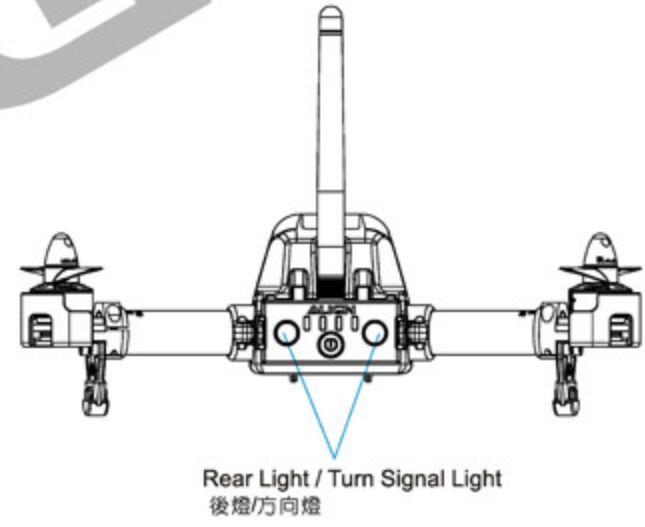
機身底燈、後燈、馬達座燈(後)，預設為相同燈號，是主要調整更改顏色的依據；而馬達座燈(前)則是對應顏色，會因顏色調整後的變化，對應出不同燈號，可清楚分辨機頭方向。

CAUTION 注 意

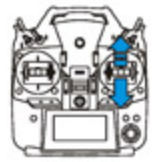
The color of two front motor mount light is automatically set to be different than other lights. After setup, make sure to click"Confirm" at the bottom of each page to ensure and complete all the parameter settings.

馬達座燈(前)的兩個燈號，出廠預設顏色與機身其它燈號不同。調整燈號顏色時，強烈建議勿將馬達座燈(前)會與其它燈號的顏色調成一致，避免在飛行時無法依燈號顏色判斷飛行頭向而發生不可預期的狀況。





REAR LIGHT / TURN SIGNAL LIGHT INDICATOR DESCRIPTION 後燈／方向燈指示說明

Mode 1	Mode 2	Control Stick Movement 遙控器動作指示	Rear Light / Turn Signal Light Status 後燈／方向燈顯示狀態
		To pull back elevator stick for the brake. 遙控器升降舵往後拉為煞車。	Constant rear light stands for flying; rapidly flash light stands for brake. 飛行中後燈為恆亮，煞車時燈號為快速閃爍。
		Right rudder to turn right Left rudder to turn left 右轉-遙控器尾舵打向右邊 左轉-遙控器尾舵打向左邊	When aircraft turn to the right, right rear light will be flash; for left turn, then the left rear light will be flash. 當穿越機向右轉時右燈會閃爍、左轉時則左燈閃爍。

The color of two front motor mount light is automatically setted to be different than other lights in order to identify where the nose is.

Allow to customizable RGB LED light color and adjust light brightness through App, providing outstanding and twinkle among others by personal mixing LED lights!

馬達座燈(前)的兩個燈號，出廠預設顏色與機身其它燈號不同，做為分辨穿越機頭向的識別。

調整機身燈號顏色，只要透過手機APP調整LED燈的RGB顏色，就能變化出您個人專屬的色彩；同時還能調整燈號亮度，創造與衆不同的MR25/MR25P，突顯個人的風格。

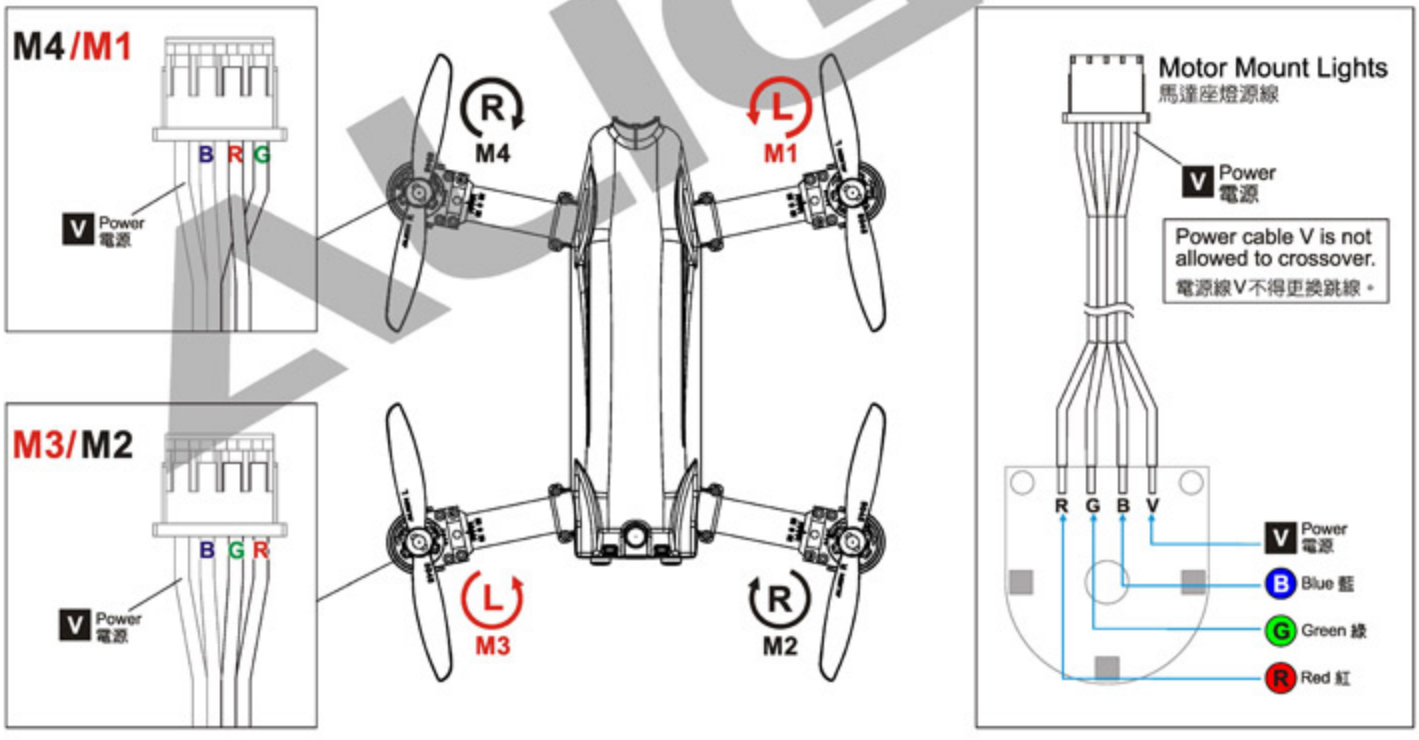
COLOR CHART 燈號顏色對照表

Color 顏色	Red 紅	Orange 橙	Yellow 黃	Green 綠	Blue 藍	Purple 紫	White 白	Black 黑
R	255	255	255	0	0	255	255	0
G	0	150	255	255	0	0	255	0
B	0	0	0	0	255	255	255	0

Let your Racing Quad outstanding and twinkle among others by personal mixing LED lights! More than 16,777,216 colors could be selective (256 to the power of 3). This chart lists main colors only.

此對照表僅列出主要顏色參考值，高達256^3的調整方式，可做出16,777,216種變化，依個人喜好選擇適當色彩。

MOTOR MOUNT LED LIGHT CONNECTIVITY METHOD 出廠設定馬達座燈源線示意圖

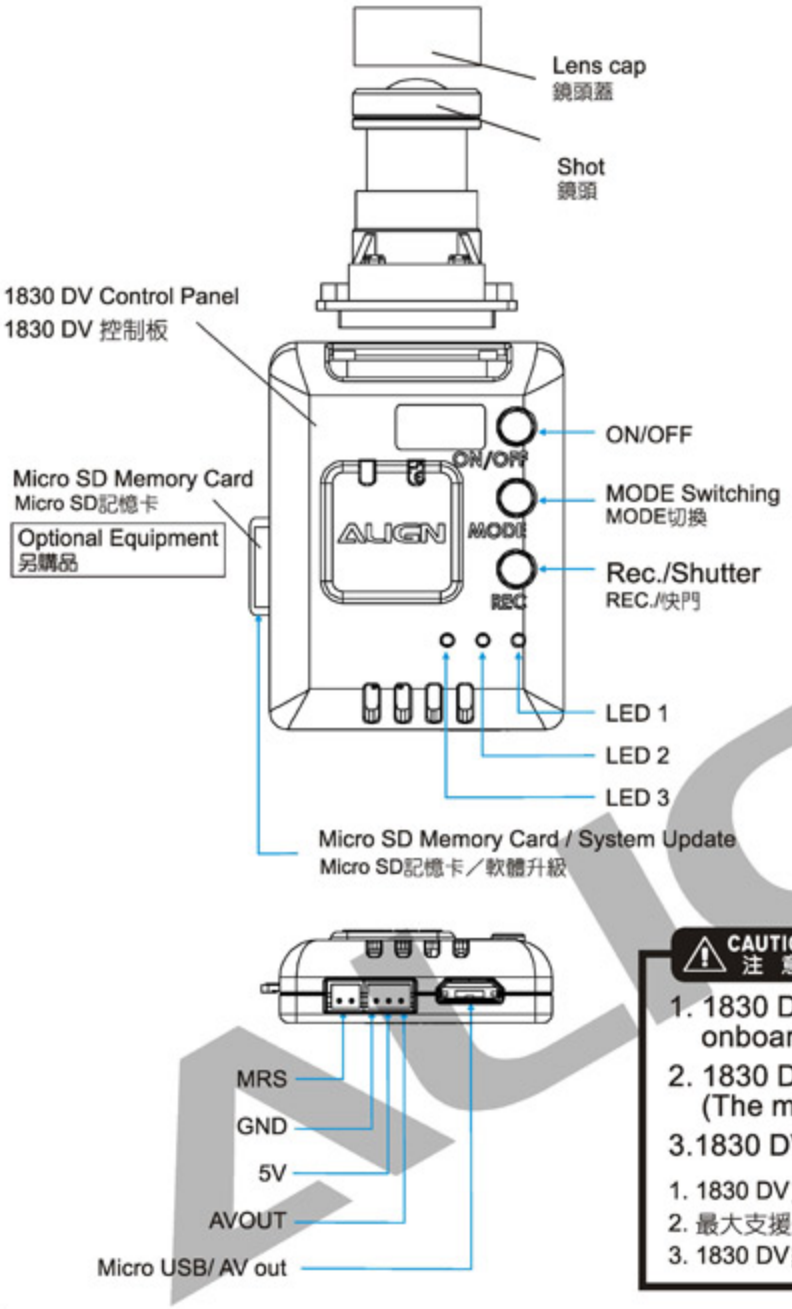


FORBIDDEN 禁 止

1. Power cable V is not allowed to crossover.
2. Make sure to be gentle when removing the contact and conductor, or it'll lead to cable damage and shorted circuit, as well as unforeseen danger and crashes.

1. 電源線V不得更換跳線。
2. 拔插線芯時，嚴禁用力拉扯，否則會造成破損與短路，而發生不可預期的危險。

7 1830 DV CAMERA FEATURES
1830 DV攝影機功能介紹



CAUTION 注 意

The lens cap can protect the lens and prevent scratching. Make sure to remove the lens cap before flying.
鏡頭蓋能有效保護鏡頭的清潔預防刮傷，在準備飛行時請取下鏡頭蓋，並妥善保存。

DV BUTTON FUNCTION DV設定鍵功能說明

ON/OFF	ON/OFF: Press and hold the button 長按-開機/關機
MODE Switching MODE切換	Mode switch: Momentary press the button 短按-切換拍攝攝模式
Rec./Shutter REC./快門	Record/Shutter: Momentary press the button 短按-開啓/結束錄影，或快門拍照

INDICATOR DESCRIPTION 指示燈說明

LED 1	1080P Video Mode 1080P錄影模式
LED 2	720P Video Mode 720P錄影模式
LED 3	Capture Mode 拍照模式

CAUTION 注 意

1. 1830 DV supports Micro SD memory card to record onboard video during flight.
2. 1830 DV support 32GB Micro SD memory card. (The maximum recording volume)
3. 1830 DV Aspect Ratio is 16:9

1. 1830 DV支援Micro SD記憶卡，可另購記憶卡記錄飛行中的影像。
2. 最大支援至32GB Micro SD記憶卡。
3. 1830 DV顯示比例為16:9。

DV SETUP MENU DV選單設定說明

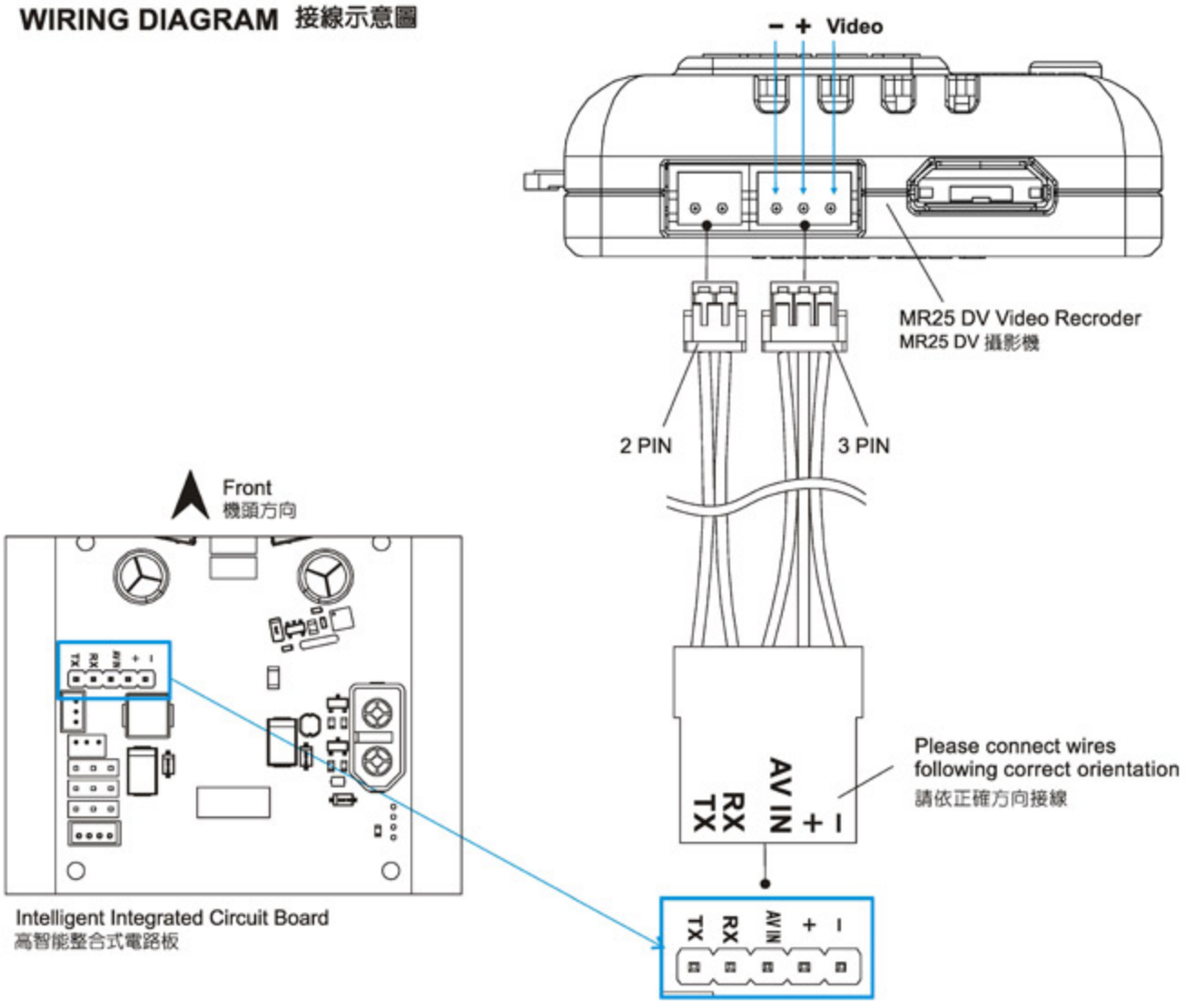
Allow to setup DV function on FPV display after power up DV camera.
DV攝影機開機後，可透過FPV螢幕顯示各項選單。

ON/OFF	Momentary press the button to enter the menu. 短按-進入選單
MODE Switching MODE切換	Momentary press the button to switch function setup. 短按-切換項目
Rec./Shutter REC./快門	Momentary press the button to select and start function setup. 短按-選取項目，進入設定畫面
1830 DV support PAL Video Output. 1830 DV支援PAL影像輸出。	

1. When enter into OSD menu, please roll to the bottom of the first page, and choose “SETUP” button.
2. Get into setup page, and select the second button to select language option for other DV camera setup process.

1. 進入OSD選單，請滾動到第一頁的底部，然後選擇“設置”按鈕。
2. 進入設置頁面，選擇第二個按鈕“語系”選擇您習慣使用的語言，來進行DV攝影機各項設定。

WIRING DIAGRAM 接線示意圖



WARNING 警 告

After video recording, please make sure to turn off camera DV power firstly, then turn off MR25 power afterwards, to ensure and save the recording video in SD memory card, or it will loss the data.

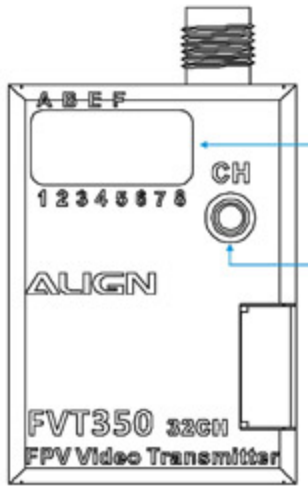
當DV攝影機錄影結束後，必須先關關DV電源再關閉MR25電源，這樣才能將錄影檔儲存於SD記憶卡，否則錄影內容將會遺失。

WARNING 警 告

This DV adapter cable has two connectors. Please plug 2pin/3pin connector(with fool-proofing) into 1830 DV video recorder and plug the other end of the 5pin dupont connector into the intelligent integrated circuit board. Please note that the 5pin dupont connector has no fool-proofing design, so make sure to respect the laser print of TX,RX,AV in,+,-, on connector to plug to intelligent integrated circuit board with the same words in front of pin. If you insert upside that may burn the DV and main board. Therefore, please double check the polarity and plug to the main board correctly. And please do not to get the pin crooked, ortherwise the crooked pin may cause a short circuit and malfunction.

DV連接線的兩端都有插頭，一邊分別是2pin/3pin端子（有防呆設計），插入1830 DV 攝影機；另一邊是5pin杜邦接頭，插入高智能整合式電路板。請注意5pin杜邦端子無防呆插頭設計，請務必將連接線端子上方鐳刻文字TX、RX、AV in、＋、－ 對準插入整合式電路版上前方有相同文字的PIN針。若將插頭插反，將導致DV及主電路板燒毀，所以插入前請再三確認極性是否正確，並且將插針正確地插入主電路板，並請注意別把針腳弄歪，歪斜的針腳可能造成短路故障的原因。

8 5.8G VIDEO TRANSMITTER ILLUSTRATED FEATURES
5.8G圖傳發射器功能介紹

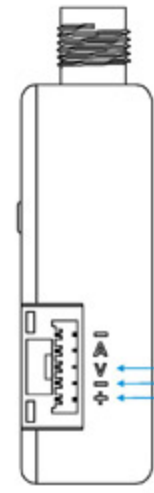


Channel Display
頻道顯示

Channel Switch Button
頻道更換鈕

Momentary press the button to change the channel
短按選擇 CH

Press and hold the button to change the Band
長按選擇 Band



Video IN

GND

7-19V IN
7-19V 輸入

CHANNEL LIST 5.8GHz圖傳頻段表

	CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8
BAND A	5865M	5845M	5825M	5805M	5785M	5765M	5745M	5725M
BAND B	5733M	5752M	5771M	5790M	5809M	5828M	5847M	5866M
BAND E	5705M	5685M	5665M	5645M	5885M	5905M	5925M	5945M
BAND F	5740M	5760M	5780M	5800M	5820M	5840M	5860M	5860M

WARNING 警告

Before turn on the power, make sure the antenna is mounted on the video transmitter correctly, because it helps to release the accumulated current, otherwise too large power may burn out the 5.8G video transmitter.

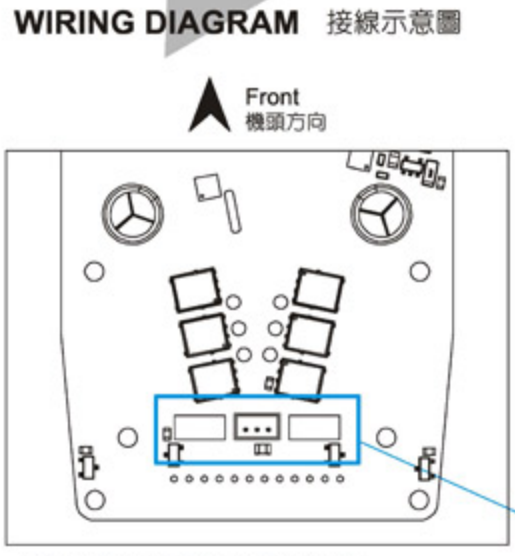
在打開電源之前，必須將圖傳天線裝上來釋放功率，以避免5.8G圖傳發射器因功率過大而燒毀。

CAUTION 注意

Channel chart for easy frequency checking, allow to check the frequency from "Frequency chart" on MRS APP at any time. Before turning on your model and transmitter, check to make sure no one else is operating on the same frequency. Frequency interference may cause unforeseen danger and crashes.

頻段表是一個方便確認頻率的工具。您可以開啓MRS APP，於MRS目錄中點選〔頻段表〕隨時隨地查閱。在飛行場上，如有其他穿越機準備同時飛行，請確認彼此的頻率沒有相同，否則會造成干擾導致失控而發生不可預期的危險。

WIRING DIAGRAM 接線示意圖



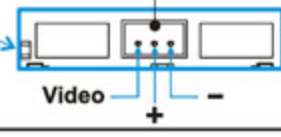
Front
機頭方向

Intelligent Integrated Circuit Board
高智能整合式電路板

5.8GHZ VIDEO TRANSMITTEREN
5.8G圖傳發射器

The connector designed with barbed bolt, please do not pull it hard when you need to plug/unplug connector, otherwise it may lead the connector and other electronic components damage.

接頭為倒勾設計，拔插時請勿用力拉扯，以免損壞接頭及其相關電子零件。



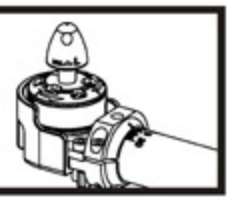
Please connect wires following correct orientation
請依正確方向接線

MRS SOFTWARE INSTALLATION AND SETUP
MRS 安裝與設定

ALIGN

WARNING 警告

For safety reasons, please remove all propellers during initial setup.
設定MR25/MR25P的過程中，必須將螺旋槳拆下，以避免發生不可預期的危險。



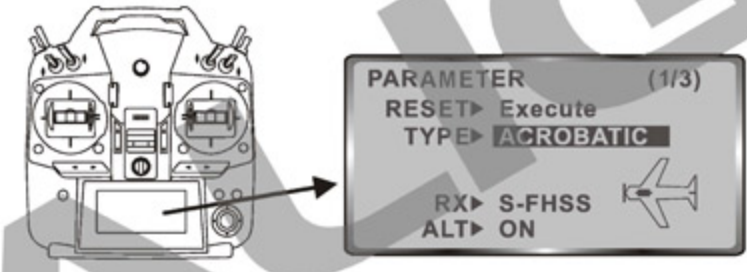
1 SOFTWARE DOWNLOAD AND INSTALLATION
MRS下載安裝

MRS flight control system is the latest version at the factory, please feel at ease using it. You can also link to ALIGN MRS website to get the latest version and the latest news.

MRS飛控系統，在出廠前已是最新版本，請安心使用。您也可以連結至亞拓MRS網站查詢，隨時更新亞拓發佈的最新版本及各項最新訊息。

1.Select either Airplane or Multicopter model type on the transmitter.
MRS will only work with transmitter set to either Airplane or Multicopter model type.

遙控器選擇飛機或多軸模式：使用MRS時，遙控器必須選擇飛機或多軸模式，才能與MRS正確搭配使用。



CAUTION 注意

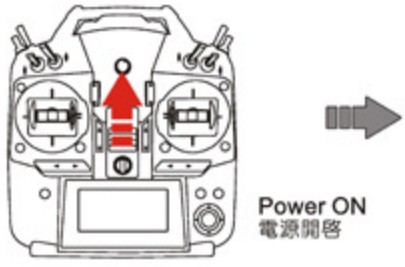
Never enable your transmitter's mixing function.
請勿開啓遙控器混控功能。

2.Please scan QR Code for link to ALIGN website to find related software, or search" ALIGN MRS" in iOS / Android app store.

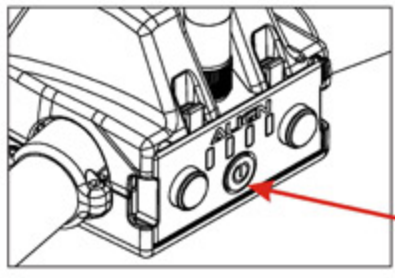
請掃描QR Code連結亞拓網站下載相關軟體，或是在iOS/Android App store搜尋"ALIGN MRS"。
http://www.align.com.tw/download-en/mrs/

Compatible with ANDROID APP ON Google play Download on the App Store

3.Power on your transmitter and multicopter.
開啓遙控器與啓動電源



Power ON
電源開啓



Press and hold for 3 seconds to power up
長按3秒開機

2 MRS SETUP
MRS設定

Program Splash Page 程式版本宣告

This splash page will appear when program is launched for the first time. MRS home page will appear 2 seconds later.

第一次進入程式，或重新登入顯示版本宣告頁面兩秒後自動進入MRS首頁。

MRS Disclaimer MRS 免責聲明：

This ALIGN MRS System Agreement for the licensing of ALIGN Cooperation Ltd. Products and Services is made and entered into by and between ALIGN Cooperation Ltd. and the customer/users identified below and/or on the Ordering Document(s). This Agreement, each accompanying addendum and each accompanying Ordering Document governs Customer/user's access to and use of the Products and Services (hereinafter called the Software).

首次使用MRS，系統會顯示免責聲明，請詳讀內容！一旦下載、安裝或使用ALIGN MRS軟體或其中任何部分，即表示貴用戶同意遵守各項條款與細則。

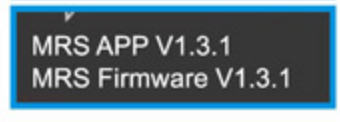
Connection Status LED Description 連線狀態燈號說明

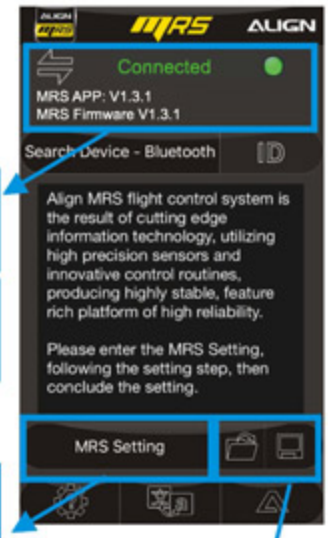
Green light for normal connection ; red light for disconnected.

After connect up MRS, the system will displays current firmware and interface of MRS version.

綠燈為正常連線；紅燈為未連線。

當MRS為正常連線狀態下，系統會顯示目前MRS的操作介面版本與程式版本。





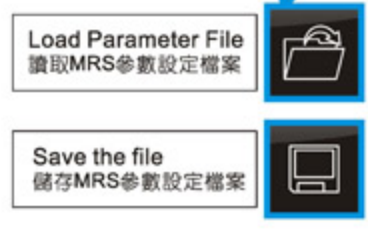
Click on "MRS Setup Menu" to enter the setup page.

選擇〔MRS飛行控制器設定〕進入MRS目錄選單。

Read and save the file 讀取及儲存檔案

MRS provides reading and saving function for parameters. Make sure to save all your settings after setup and before system update in mobile device for future use.

MRS提供讀取及儲存參數設定的功能，在各項選單設定完畢或準備更新程式之前，可以將喜好的參數設定儲存至手機，做為日後調整設定使用。



CAUTION 注 意

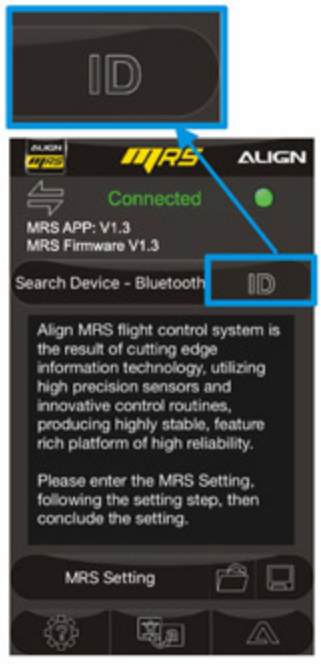
Attention: Only while you confirm binding with transmitter, then you can change the name of MRS bluetooth.

此功能需在遙控器對頻狀態下進行。

Instruction for how to change the name of MRS Bluetooth

藍牙名稱設定/修改步驟:

1. Connect to MRS, then tap " Search Bluetooth" button.
2. When Bluetooth is connected, it shows "ID" on screen enable to tap and start rename.
3. Type your name (The name can be up to 16 alphanumeric characters long.)
4. Tap "Confirm" button and Bluetooth will disconnect automatically. LED turns solid to start modification.
5. Wait till LED flash to indicate that Bluetooth rename has been completed.



1. MRS連線後，點擊〔搜尋裝置－藍牙〕按鈕。
2. 藍牙裝置在連線狀態下〔ID〕按鈕為顯示，即可點選開啓修改藍牙名稱的視窗。
3. 輸入自訂名稱（最多可達16字元）。
4. 按下確認鍵後，藍牙會自動斷線，且LED燈會恆亮進入修改狀態。
5. 待LED燈恢復正常即完成名稱修改。

CAUTION 注 意

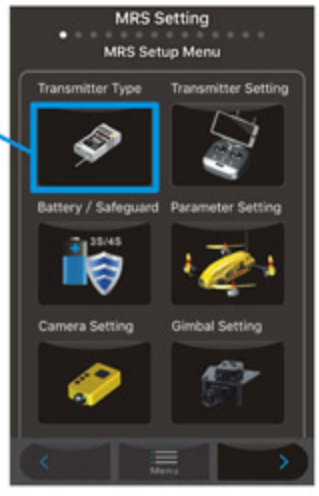
1. Rename cannot be done if Bluetooth is disconnected.
2. For iOS system, when Bluetooth rename has been competed, you will still get the original Bluetooth name on device. So make sure to follow the instruction : to connect >> disconnect >> re-search for Bluetooth again, then it shows the new name of MRS Bluetooth.

1. 在藍牙裝置未連線的狀態下，無法進行藍牙名稱設定/修改。
2. iOS裝置在修改後搜尋到的名稱會是上一個設定，必須先連線後並斷線，重新搜尋才會顯示修改後的名稱。

MRS Setting Selection MRS目錄選單

Each settings can be located quickly through this setting selection menu. We recommend following the sequence during MRS' initial setup.

由MRS目錄選單可快速進入所要的選項頁，首次設定MRS建議依序進行設定及調整。



CAUTION 注 意

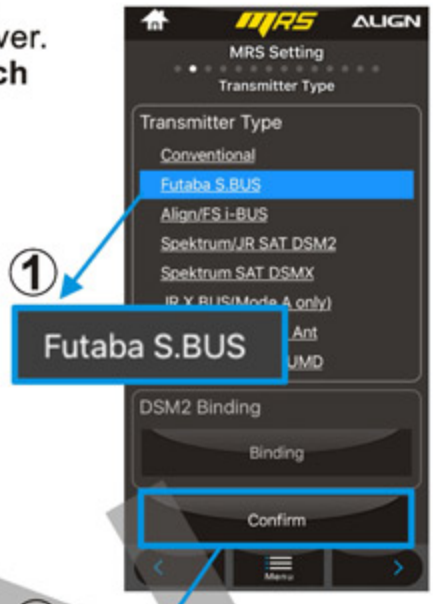
After setup, make sure to click "Confirm" at the bottom of each page to ensure and complete all the parameter settings.

每次設定時，請務必按下"設定確認鍵"，確認此次參數設定已調校完成。

1 TRANSMITTER TYPE
遙控器選擇

MRS supports standard receiver, Futaba S.BUS, FLYSKY i.BUS, Spektrum/JR SAT DSM2, JR X.BUS, JR DMSS Remote Ant receiver. **After setup, make sure to click "Confirm" at the bottom of each page to ensure and complete all the parameter settings.**

請選擇所使用接收器類型。
MRS支援傳統接收器、Futaba S.BUS、FLYSKY i.BUS、Spektrum/JR SAT DSM2、JR X.BUS接收器。**每次設定時，請務必按下"設定確認鍵"，確認此次參數設定已調校完成。**



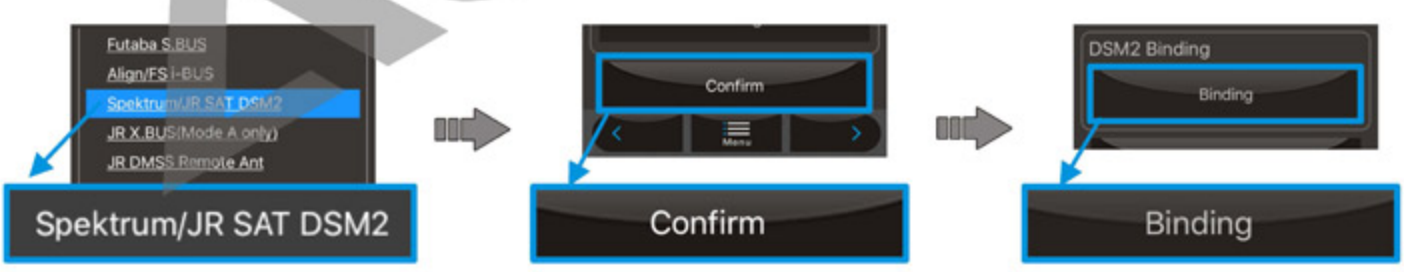
CAUTION 注 意

The way of binding varies from different receiver brands. Please refer to the instruction from receiver supplier for binding and wiring.
各廠牌接收器的對頻方式不同，請依照原廠指示對頻完成後再進行接線。

Please refer to Align announcement of MRS flight controller system for news update of receiver and support.
各類型接收器相關支援及更新，請隨時關注亞拓發佈MRS飛控系統的最新版本及各項最新訊息。

Spektrum/JR SAT DSM2 Binding
Spektrum/JR SAT DSM2 對頻方式

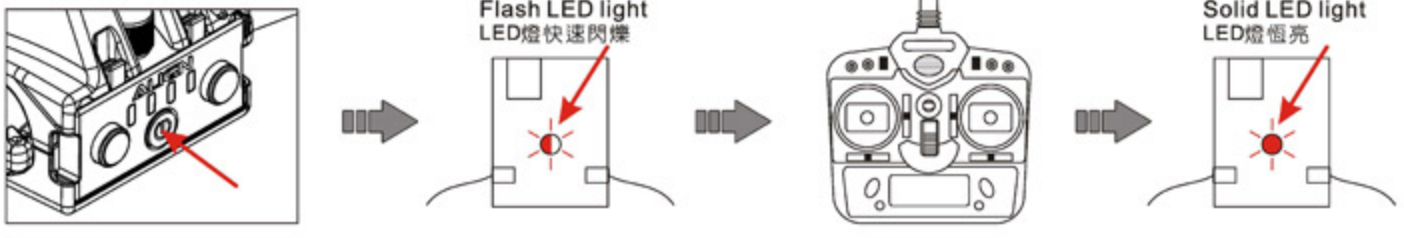
Spektrum/JR SAT DSM2 Binding 對頻方式



① Select DSM2 satellite
點選DSM2衛星天線

② Click "confirm" to save
按〔設定確認〕儲存

③ Click "Bind" button
點選 "對頻" 按鈕



④ Re-start
重新開機

⑤ Enter in binding mode
進入對頻模式

⑥ Press "Bind button" on transmitter
遙控器按對頻鈕開機

⑦ Complete binding
對頻完成

2 RC TRANSMITTER SETUP
遙控器設定

CAUTION 注 意

When first time setup, make sure to perform and complete travel range calibration, or it may lead to abnormal system control.

MR25初次設定時，請務必要正確執行遙控器行程校正，否則會造成遙控器控制異常。。

CH1~CH4

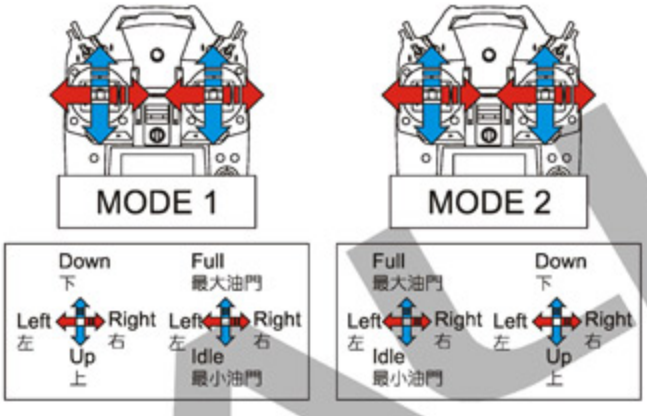
RC Transmitter Stick Direction and Travel Range Calibration:

1) Before starting, set all EPA / Travel ADJ max and min value on your TX to default 100%, and neutralize all subtrims to 0.
2) Move your RC transmitter sticks and confirm travel direction on aileron/ elevator/ throttle/ rudder correctly matches the PC interface display. Select the " Reverse"on corresponding channels that need reversing.

遙控器搖桿方向、行程校正：

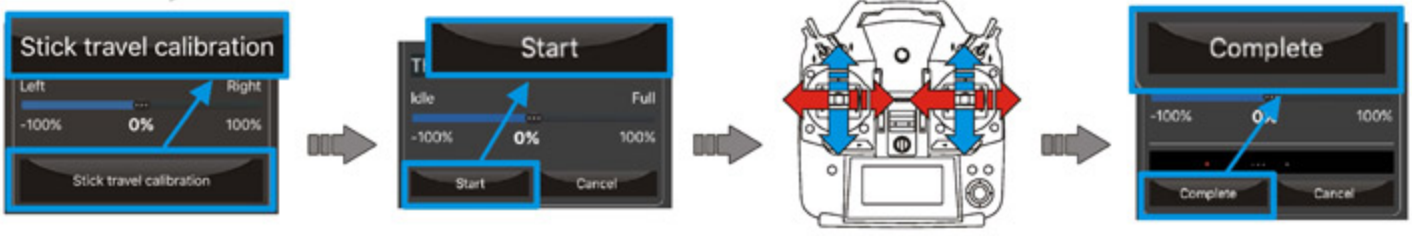
1)設定此項目前，所有頻道EPA、Travel ADJ最大最小要為預設值100%，所有微調設為"0"。

2)確認遙控器各動作，副翼、升降、油門、尾舵搖桿方向是否正確，如果介面上顯示方向與搖桿方向相反，可點選該頻道上的"正反向"，讓介面與遙控器一致。



3)Select "Stick travel calibration" and move all sticks on RC transmitter to maximum and minimum position, then click on "Complete"to finish.

3)點選"遙控器行程校正"將遙控器搖桿都推至最大、最小，然後按下"完成"來結束校正。



① Click on RC Travel Range Calibraton.
點選遙控器行程校正

② Click on "Start".
點選開始進行遙控器行程校正

③ Move all sticks on RC transmitter to maximum and minimum position.
將遙控器搖桿推至最大及最小

④ Click on "Complete"
完成

CAUTION 注 意

After setup, make sure to click "Confirm" at the bottom of each page to ensure and complete all the parameter settings.

每次設定時，請務必按下"設定確認鍵"，確認此次參數設定已調校完成。

3 CHANNEL FUNCTIONS
各頻道動作定義

CH5 MOTOR ARM 油門解鎖

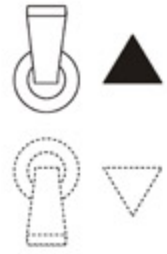
Motor Arm Function - To arm the transmitter for throttle control. Assign a 2-step switch on your RC transmitter to CH5 Motor Arm. After setup, make sure to click "Confirm" at the bottom of each page to ensure and complete all the parameter settings.

MR25/MR25P具備解鎖功能，在飛行前執行解鎖動作，讓遙控器開啓作動，可選擇一個二段開關對應CH5油門解鎖。

CAUTION 注 意

After setup, make sure to click "Confirm" at the bottom of each page to ensure and complete all the parameter settings.

每次設定時，請務必按下"設定確認鍵"，確認此次參數設定已調校完成。



▲ Lock 鎖定

▽ Motor Arm 解鎖

Transmitter Motor Arm Switch
遙控器開關解鎖

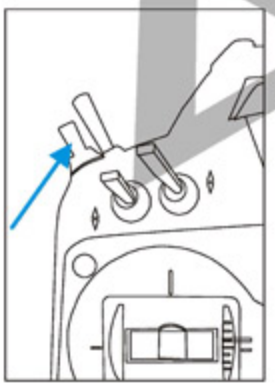
CH6 FLIGHT MODE 飛行模式

Flight mode: Attitude, Manual-Normal, and Manual-Sport Mode can all be assigned. Please assign a 3-step switch on your RC transmitter to Ch6 Flight Mode.

MR25/MR25P具備了三種飛行模式：姿態、手動-一般、手動-運動，請先選擇一個三段開關對應CH6飛行模式。

Switch settings vary between different transmitter models, and can be set according to user preference.

各型號遙控器開關配置設定不相同，可依使用習慣選擇開關。



▲ Attitude Mode 姿態模式

■ Manual Mode (Normal) 手動模式-一般

▼ Manual Mode (Sport) 手動模式-運動

WARNING 警 告

Beginners should not select Manual mode on first position. Inexperiences with manual flying may lead to control difficulties or even crash.

初學者不建議設定第一段為手動模式，手動模式在不熟練飛行控制者的操作下飛行，可能會造成不可預期的意外發生。

CH7 GIMBAL MODE 雲台模式

Auto Tilt Compensation - Assign a 3-step switch on your RC transmitter to CH7 Gimbal mode.
MR25/MR25P具備了俯仰自動修正功能，可選擇一個三段開關對應CH 7雲台模式。

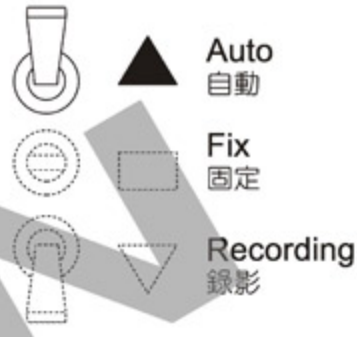
CAUTION 注 意

If you are using 6-channel transmitter, then the setting of CH7~CH8 are all default setup. You can set these channels assignment by APP interface software for correction.
如果您所使用的是六動遙控器，那麼CH7、CH8所指定的動作會是出廠時的預設值。若是要更改各頻道動作定義可透過APP介面做調整。

Default Setting: Auto
出廠預設值：自動修正

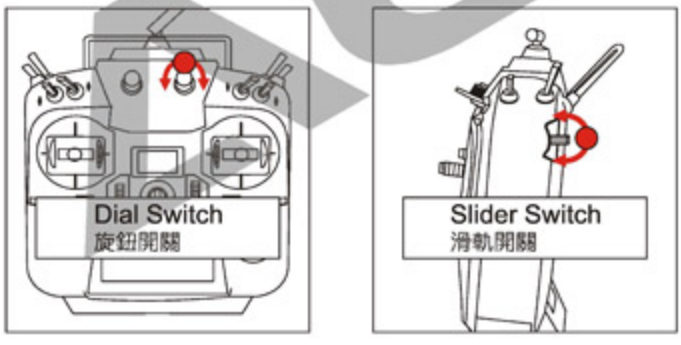
WARNING 警 告

After video recording, please make sure to turn off camera DV power firstly, then turn off MR25 power afterwards, to ensure and save the recording video in SD memory card, or it will loss the data.
當DV攝影機錄影結束後，必須先關關DV電源再關閉MR25電源，這樣才能將錄影檔儲存於SD記憶卡，否則錄影內容將會遺失。



CH8 GIMBAL ANGLE 雲台角度

Gimbal Angle Adjustment - Assign a 2-step switch on your RC transmitter to CH8 Gimbal mode.
MR25/MR25P具備了雲台角度設定功能，可選擇一個旋鈕或滑桿開關對應CH 8雲台角度。



Default Setting: 0 degree
出廠預設值：0度

4 BATTERY / SAFEGUARD
電池設定/安全保護

Choose the cell of your battery. If battery specification and setting are different, MR25 motor LED will keep flashing after power up and be unable to use.

MRS's intelligent power management system will automatically power off in a pre-determined time after landing.

MRS's factory default hibernation function is OFF, which can be adjusted to 5-10 minutes based on actual needs. **After setup, make sure to click "Confirm" at the bottom of each page to ensure and complete all the parameter settings.**

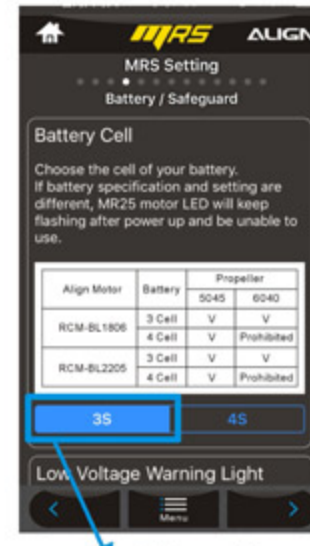
Set up low voltage warning. Recommended value is 10.5V.

選擇使用電池的規格。如果使用的電池與設定的規格不同，MR25開機後馬達燈將會持續閃爍，並無法正常使用。

MRS具備智慧電源管理功能，當穿越機降落閒置時，會執行電源關閉保護。

MRS自動關閉時間原廠值為關閉，您可以依實際需求設定關時間長短，調整至5分鐘或10分鐘關機。**每次設定時，請務必按下"設定確認鍵"，確認此次參數設定已調校完成。**

設定低電壓警示，出廠設定為10.5V(建議值)。



3S or 4S

Choose the cell of your battery.
選擇使用電池的規格。

FORBIDDEN 禁 止

3Cell battery can be use Align standard **5045/6040 propellers**, **4Cell** battery can use Align standard **5045 propellers only**, strictly prohibit to use other propellers instead of Align 5045 propellers; Improper usage will lead to ESC power outage, motor, electronic burn out and other unforeseen danger and accident.

3S電池請使用亞拓原廠 5045/6040 螺旋槳、4S電池只適用亞拓原廠 5045 螺旋槳，嚴禁使用它廠牌之螺旋槳，否則不當的動力輸出將導致 ESC 斷電、馬達、電子零件燒毀。

5 PARAMETER SETTING
飛行參數設定

MR25/MR25P gains have been optimized out of the factory; no changes are necessary for flight. In addition, MRS also provides independent gain adjustments for Manual and Attitude modes. Excess deviation of these gains may affect stability and decrease flight performance. **After setup, make sure to click "Confirm" at the bottom of each page to ensure and complete all the parameter settings.**

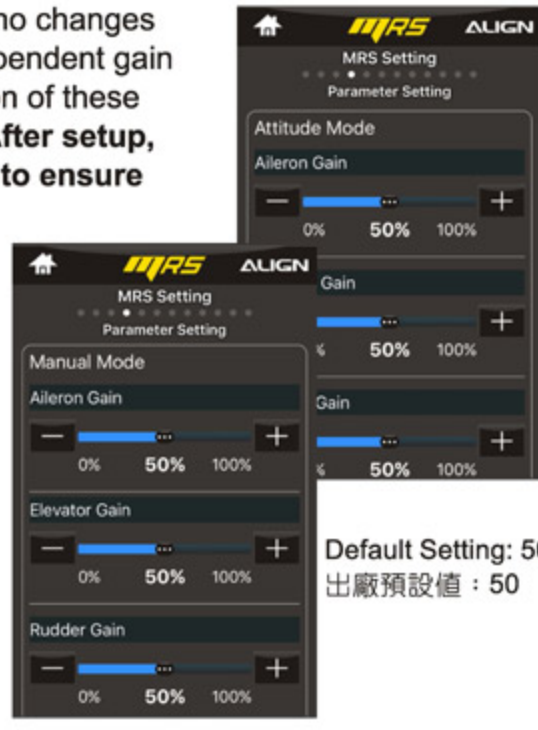
Attitude Mode: Maintains level .

Manual Mode: Full control by the pilot without any horizontal leveling capabilities. (Highly recommanded not to turn on this function if you're not familiar with it.)

MR25/MR25P出廠預設感度已為最佳適用感度，不須調整即可飛行。另外，MRS提供手動、姿態模式各動作的感度調整，可依個人喜好須求調整，感度過大或過小會造成穩定性或操控性變差。**每次設定時，請務必按下"設定確認鍵"，確認此次參數設定已調校完成。**

姿態模式：自動保持穿越機飛行時姿態水平功能。

手動模式：完全由操控者控制，無自動水平功能。（強烈建議，不熟悉操作者勿開啓此功能）。



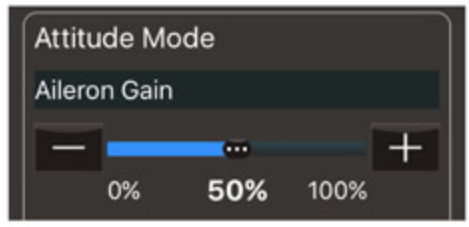
Default Setting: 50
出廠預設值：50

ATTITUDE MODE 姿態模式

1. Aileron Gain 副翼感度

a. For fast lateral oscillation, check to decrease aileron gain value generally by 5% till correct the attitude function.

b. For lateral drift, check to increase aileron gain value generally by 5% till correct the attitude function.



a. 當機體有左右快速抖動的現象時，將副翼感度以漸進的方式一次5%調降，直到機體姿態反應正常。

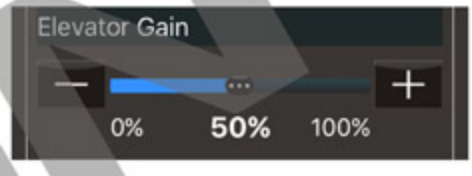
b. 當機體有左右不安定滑動的現象時，將副翼感度以漸進的方式一次5%調升，直到機體姿態反應正常。

---

2. Elevator Gain 升降感度

a. For fast fowrard/aft oscillation, check to decrease elevator gain value generally by 5% till correct the attitude function.

b. For lateral drift of tail, check to increase elevator gain value generally by 5% till correct the attitude function.



a. 當機體有左右快速抖動的現象時，將副翼感度以漸進的方式一次5%調降，直到機體姿態反應正常。

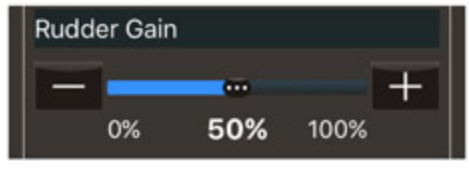
b. 當機體有左右不安定滑動的現象時，將副翼感度以漸進的方式一次5%調升，直到機體姿態反應正常。

---

3. Rudder Gain 尾舵感度

a. For fast oscillation of the tail, check to decrease rudder gain value generally by 5% till correct the attitude function.

b. For lateral drift of tail, check to increase rudder gain value generally by 5% till correct the attitude function.



a. 當機尾有左右快速抖動的現象時，將尾舵感度以漸進的方式一次5%調降，直到機體姿態反應正常。

b. 當機尾有左右不安定滑動的現象時，將尾舵感度以漸進的方式一次5%調升，直到機體姿態反應正常。

---

4. Aileron Maximum Angle 副翼動作角度

To adjust Attitude Aileron Maximum Angle

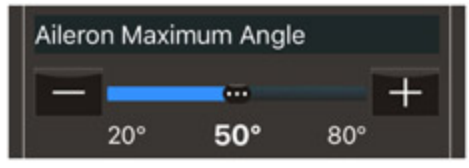
a. For large Aileron angle, check to decrease gain value generally by 5% to reduce the angle, till suitable to your control feel.

b. For small Aileron angle , check to increase gain value generally by 5% to increase the angle, till suitable to your control feel.

此設定為調整姿態模式副翼最大傾角。

a. 當機體有副翼動作角度過大時，以漸進的方式一次5度調降，減低動作角度，直到適合您的飛行性能。

b. 當機體有副翼動作角度過小時，以漸進的方式一次5度調升，加大動作角度，直到適合您的飛行性能。



5. Elevator Maximum Angle 升降動作角度

To adjust Elevator Maximum Angle in Attitude mode.

a. For large Elevator angle, check to decrease gain value generally by 5% to reduce the angle, till suitable to your control feel.

b. For small Elevator angle , check to increase gain value generally by 5% to increase the angle, till suitable to your control feel.

此設定為調整姿態模式升降最大傾角。

a. 當機體有升降動作角度過大時，以漸進的方式一次5度調降，減低動作角度，直到適合您的飛行性能。

b. 當機體有升降動作角度過小時，以漸進的方式一次5度調升，加大動作角度，直到適合您的飛行性能。

6. Aileron Speed Limit 副翼翻滾速度

To adjust Aileron Speed Limit in Attitude mode.

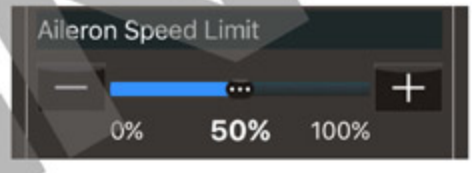
a. For large Aileron speed limit, check to decrease gain value generally by 5% to reduce speed limit, till suitable to your control feel.

b. For small Aileron speed limit , check to increase gain value generally by 5% to increase speed limit, till suitable to your control feel.

此設定為調整姿態模式副翼翻滾速度。

a. 當機體有副翼翻滾速度過大時，以漸進的方式一次5%調降，減低翻滾速度，直到適合您的飛行性能。

b. 當機體有副翼翻滾速度過小時，以漸進的方式一次5%調升，加大翻滾速度，直到適合您的飛行性能。



7. Elevator Speed Limit 升降翻滾速度

To adjust Elevator Speed Limit in Attitude mode.

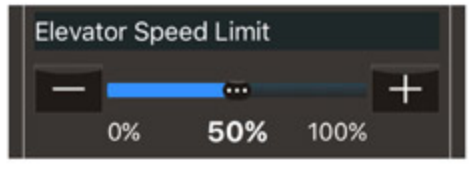
a. For large Elevator speed limit, check to decrease gain value generally by 5% to reduce the speed limit, till suitable to your control feel.

b. For small Elevator speed limit , check to increase gain value generally by 5% to increase the speed limit, till suitable to your control feel.

此設定為調整姿態模式升降翻滾速度。

a. 當機體有升降翻滾速度過大時，以漸進的方式一次5%調降，減低翻滾速度，直到適合您的飛行性能。

b. 當機體有升降翻滾速度過小時，以漸進的方式一次5%調升，加大翻滾速度，直到適合您的飛行性能。



8. Return Speed 回正速度

To adjust Return Speed gain in Attitude Mode.

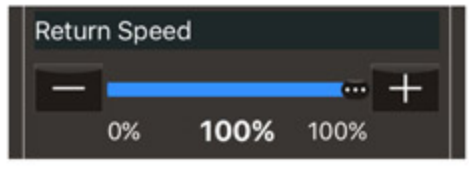
a. For large Return Speed, check to decrease gain value generally by 5% to reduce return speed, till suitable to your control feel.

b. For small Return Speed , check to increase gain value generally by 5% to increase return speed, till suitable to your control feel.

此設定為調整姿態模式的自動回正（自動水平）速度。

a. 當機體有回正速度過大時，以漸進的方式一次5%調降，減低回正速度，直到適合您的飛行性能。

b. 當機體有回正速度過小時，以漸進的方式一次5%調升，加大回正速度，直到適合您的飛行性能。



MANUAL MODE 手動模式

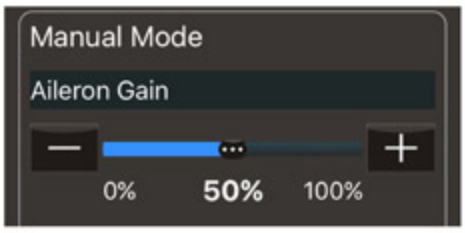
1. Aileron Gain 副翼感度

a. For fast lateral oscillation, check to decrease aileron gain value generally by 5% till correct the attitude function.

b. For lateral drift, check to increase aileron gain value generally by 5% till correct the attitude function.

a. 當機體有左右快速抖動的現象時，將副翼感度以漸進的方式一次5%調降，直到機體姿態反應正常。

b. 當機體有左右不安定滑動的現象時，將副翼感度以漸進的方式一次5%調升，直到機體姿態反應正常。



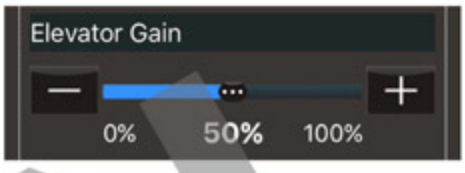
2. Elevator Gain 升降感度

a. For fast fowrard/aft oscillation, check to decrease elevator gain value generally by 5% till correct the attitude function.

b. For lateral drift of tail, check to increase elevator gain value generally by 5% till correct the attitude function.

a. 當機體有左右快速抖動的現象時，將副翼感度以漸進的方式一次5%調降，直到機體姿態反應正常。

b. 當機體有左右不安定滑動的現象時，將副翼感度以漸進的方式一次5%調升，直到機體姿態反應正常。



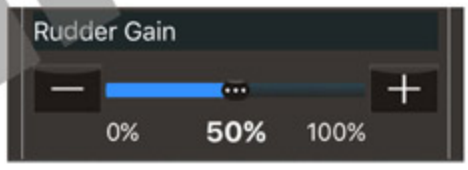
3. Rudder Gain 尾舵感度

a. For fast oscillation of the tail, check to decrease rudder gain value generally by 5% till correct the attitude function.

b. For lateral drift of tail, check to increase rudder gain value generally by 5% till correct the attitude function.

a. 當機尾有左右快速抖動的現象時，將尾舵感度以漸進的方式一次5%調降，直到機體姿態反應正常。

b. 當機尾有左右不安定滑動的現象時，將尾舵感度以漸進的方式一次5%調升，直到機體姿態反應正常。



MANUAL MODE (Normal) 手動模式(一般)

1. Aileron Speed Limit 副翼翻滾速度

To adjust Aileron Speed Limit in Manual-Normal Mode which is suitable for FPV and normal flying.

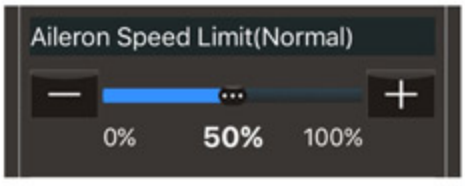
a. For large Aileron speed limit, check to decrease gain value generally by 5% to reduce speed limit, till suitable to your control feel.

b. For small Aileron speed limit , check to increase gain value generally by 5% to increase speed limit, till suitable to your control feel.

此設定為調整手動模式副翼翻滾速度，一般模式適合FPV與一般航道飛行。

a. 當機體有翻滾速度過大時，以漸進的方式一次5%調降，減低翻滾速度，直到適合您的飛行性能。

b. 當機體有副翼翻滾速度過小時，以漸進的方式一次5%調升，加大翻滾速度，直到適合您的飛行性能。



2. Elevator Speed Limit 升降翻滾速度

To adjust Elevator Speed Limit in Manual-Normal Mode which is suitable for FPV and normal flying.

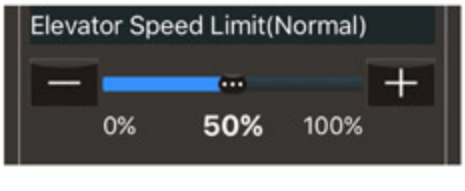
a. For large Elevator speed limit, check to decrease gain value generally by 5% to reduce the speed limit, till suitable to your control feel.

b. For small Elevator speed limit , check to increase gain value generally by 5% to increase the speed limit, till suitable to your control feel.

此設定為調整手動模式升降翻滾速度，一般模式適合FPV與一般航道飛行。

a. 當機體有升降翻滾速度過大時，以漸進的方式一次5%調降，減低翻滾速度，直到適合您的飛行性能。

b. 當機體有升降翻滾速度過小時，以漸進的方式一次5%調升，加大翻滾速度，直到適合您的飛行性能。



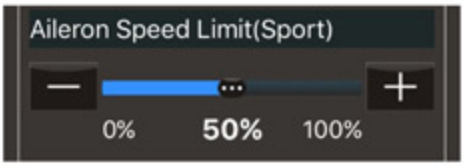
MANUAL MODE (Sport) 手動模式(運動)

1. Aileron Speed Limit 副翼翻滾速度

To adjust Aileron Speed Limit in Manual-Sport Mode which is suitable for 3D and FPV flying.

a. For large Aileron speed limit, check to decrease gain value generally by 5% to reduce speed limit, till suitable to your control feel.

b. For small Aileron speed limit , check to increase gain value generally by 5% to increase speed limit, till suitable to your control feel.



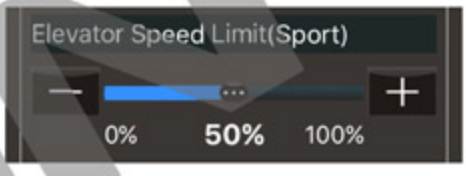
此設定為調整手動模式副翼翻滾速度，運動模式適合3D與FPV翻滾飛行。
A. 當機體有翻滾速度過大時，以漸進的方式一次5%調降，減低翻滾速度，直到適合您的飛行性能。
b. 當機體有副翼翻滾速度過小時，以漸進的方式一次5%調升，加大翻滾速度，直到適合您的飛行性能。

2. Elevator Speed Limit 升降翻滾速度

To adjust Elevator Speed Limit in Manual-Sport Mode which is suitable for 3D and FPV flying.

a. For large Elevator speed limit, check to decrease gain value generally by 5% to reduce the speed limit, till suitable to your control feel.

b. For small Elevator speed limit , check to increase gain value generally by 5% to increase the speed limit, till



此設定為調整手動模式升降翻滾速度，運動模式適合3D與FPV翻滾飛行。
a. 當機體有升降翻滾速度過大時，以漸進的方式一次5%調降，減低翻滾速度，直到適合您的飛行性能。
b. 當機體有升降翻滾速度過小時，以漸進的方式一次5%調升，加大翻滾速度，直到適合您的飛行性能。

CAUTION 注 意

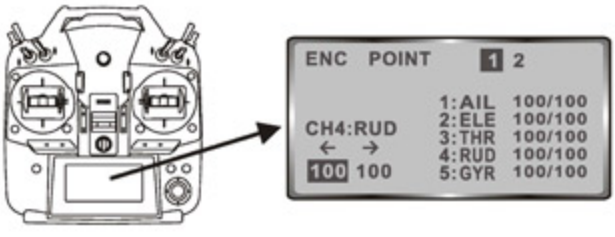
After setup, make sure to click "Confirm" at the bottom of each page to ensure and complete all the parameter settings.

每次設定時，請務必按下"設定確認鍵"，確認此次參數設定已調校完成。

RUDDER SPEED LIMIT ADJUSTMENT 尾舵速度調整

Allow to adjust Rudder Speed Limit through Endpoint/Travel ADJ value on the transmitter, to faster and lower rudder speed reaction.

尾舵的反應速度可透過遙控器調整尾舵的Endpoint/Travel ADJ數值，來增加或降低尾舵反應速度。



FORBIDDEN 禁 止

Manual mode is suitable only for experienced pilots. Beginners shold avoid flying in manual mode.

手動模式適合有飛行經驗的玩家使用，並嚴禁初學者使用，否則會造成不可預期的危險。

GAIN AND FLIGHT CHARACTERISTICS ADJUSTMENTS
感度與飛行特性調整說明

		Gain too high 感度過大	Gain too low 感度過小	Default Setting 出廠預設值	Suitable for 適合使用者
Attitude Mode 姿態模式	Aileron Gain 副翼感度	Fast lateral oscillation 機體左右快速抖動	Lateral drift 機體左右不安定滑動	50	Beginner 初學者 General 一般飛行員 Professional 高階飛行員
	Elevator Gain 升降感度	Fast fowrard/aft oscillation 機體前進／後退快速抖動	Forward/aft drift 機體前進／後退不安定滑動	50	
	Rudder Gain 尾舵感度	Fast oscillation of the tail 機尾左右快速抖動	Lateral drift of tail 機尾左右不安定滑動	50	
	Aileron Maximum Angle 副翼動作角度	To adjust Attitude Aileron/Elevator Maximum Angle, increase gain value for small Aileron/Elevator angle ; decrease gain value for large Aileron/Elevator angle. 調整姿態模式副翼／升降最大傾角，當飛行時副翼／升降動作角度過小時，可加大動作角度；動作角度過大時，則減低動作角度。		50	
	Elevator Maximum Angle 升降動作角度			50	
	Aileron Speed Limit 副翼翻滾速度	To adjust Attitude Aileron/Elevator Speed Limit, increase gain value for low-sensitive Aileron/Elevator maneuver; decrease gain value for high-sensitive Aileron/Elevator maneuver. 調整姿態模式副翼／升降翻滾速度（動作反應速度），當飛行時副翼／升降動作角度過小時，可加大翻滾速度；動作反應過大時，則減低翻滾速度。		50	
	Elevator Speed Limit 升降翻滾速度			50	
	Return Speed 回正速度	Adjust Return Speed gain in Attitude Mode. 調整姿態模式的自動回正（自動水平）速度。		50	
Manual Mode 手動模式	Aileron Gain 副翼感度	Fast lateral oscillation 機體左右快速抖動	Lateral drift 機體左右不安定滑動	50	Professional 高階飛行員
	Elevator Gain 升降感度	Fast fowrard/aft oscillation 機體前進／後退快速抖動	Forward/aft drift 機體前進／後退不安定滑動	50	
	Rudder Gain 尾舵感度	Fast oscillation of the tail 機尾左右快速抖動	Lateral drift of tail 機尾左右不安定滑動	50	
Manual Mode (Normal) 手動模式－一般	Aileron Speed Limit 副翼翻滾速度	Manual - Normal Mode : suitable for FPV and normal flying. Adjust Aileron/Elevator Speed Limit 一般模式適合FPV與一般航道飛行。 調整副翼／升降翻滾速度。		50	Professional 高階飛行員
	Elevator Speed Limit 升降翻滾速度			50	
Manual Mode (Sport) 手動模式－運動	Aileron Speed Limit 副翼翻滾速度	Manual - Sport Mode : suitable for 3D and FPV flips/roll flying. Adjust Aileron/Elevator Speed Limit 運動模式適合3D與FPV翻滾飛行。 調整副翼／升降翻滾速度。		50	Professional 高階飛行員
	Elevator Speed Limit 升降翻滾速度			50	

FORBIDDEN 禁 止

Manual mode is suitable only for experienced pilots. Beginners shold avoid flying in manual mode.

手動模式適合有飛行經驗的玩家使用，並嚴禁初學者使用，否則會造成不可預期的危險。

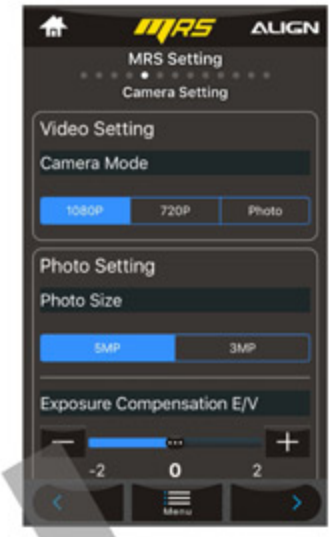
6 CAMERA SETTING
相機設定

Camera Function:

a. Video settings: Select size.

b. Photo settings: Select size and E/V Compensation.

When connect to MRS system, the system will reset camera setting to default value everytime. You can adjust the Gain value according to your control feel before each flight. **After setup, make sure to click "Confirm" at the bottom of each page to ensure and complete all the parameter settings.**



選擇相機功能：

a.錄影功能設定 -選擇影像尺寸。

b.拍照功能設定-選擇拍照尺寸；調整曝光補償E/V。

MRS重新連線時，相機所有參數將會慢恢原廠預設值，如須調整請重新設定。**每次設定時，請務必按下"設定確認鍵"，確認此次參數設定已調校完成。**

Please refer to Align announcement of MRS flight controller system for news update of camera functionality and support.
相機各項功能更新，請隨時關注亞拓發佈MRS飛控系統的最新版本及各項最新訊息。

7 GIMBAL SETTING
雲台設定

If you are using six channel transmitter you can adjust the gimbal only by using the App interface software!
如果使用的是六動遙控器，僅可透過APP介面調整設定雲台功能動作。

MR25/MR25P has camera gimbal tilt compensation function. Automatic tilt compensation or fixed angle can be set here. **After setup, make sure to click "Confirm" at the bottom of each page to ensure and complete all the parameter settings.**

Gimbal Modes Selection:

1. Auto Tilt Compensation: Camera angle is adjusted dynamically to maintain 0 degree tilt during flight.
2. Fixed Angle: Camera angle is fixed.
3. Tilt Angle Adjustment: Set the tilt angle, keep camera level.
   Tilt Angle Trim: Trim for camera neutral point.

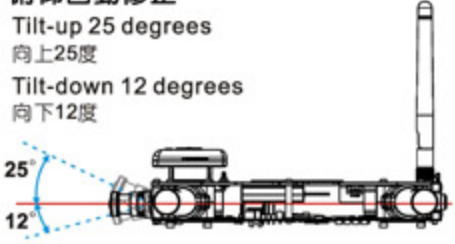
MR25/MR25P具備雲台俯仰修正功能，可以在APP 介面中選擇俯仰自動修正、俯仰固定角度。**每次設定時，請務必按下"設定確認鍵"，確認此次參數設定已調校完成。**

選擇雲台模式：

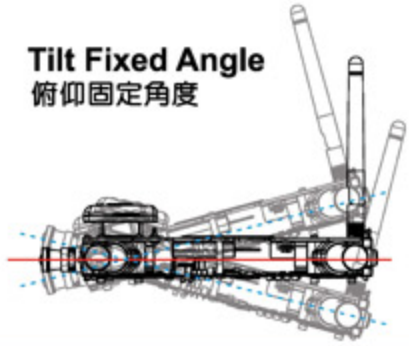
1. 俯仰自動修正：飛行鏡頭自動修正，保持0度水平拍攝
2. 俯仰固定角度：飛行中鏡頭固定角度拍攝。
3. 俯仰角度調整：調整鏡頭俯仰角度，飛行中鏡頭保持固定角度拍攝。
   俯仰角度微調：鏡頭中立點調整。

Auto Tilt Compensation
俯仰自動修正

Tilt-up 25 degrees
向上25度
Tilt-down 12 degrees
向下12度

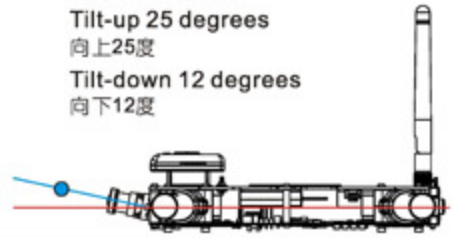


Tilt Fixed Angle
俯仰固定角度



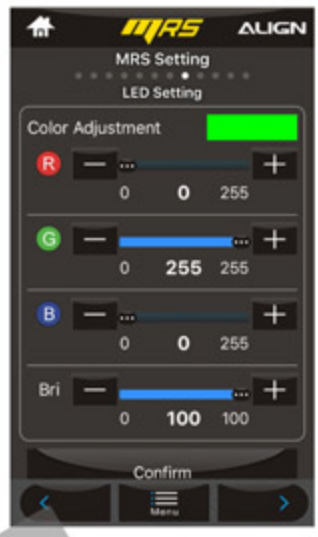
Tilt Angle Adjustment
俯仰角度調整

Tilt-up 25 degrees
向上25度
Tilt-down 12 degrees
向下12度



8 LED SETTING
燈號設定

The LED color of bottom light, rear light and rear motor mount light are set to be the same color that can be selective from the system. The front motor mount light color will automatically be changed correspondingly to show where the nose is. After setup, make sure to click "Confirm" at the bottom of each page to ensure and complete all the parameter settings.



機身底燈、後燈、馬達座燈(後)，預設為相同燈號，是主要調整更改顏色的依據；而馬達座燈(前)則是對應顏色，會因顏色調整後的變化，對應出不同燈號，可清楚分辨機頭方向。每次設定時，請務必按下"設定確認鍵"，確認此次參數設定已調校完成。

RGB color adjustment range is 0 to 255. Brightness is adjusted through [Bri] range of 0 to 100.

RGB三原色可以各別調整，範圍為0~255。燈號亮度則由[Bri]調整，範圍為0~100。

⚠ WARNING 警 告

When adjusting the light color, strongly suggest to set two different color for front and rear motor mount for recognize the heading direction in order to avoid any unexpected accidents during the flight.

調整燈號顏色時，強烈建議勿將馬達座燈(前)會與其它燈號的顏色調成一致，避免在飛行時無法依燈號顏色判斷飛行頭向而發生不可預期的狀況。。

COLOR CHART 燈號顏色對照表

Color 顏色	Red 紅	Orange 橙	Yellow 黃	Green 綠	Blue 藍	Purple 紫	White 白	Black 黑
R	255	255	255	0	0	255	255	0
G	0	150	255	255	0	0	255	0
B	0	0	0	0	255	255	255	0

Let your Racing Quad outstanding and twinkle among others by personal mixing LED lights! More than 16,777,216 colors could be selective (256 to the power of 3). This chart lists main colors only.

此對照表僅列出主要顏色參考值，高達256^3的調整方式，可做出16,777,216種變化，依個人喜好選擇適當色彩。

9 OSD SETTING
OSD設定

Select the data you wish to display in OSD

Battery voltage, flight time, current, flight attitude, flight mode, camera recording mode, gimbal mode, gimbal angle.

選擇在OSD螢幕上顯示的資訊
電池電壓、飛行時間、工作電流、飛行姿態、飛行模式、攝影模式、雲台模式、雲台角度。

▶——————◀

Attitude Indicator display aircraft flying action on OSD screen in real-time.

When aircraft flies up/down or even tilt, the attitude indicator will follow the nose direction to move up/down accordingly, allow to know the aircraft relation to the horizon in real-time.

姿態儀是隨著穿越機的飛行動作變化，即時顯示於OSD螢幕。

當穿越機朝上或朝下飛行時，姿態儀隨著機頭方向往螢幕的上/下方移動；當穿越機呈傾斜方式飛行時，姿態儀也會隨著傾斜的變化顯示，可以即時掌握穿越機的飛行狀態。

10 SETUP INFORMATION
機體設定資訊

Setup Information allow to double check all settings and default setup again before performing motor test.

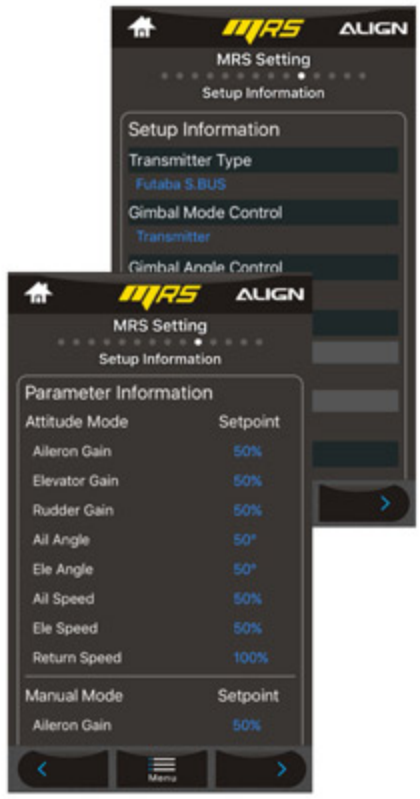
Allow to re-set the value by pressing "Reset button", then all the setting will turn to default value, the system will not keep your previous setting.

1. **Setup Information:** Shows multicopter type, receiver type, gimbal mode, failsafe setting, low voltage protection parameters, hibernation function and ...etc.
2. **Parameter Information:** The gain setup and default setup value of Manual Mode and Attitude Mode.

機體設定資訊是提供檢查您所設定的內容以及原廠預設值做為參考。請再檢查是否與目前穿越機的實際狀況相同。

如果調整後的設定值不是您所需要的，可按下重設鍵，可將該區設定全部恢復為原廠預設值，系統並不會儲存原調整的設定值。

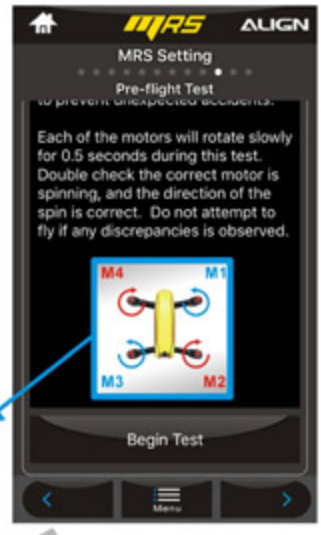
1. **機體設定資訊**：顯示接收器類型、飛行機類、相機功能選擇、雲台鎖定模式、安全保護設定，自動關時間與低電壓警示設定參數、燈號顏色.....等。
2. **感度設定資訊**：手動模式感度、姿態模式感度的設定值與原廠預設值。



11 PRE-FLIGHT TEST (MOTOR SPIN TEST)
飛行前檢測 (馬達轉向檢測)

MOTOR SPIN TEST：
When this function is activated, motor will sequentially rotate approximately 0.5 seconds. Ensure each motor is turning in correct direction, as any incorrect rotating direction may lead to immediate flip-over on takeoff. Rotating motor poses certain danger, so please ensure there are no obstacles or people nearby when performing this test.

馬達檢測功能：
使用此功能時，馬達會逐一M1、M2、M3、M4慢速轉動約0.5秒，測試時務必仔細檢視各馬達轉向是否正常，錯誤的轉向將導致起飛時翻機意外，馬達主旋翼轉動過程有危險性，檢測時請先確認多軸機旁無雜物，並且人要避開主旋翼轉動範圍，以免發生危險。



FORBIDDEN 禁 止

When checking for motor and propeller rotation, make sure not to hold the aircraft in hand for testing. Make sure there is no obstacles nearby the propellers to prevent unexpected accidents.
調整或檢測馬達螺旋槳轉動過程中具有危險性，嚴禁以手握穿越機進行調整或檢測。請確認飛行機旁沒有雜物、並且避開螺旋槳轉動範圍，以免發生危險，否則將會導致不可預期重的意外或人員傷害。

12 GYRO CALIBRATION
陀螺儀校正

Advanced setup: Only need to do the calibration when MR25 drift in flight.

When gyro adjusting, make sure to place MR25 at horizontal location, or it may impact the precision calibration.

Set the MR25 motionless and level on the ground/table position, press "calibration" button, after process is completed, system will indicates "Success"； "Failed" means the craft didn't at horizontal location while calibration, please re-place and adjust again.

此功能為進階設定，當你的MR25飛行有偏移情況發生，才需要進行此陀螺儀校正功能。

請注意使用陀螺儀校正時，必須將MR25靜止平放於水平面上，否則會影響校正精準度。

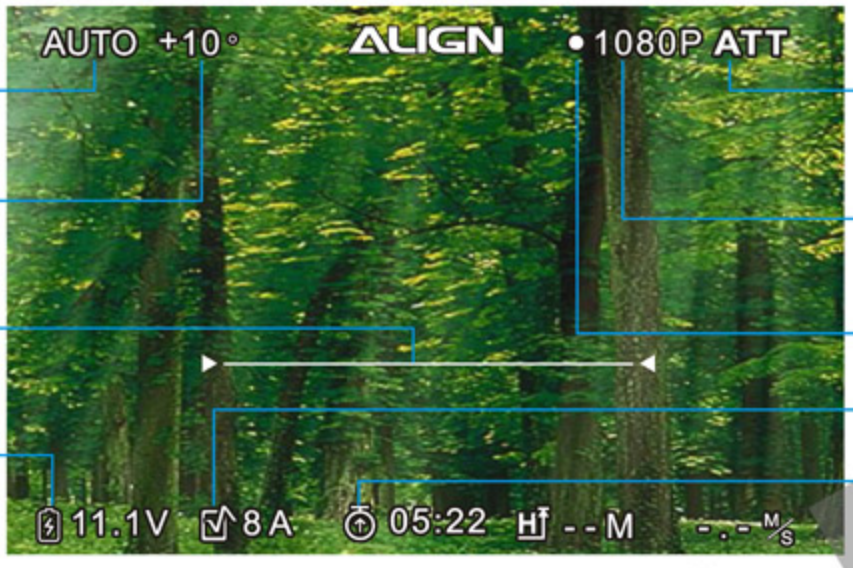
機子靜止放置好後，按下校正鈕，校正完成後會顯示“成功”。如果顯示“失敗”表示機子沒靜止水平，請重新執行校正。

13 LOST AIRCRAFT FINDER
尋機功能

After power up MR25, the motor throttle can be activated for flying. Once the motor throttle is been closed, but not power off MR25 more than 30 secs to 3 minutes, the system will automatically emit loud audible warning sound for MR25 searching. **After setup, make sure to click "Confirm" at the bottom of each page to ensure and complete all the parameter settings.**

MR25開機後，馬達油門(馬達電源)只要經啓動過，如果油門再度被關閉後，超過30秒~3分鐘，系統會自動啓動馬達發出高音量警示鳴聲，可依據聲音來源尋找您的MR25。**每次設定時，請務必按下"設定確認鍵"，確認此次參數設定已調校完成。**

3 OSD INTRODUCTION
OSD 功能介紹



Selective data for OSD display:

Gimbal mode, gimbal angle, flight attitude, flight mode, camera recording mode, battery voltage, flight time, current...etc.

MR25飛行資訊在OSD螢幕上顯示的有：
雲台模式、雲台鏡頭角度、飛行姿態、飛行模式、攝影模式、錄影、電池電壓、工作電流、飛行時間。

Optional Equipment Required for This Function
此功能須搭配選購商品使用

FPV Monitor
螢幕接收器

Optional Equipment
另購品

▶——◀ Flight Attitude 飛行姿態

Flight Attitude display aircraft flying action on OSD screen in real-time. When aircraft flies up/down or even tilt, the attitude indicator will follow the nose direction to move up/down accordingly, allow to know the aircraft relation to the horizon in real-time.

飛行姿態是隨著穿越機的飛行動作變化，即時顯示於OSD螢幕。當穿越機朝上或朝下飛行時，姿態儀隨著機頭方向往螢幕的上/下方移動；當穿越機呈傾斜方式飛行時，姿態儀也會隨著傾斜的變化顯示，可以即時掌握穿越機的飛行狀態。

4 FAILSAFE
失控保護

MR25 / MR25P has built-in failsafe function, please select transmitter's default to instead "FAILSAFE" setting, for more further default setting of your transmitter, please refer to your transmitter instruction.

If you lose control during the flight, the system will activate the Failsafe function automatically, then the copter will rotate back into horizontal position, the propellers will remain idling and then slowly descend to release impact from sudden crash.

MR25/MR25P已內建失控保護機制，遙控器端不須再設定，請直接選用遙控器出廠預設值，欲瞭解更多詳情，請參閱您所使用的遙控器說明書。

當飛行中，若發生遙控器訊號失去控制(NO控)時，此時內建的失控保護機制便會啓動，使機體自動水平回正，螺旋槳會保持怠速運轉，然後慢速降落，以降低急速墜落的衝擊力。

PRE-FLIGHT CHECKLIST AND WARNINGS
飛行前檢查與注意

ALIGN

1 LOCATE AN APPROPRIATE LOCATION
遠離障礙物與人群

R/C 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.

遙控飛行機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遙控飛行場地飛行。必須注意周遭有沒有人、高樓、建築物、高壓電線、樹木等等，避免磁場干擾、外力訊號干擾及操控的不當造成自己與他人財產的損壞。請務必選擇在空曠合法專屬飛行場地。請勿在下雨、打雷、沙塵等惡劣天候下操作，以確保本身及機體的安全。

2 DO NOT FLY ALONE
避免獨自操控

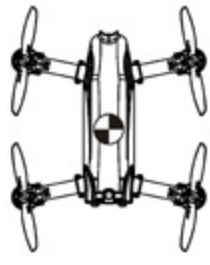
Before turning on your model and transmitter, check to make sure no one else is operating on the same frequency. Frequency interference can cause your model, or other models to crash. The guidance provided by an experienced pilot will be invaluable for the assembly, tuning, trimming, and actual first flight or unforeseen danger may happen. (Recommend you to practice with 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。遙控飛行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，否則將可能造成不可預期的意外發生。(勤練電腦模擬器及老手在場指導是入門必要的選擇)

3 CENTER OF GRAVITY ADJUSTMENT
重心調校

The aircraft needs to be balanced at the Center of Gravity (CG) point with full payload onboard. Improper CG balance may cause flight instability and/or uneven power consumption of the motors, and may even leads to crash in worse case scenario.

飛行前務必確認，並調整好全載重機體的重心位置，偏移的重心容易導致飛行不穩與馬達受力不均的耗電、損傷，嚴重將導致不可預期的失衡摔機。



4 SETUP INFORMATION
機體設定資訊

Make sure to double check all APP parameter setting before flying. Incorrect settings will affect to unexpected and unpredictable safety danger

飛行前務必確認APP內所設定的參數是否正確，不正確的設定將會影響飛行狀態的安全，嚴重將導致不可預期的危險。

5 MOTOR START AND STOP
馬達電源啓動與關閉

Safety feature to allow spin-up of motors only when specific transmitter stick movement is executed, so that accidental start/stop is prevented.

1.To Start Motor

1) Turn on transmitter power.

2) Press and hold power button for 3 seconds to turn on multicopter power.

3) Arm the motor switch on RC transmitter to power up the motor.

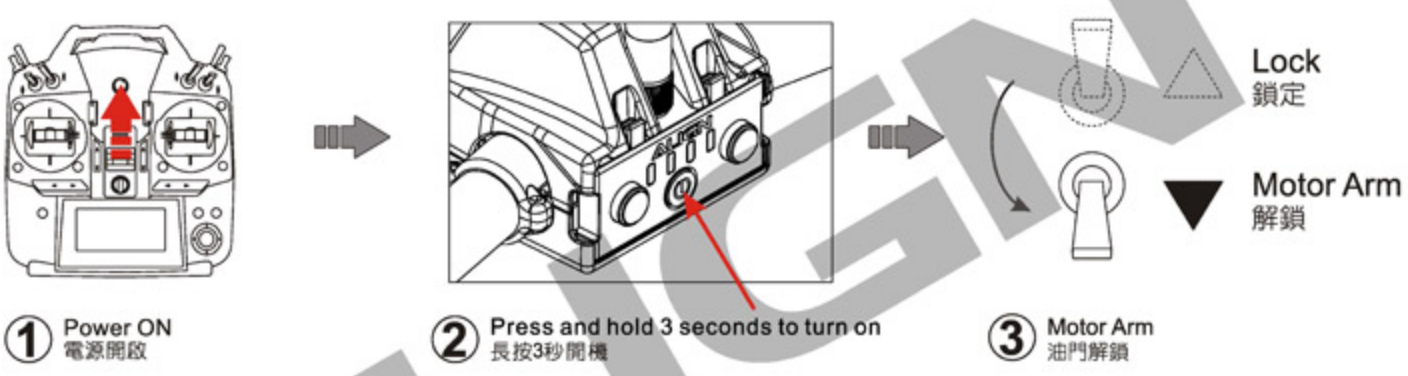
馬達具備安全保護裝置，必須執行遙控器開關動作才能啓動或關閉馬達電源，避免因誤開電源而啓動或關閉馬達。

1.開啓馬達電源

1) 開啓遙控器電源。

2) 啓動機身主電源，長按電源鍵3秒開機。

3) 切換遙控器的油門解鎖開關，啓動主馬達。



① Power ON
電源開啟

② Press and hold 3 seconds to turn on
長按3秒開機

③ Motor Arm
油門解鎖

2. To Stop Motor

1) Disarm the motors on RC transmitter to power off the motor.

2) Press and hold the power button for 3 seconds to turn off multicopter power.

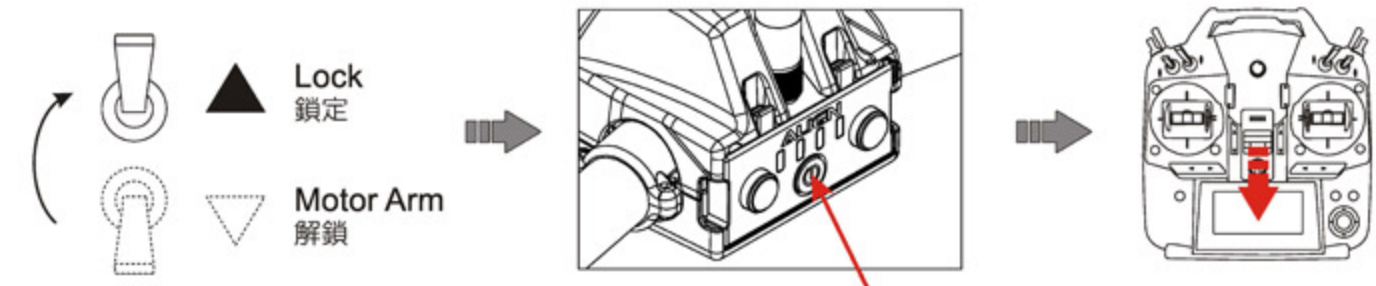
3) Turn off transmitter power.

2.關閉馬達電源

1) 關閉遙控器的油門解鎖開關，關閉主馬達。

2) 關閉機身主電源，長按電源鍵3秒關機。

3) 關閉遙控器電源。



① Power Off the Throttle
關閉油門

② Press and hold 3 seconds to turn off
長按3秒關機

③ Power OFF
電源關閉

6 MOTOR SPIN TEST
馬達運轉測試

1.When motor spin test is activated, motor will sequentially rotate approximately 0.5 seconds. Check correct motor location and spin direction is correct.

2. Rotating motor process certain danger, so please ensure there are no obstacles or people nearby when performing this test.

1.馬達運轉測試功能開啓時，馬達會依序慢速轉動約0.5秒，檢查安裝位置及螺旋槳旋轉方向是否一致。

2.馬達螺旋槳旋轉過程有危險性，檢測時請先確認多軸機旁無雜物，並避開螺旋槳轉動範圍，以免發生危險

FORBIDDEN 禁 止

When checking for motor and propeller rotation, make sure not to hold the aircraft in hand for testing. Make sure there is no obstacles nearby the propellers to prevent unexpected accidents.

調整或檢測馬達螺旋槳轉動過程中具有危險性，嚴禁以手握穿越機進行調整或檢測。請確認穿越機旁沒有雜物、並且避開螺旋槳轉動範圍，以免發生危險，否則將會導致不可預期重的意外或人員傷害。

Motor Rotational Speed and Current Reference 馬達動力轉速與電流參考數據
(Equipped with RCM-BL1806 motor as an example) (搭載RCM-BL1806馬達)

Propeller 螺旋槳	Voltage 電壓	Hovering Current 停懸電流	RPM 轉速	Max Rotational Current 最高轉速電流	RPM 轉速
5045	3cell	9.5A	Approx.約12000	29.5A	Approx.約17500
6040	3cell	9.5A	Approx.約9000	48.5A	Approx.約14250
5040	4cell	10A	Approx.約12000	47A	Approx.約20950

MR25 Power Tip MR25動力搭配表

Align Motor 亞拓馬達	Battery 電池	Propeller 螺旋槳	
		5045	6040
RCM-BL1806	3 Cell	V	V
	4 Cell	V	Prohibited 嚴禁使用
RCM-BL2205 (Optional Equipment) (另購品)	3 Cell	V	V
	4 Cell	V	Prohibited 嚴禁使用

FORBIDDEN 禁 止

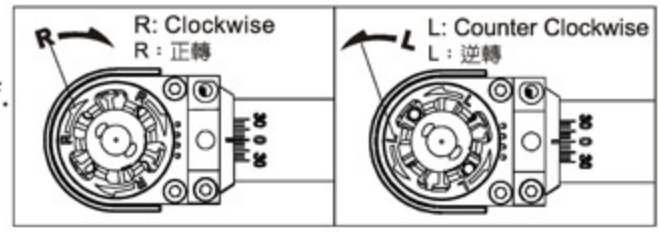
3Cell battery can be use Align standard 5045/6040 propellers, 4Cell battery can use Align standard 5045 propellers only, strictly prohibit to use other propellers instead of Align 5045 propellers; Improper usage will lead to ESC power outage, motor, electronic burn out and other unforeseen danger and accident.

3S 電池請使用亞拓原廠 5045/6040 螺旋槳、4S電池只適用亞拓原廠 5045 螺旋槳，嚴禁使用它廠牌之螺旋槳，否則不當的動力輸出將導致 ESC 斷電、馬達、電子零件燒毀。

7 MOTOR ROTATION DIRECTION
馬達正逆轉方向

Incorrect sequence of motor tube assembly or changes made to rotational directions of motor / blades may cause immediately flip-over on takeoff.

飛行前請確定馬達固定座上所標示的正、逆轉方向符號。



FORBIDDEN 禁 止

Strictly prohibit to use other propellers instead of Align standard 6040 propellers, for instance 6045,6050; improper usage will lead to ESC power outage, motor, electronic burn out and other unforeseen danger and accidents.

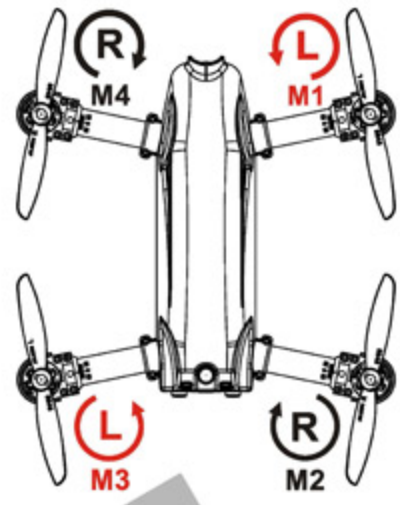
嚴格禁止使用6040以上螺旋槳，包含非原廠6040，例如6045、6050；不當的使用將導致於動力最大輸出時，ESC斷電、馬達、電子零件燒燬等不可預期的意外發生。

CAUTION 注 意

Double check the sequence and blades R/L rotation direction during motor tube assembly, ensure the install matches exactly with the instruction manual. Incorrect assembly or modifications may cause unexpected results or bodily injuries.

務必再次檢查及確認，馬達轉向、螺旋槳、及螺旋槳螺帽上的轉向標示一致，錯誤或任意變動機體，將會導致不可預期嚴重的意外或人員傷害。

Propeller Rotation Direction
螺旋槳轉向示意圖



8 FLIGHT MODE INTRODUCTION
飛行模式介紹

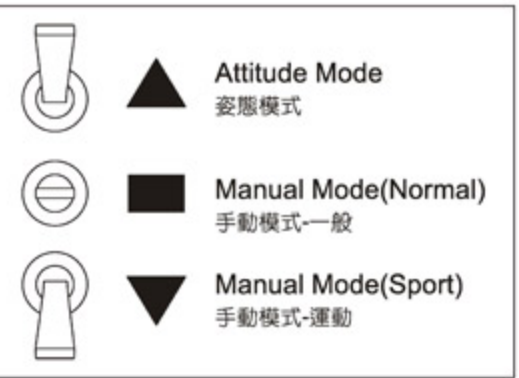
Flight Mode: 1. Attitude 2. Manual-Normal Mode 3. Manual-Sport Mode

Attitude Mode: Default setting for beginners and FPV basic racing quad flying.

Manual - Normal Mode/Sport Mode: Suitable for high end FPV racing quad flying- Capable of smooth, agile, flip and roll in both slow & fast speed flying.

Manual - Sport Mode: Suitable for 3D extreme flying.

Through your previous channel setting on transmitter, you can switch and perform different flight mode.



飛行模式設有 1.姿態模式 2.手動模式(一般) 3.手動模式(運動)。

姿態模式：適合初級飛行與FPV基礎飛行。

手動模式(一般)與手動模式(運動)：適合高級FPV穿越飛行 以切換開關執行順暢、靈活或慢速翻滾／急速翻滾等動作來混合控制達成酷炫完美飛行。

手動模式(運動)：適合3D暴力飛行。

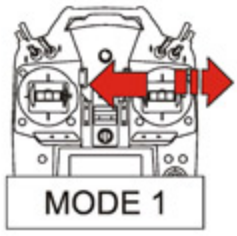
各項模式變換以透過遙控器開關切換啓動。

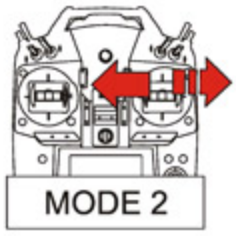
1 ATTITUDE MODE
姿態模式

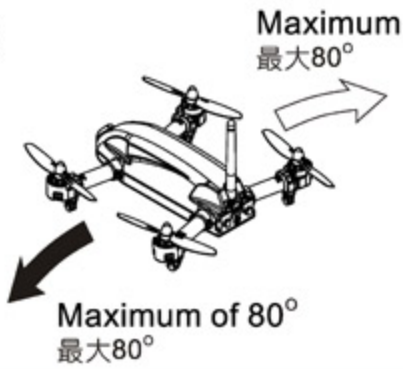
Attitude Mode : Maintains aircraft level horizon. Elevator/Aileron/Rudder stick inputs are translated as angular command. Larger stick input translates to steeper angels of multicopter tilt, with maximum of 80 degrees and default setting of 50 degrees. Suitable for beginners and FPV basic racing quad flying.

姿態模式會自動保持穿越機姿態水平功能，升降、副翼、尾舵搖桿指令為角度命令，搖桿動作越大穿越機動作角度越大，預設為50，最大角度限制為80度。適合初級飛行與FPV基礎飛行。

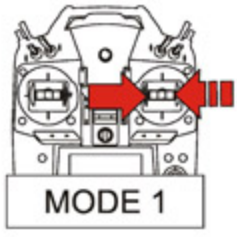
a) Elevator/aileron stick (left and right maximum of 80°)
升降/副翼搖桿(左或右最大80度)

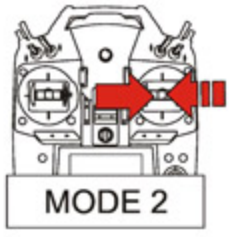


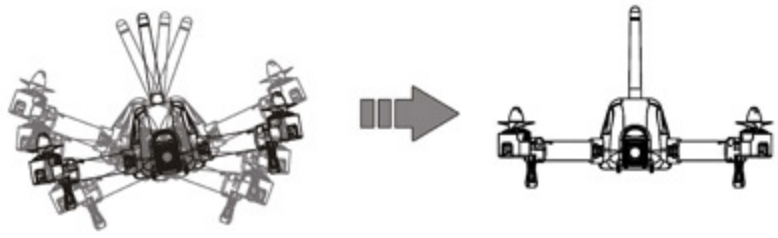




b) Release stick (multicopter automatically levels)
搖桿放開(機體自動回正)







2 MANUAL MODE (NORMAL)
手動模式(一般）

Manual Mode : Fully control by the pilot without any horizontal leveling capabilities. (Highly recommanded not to turn on this function if you're not familiar with it.) Suitable for high end FPV racing quad flying. Capable of smooth, agile, flip and roll in both slow & fast speed flying.

Control Response adjustment:

Set the exponential (EXP) of Aileron/Elevator/Rudder according to your control feel in manual mode.

When control response is too fast, decrease EXP -10%~-60% for Futaba radios； increase EXP +10%~+60% for JR radios.

When control response is too sluggish, increase EXP +0%~+30% for Futaba radios; decrease EXP -0%~-30% for JR radios.

手動模式是完全由操控者控制，無自動水平功能。(強烈建議，不熟悉操作者勿開啓此功能)。手動模式(一般)適合高級FPV穿越飛行 以切換開關執行順暢、靈活或慢速翻滾／急速翻滾等動作來混合控制達成酷炫完美飛行。

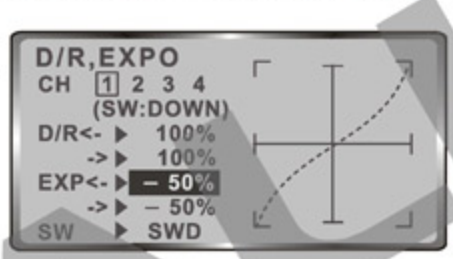
動作靈敏度調整:

手動模式可依個人飛行操控手感調整遙控器副翼、升降、尾舵的EXP：

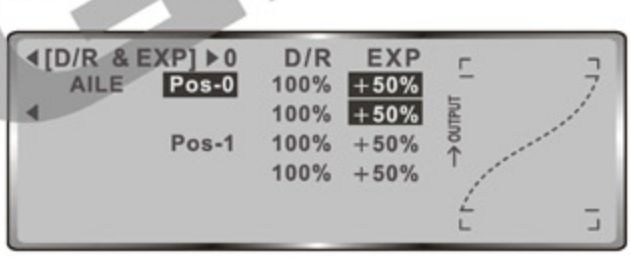
當手動模式動作靈敏度太大，Futaba調低範圍-10%~-60%；JR的調高範圍+10%~+60%。

當手動模式動作靈敏度太小，Futaba調高範圍+0%~+30%；JR的調低範圍-0%~-30%。

Futaba



JR



WARNING 警告

Manual mode is suitable only for experienced pilots without any horizontal leveling capabilities. Beginners should avoid flying in manual mode or it will cause unforeseen danger and crashes.

手動模式適合有飛行經驗的玩家使用，並嚴禁初學者使用，否則會造成不可預期的結果。在手動模式下無自動水平功能。

3 MANUAL MODE (SPORT)
手動模式(運動)

Manual Sport Mode: Suitable for 3D extreme flying. Capable of smooth, agile, 3D flips/roll by moving aileron/elevator stick to the end.

手動模式(運動)除了適合高級FPV穿越飛行 以切換開關執行順暢、靈活或慢速翻滾/急速翻滾等動作之外。也適合3D暴力飛行。MR25具備3D翻滾飛行功能，可透過遙控器切換手動模式，並將副翼或升降動作打到底來執行翻滾動作。

Control Response adjustment:

Set the exponential (EXP) of Aileron/Elevator/Rudder according to your control feel in manual mode.

When control response is too fast, decrease EXP -10%~-60% for Futaba radios； increase EXP +10%~+60% for JR radios.

When control response is too sluggish, increase EXP +0%~+30% for Futaba radios; decrease EXP -0%~-30% for JR radios.

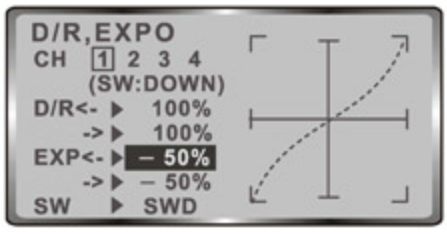
動作靈敏度調整:

手動模式可依個人飛行操控手感調整遙控器副翼、升降、尾舵的EXP：

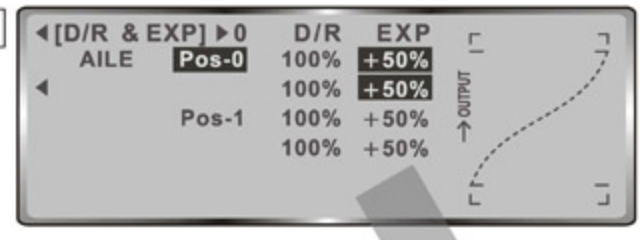
當手動模式動作靈敏度太大，Futaba調低範圍-10%~-60%；JR的調高範圍+10%~+60%。

當手動模式動作靈敏度太小，Futaba調高範圍+0%~+30%；JR的調低範圍-0%~-30%。

Futaba



JR



Elevator at end, MR25 will execute fast forward/reverse flip.

升降舵動作打到底時，穿越機會執行前/後翻滾一圈

Hold Aileron at end, MR25 will execute fast roll.

副翼舵動作打到底時，穿越機會執行側翻滾一圈

WARNING 警告

Stunt flight is professional 3D rolling action. It's prohibited to fly Manual Mode(Sport) if you are not familiar with it. Must operate aircraft in where flat, smooth ground without obstacles, to prevent unexpected injuries when crashing.

特技飛行屬於專業動作，具備3D翻滾飛行功能，不熟悉飛行操作者嚴禁使用！並且應於距離地面較高空曠的飛行空間執行，避免因不熟悉特技特性而造成墜機，或發生不可預期的傷害。

9 GIMBAL MODE INTRODUCTION
雲台模式介紹

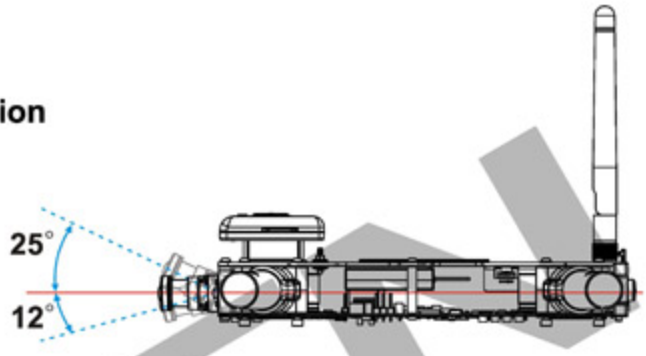
MR25 / MR25P with gimbal tilt correction function can be selected in APP interface automatically correct pitch , the pitch angle is fixed .

MR25/MR25P具備雲台俯仰修正功能，可以在APP 介面中選擇俯仰自動修正、俯仰固定角度。

1. Auto Tilt Compensation:
Camera angle is adjusted dynamically to maintain 0 degree tilt during flight.

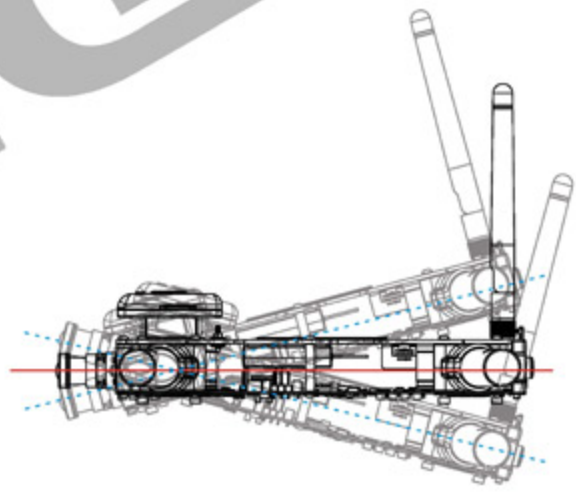
俯仰自動修正：飛行中鏡頭自動修正，保持0度水平拍攝

Auto Tilt Compensation
俯仰自動修正
Tilt-up 25 degrees
向上25度
Tilt-down 12 degrees
向下12度



2. Tilt Fixed Angle: Camera angle is fixed.
俯仰固定角度：飛行中鏡頭固定角度拍攝。

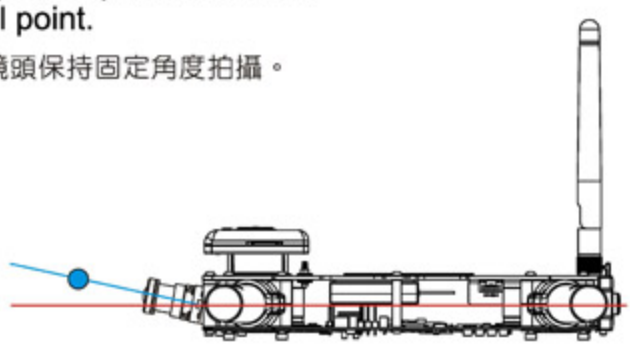
Tilt Fixed Angle
俯仰固定角度



3. Tilt Angle Adjustment: Set the tilt angle, keep camera level.
Tilt Angle Trim: Trim for camera neutral point.

俯仰角度調整：調整鏡頭俯仰角度，飛行中鏡頭保持固定角度拍攝。
俯仰角度微調：鏡頭中立點調整。

Tilt Angle Adjustment
俯仰角度調整
Tilt-up 25 degrees
向上25度
Tilt-down 12 degrees
向下12度



SPECIFICATIONS
產品規格

ALIGN

MRS Flight Control MRS多軸飛控系統

Input Voltage 輸入電壓	10V~16.8V	Supports Multicopter Configurations 支援機型	MR25/MR25P Racing Quad MR25/MR25P穿越機
Operating Frequency 工作頻率	800HZ		
Operating Temperature 工作溫度	-20° C ~ 65° C (-4° F ~ 149° F)	Maximum Angular Speed 最大角速度	Aileron/Elevator 400° /sec, Rudder 45° /sec 副翼 /升降 400度/秒，尾舵 45 度/秒
Maximum Tilting Angle 最大傾斜角度	80 degrees 80度		

Multicopter Brushless ESC 多軸無刷調速器

Input Voltage 輸入電壓	11.1V ~ 14.8V(3S ~ 4S Li-Po)	Operating Temperature 工作溫度	-5°C~ 45°C(23°F~ 113°F)
Max Continuous Current 最大持續耐電流	15A		

RCM-BL1806 Brushless Motor 2300 KV (RPM/V) RCM-BL1806無刷馬達 2300KV(RPM/V)

Input Voltage 輸入電壓	11.1V	Stator Arms 矽鋼片槽數	12
Max Continuous Current (3Minutes) 最大持續耐電流 (3分鐘)	12A	Magnet Poles 磁鐵極數	14
Max Continuous Power (3Minutes) 最大持續功率 (3分鐘)	135W	Dimesion/ Weight 尺寸/ 重量	φ5xφ23x25.6mm/ 18.5g

5.8G Video Transmitter 5.8G圖傳發射器

Operating Frequency 工作頻率	5.8GHz	Antenna Interface 天線接口	RP SMA
Operating Channels 工作頻道	32 CH	Transmitting Power 發射功率	350mW
Input Voltage 輸入電壓	7~19V DC	Dimesion 外觀尺寸	31x23x11mm
Operating Current 供電電流	300mA 12V	Weight 重量	14g(Exclude Antenna) / 21.48g(Include Antenna) 14g(不含天線) / 21.48g(含天線)

5.8G Circular Polarized Gain Antenna TX 5.8G無向性增益發射天線

Operating Frequency 工作頻率	5.8GHz(5750-5850 MHz)	Antenna Interface 天線接口	SMA(Female) SMA(母)
Antenna Gain 天線增益	8dBi	Cloverleaf 葉瓣	3 blades
Operating Temperature 工作溫度	-30°C ~ +60°C	Dimesion 尺寸	Φ35xΦ5x76.5mm
Impedance 阻抗	50Ω	Weight 重量	Approx.13g

5.8G Circular Polarized Antenna TX 5.8G無向性發射天線

Operating Frequency 工作頻率	5.8GHz(5225-5950 Mhz)	Antenna Interface 天線接口	SMA(Female) SMA(母)
Antenna Gain 天線增益	4dBi	Dimesion 尺寸	31x23x11mm
Operating Temperature 工作溫度	-30°C ~ +85°C	Weight 重量	Approx.7.5g
Impedance 阻抗	50Ω		

1830 DV Video Recorder 1830 DV攝影機

Recording 錄影	1080P 30FPS/ 720P 60FPS	FOV 視角	90°
Encoding Format 視頻格式	AVI	Memory Cards 記憶卡	Micro SD (Maximum Supported 32GB) Micro SD (最大支援32GB)
Photo Resolution 照片尺寸	5M / 3M pixels	Interface 接口	Micro USB、AV out/DC in、MRS Controller 控制
Shutter speed 快門速度	2~1/8000秒	Video Output Format 影像輸出格式	PAL、NTSC
Input Voltage 輸入電壓	5V	Aspect Ratio 顯示比例	16:9

Q & A
問與答

ALIGN

Q&A 1

MR25 will not start up with flashing LED light after power up?
(1) Abnormal Power-ON
(2) Check if receiver is connected.
(3) Check if proper receiver type is selected in APP setting.
(4) Check if throttle position is at the lowest position also check if "Motor Arm" function is at "OFF" position.

MR25開機後，無法啓動、LED呈現快速閃爍?
(1) 開機異常。
(2) 請檢查是否有接上接收機。
(3) 檢查APP設定，是否有正確選對接收機類型。
(4) 請檢查油門是否在最低位置，解鎖開關是否在OFF位置。

Q&A 2

MR25 startup properly, but can't fly after motor arm?
Check if CH5 switch function is well assigned to APP system correspondingly also check if "Motor Arm" function is at "ON" position.

MR25正常開機，但無法解鎖起飛?
請檢查CH5有沒有對應到開關，並搭配APP確認開關切換時，解鎖指示是否有跳到ON位置。

Q&A 3

After motor arm and start flying, MR25 flying performance will flips over?
(1) Check if propeller is installed at correct direction.
(2) Check if motor and ESC wire connection is installed with correct color cable.

解鎖起飛時，MR25動作錯亂翻倒?
(1)請檢查螺旋槳是否有依照正確方式安裝。
(2)請檢查馬達與電變的接線，是否有依照正確顏色連接。

Q&A 4

Slightly draft to other position while hovering?
(1) Check if four motor is level installed at 0 degree tilt angle.
(2) Check for proper balance on CG point.

停懸時，MR25會往某個方向偏移?
(1)請檢查四個馬達是否有水平安裝，馬達固定座刻度在0度。
(2)請檢查機體重心是否在正確位置。

Q&A 5

Quick shaking at fast speed flying ?
Check to decrease aileron and elevator gain value in flight mode function.

高速飛行時，出現追蹤(快速抖動)情況？
請降低該飛行模式下的副翼與升降感度。

Q&A 6

MR25 with Oversensitive control?
Check to decrease speed limit gain value in flight mode function until it matches your control feel.

MR25飛行動作太過敏感、不好控制?
請降低該飛行模式下的滾轉速度數值，直到動作反應適合您的操控手感。

Q&A 7

Flying angle is too small in Attitude mode?
Check to increase aileron & elevator maximum angle gain value.

姿態模式下，飛行動作、角度過小?
請加大姿態模式下的升降、副翼動作角度。

Q&A 8

Slight shakes of video footage in Attitude mode during FPV flight?
Check to decrease return speed gain value in flight mode function to keep stable video.

FPV飛行時，在姿態模式下，操控時畫面很容易晃動?
請降低姿態模式的回中速度，讓畫面較為安定。

Q&A 9

While DVR video record function is not working?
Please enter to the MRS App system "Setup Information" first section, and press "Reset" for gimbal function.

DVR無法使用錄影功能?
請進入手機MRS App介面"機體設定資訊"雲台功能選項下方，點選"恢復機體預設值"重設。

10 Q&A

ESC burned when motor rotor locked during operation?
MR25 with highly intelligent integrated circuit board design, built-in protection design can avoid ESC burn up when motor rotor is locked

馬達在運行中堵轉會燒毀?
MR25主控板為高智能整合式電路板，內建保護設計，可以避免馬達堵轉造成電變燒毀問題。

11 Q&A

Circuit board MOS and motor burned when flying or motor arming?
MR25 with precision high-end circuit board design, please pay attention to keep MR25 surface clean and maintenance after every flight. Make sure to be aware of flying environment, not to fly in moisture or turbid air to prevent any dust or water vapor from MR25. For any adhered substance attached to main PCB will cause short circuit board, MOS burn up or motor burn up; so it??s important make sure to check and clean MR25 main PCB regularly.

主控板MOS與馬達在飛行中或解鎖運轉時燒毀？
MR25主控板為高智能整合式電路板，請務必定期保養並維護MR25主控板表面的清潔，同時注意飛場的環境，請勿在潮濕或混濁的空氣中飛行，以避免水氣或塵土進入MR25機體內，若有異物附著於主控板，可能導致電路局部短路，造成主控板的電子零件或馬達燒毀。因此MR25主控板的定期清潔保養，是非常重要的檢查工作。

12 Q&A

How to protect and clean circuit board?
Allow to clean and maintain MR25 PCB by using special cleaner such as high-pressure air filter or air guns?Ketc. to remove dust, grass or dry the moisture from MR25 surface.

主控板如何防護清潔?
可以利用清潔電腦專用高壓除塵空氣罐，或附有空氣濾清器的高壓空氣槍，噴清表面塵土、異物或水氣。

13 Q&A

Obviously tilt while hovering in Attitude mode?
Use APP gyro calibration function to correct the gyro.
Please note that during calbration MR25 must be completely still placed on the flat plane or it will affect the calibration precision.
If after tuning or APP gyro calibration still cannot solve it, the IMU's gyro on PCB may damaged. Please replace a new IMU and redo gyro calibration .

在姿態模式時，機子停懸時有明顯傾斜?
可利用APP陀螺儀校正功能，把陀螺儀校正正確。
校正時要特別注意，機子必須完全靜止平放於平面上，否則會影響校正準確度。
如果微調或APP校正都還是調不過來，有可能是主板上電路板(IMU)的陀螺儀震壞了，更換IMU後再重新陀螺儀校正即可解決。

14 Q&A

What parameter should be adjusted when head is offset?
(1) MR25 motor with adjustable angle design, please make sure four motor tilt angle is 0 degree.
(2)Implement APP gyro calibration function.
Attention! Firmware and software(APP) must be V1.2 or more.

機頭會偏請問要調整哪個參數?
(1) Mr25馬達為可調角度設計，檢查四個馬達角度是否為水平0度。
(2) 使用APP的陀螺儀校正功能，重新校正陀螺儀。
注意！主程式及手機APP必須使用V1.2以上版本。

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Align Team keep innovating and developing on new RC Helicopter, Multicopter, and FPV Racing Quads, providing more diversified experience fun fly. For more news update, please check the following links for more information.

Wish you a pleasant flying.

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http://i.youku.com/u/UMTQ0NjEwNjczNg==

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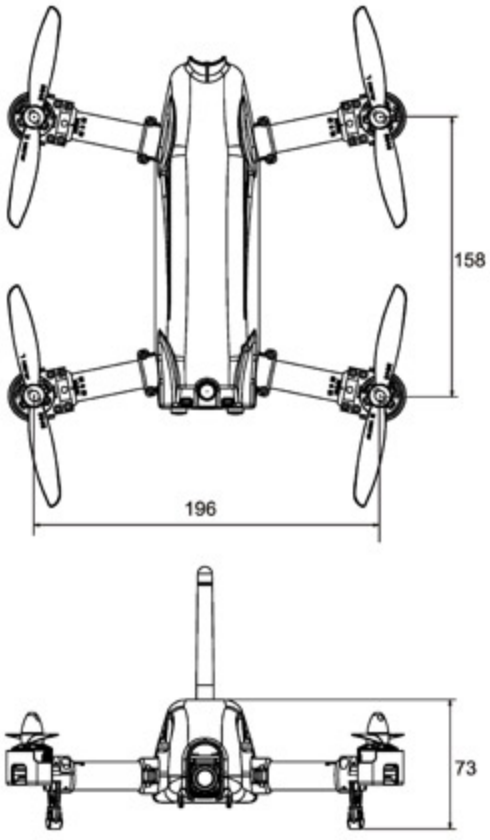
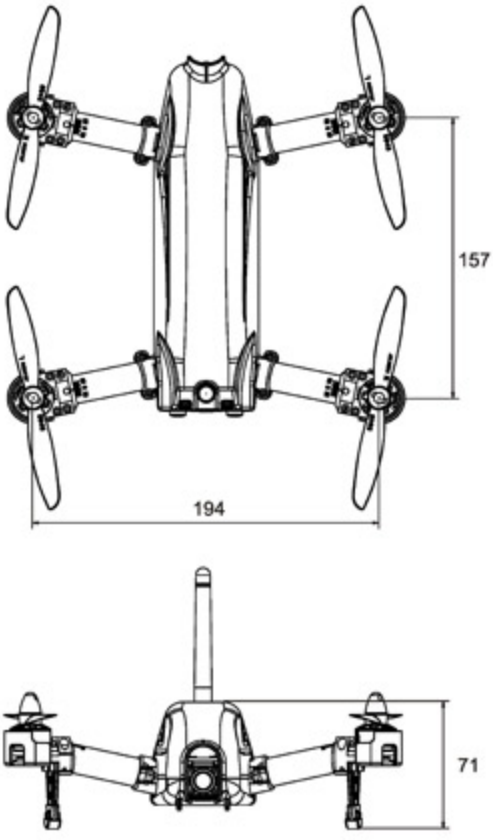
Specifications & Equipment/規格配備:

Airframe Diameter/軸距:250mm
Propeller Diameter/螺旋槳直徑:5吋(127mm) ／6吋(152mm)
Flying Weight(without battery)/全配重(不含電池): Approx. 410g

MR25



MR25P



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