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

For more detailed instruction, please check our website.

更詳細的組裝說明請上官網。

承蒙閣下選用亞拓專業航拍系列產品，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。
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 G2P Gimbal DV System can support with iOS and Android systems; built in receiver interface to accept various receiver systems on the market.

In order for you to thoroughly enjoy the G2P Gimbal DV System, please read through this manual prior to assembly and setting up. Keep this manual handy for future reference.

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.

WARNING LABEL LEGEND
標誌代表涵義

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
</table>
| ☑️ | Do not attempt under any circumstances.  
在任何禁止的環境下，請勿嘗試操作。 |
| 🚫 | 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。 |
| ⚠️ | 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。 |

承蒙閣下選用亞拓遙控系列産品，謹表謝意。進入遙控世界之前必須告訴您許多相關的知識與注意事項，以確保您能夠在學習的過程中較得心應手。

亞拓G2P雲台相機組支援iOS、Android系統裝置使用，內建接收功能，可搭配多種系統使用。

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，作為日後調整的參考。

做為本产品的使用者，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。
SAFETY NOTES

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.

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.

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.
Brand new incredible G2P Gimbal DV System composed of excellent locking performance, high resolution brushless motor, and high rigidity and stability. Allows to fly and control the aircraft through master/slave internet control system. It can adjust Tilt & Pan in master single-control system; or it can adjust Tilt & Pan & Roll in master/slave dual-control system. For the best aerial photography performance, suggest to have ALIGN AP1 Multicopter Control Unit and VDT1 HD Digital Video Transmitter together.

全新搭載優異演算能力的G2P雲台相機組，高鎖定、高解析無刷馬達、反應靈敏高穩定性，主從互聯控制系統，可在飛行中各別單控飛行機與雲台，主機單控可調式俯仰/平移，主從雙控制可調式俯仰/傾/滾轉。建議搭載亞拓AP1多軸飛控系統及VDT1高清數位圖傳使用，專為航拍作業提供最佳化的性能設計。

Automatic 3-axis neutral calibration.
自動校正三軸中立定位點檢測。

Support single RC transmitter control of multicopter and gimbal, or a separate dedicated RC transmitter control for gimbal.
支援多軸機與雲台單一遙控器操作，以及雲台專用遙控器操作使用。

Multi-function modes. Each of the 3-axis can be controlled through RC control.
多功能工作模式，三軸可使用遙控器操作控制。

High stability, high precision 3 axis gimbal control system.
高穩定/高精度的三軸雲台控制系統。

Allowing precise lock on shooting objects, allowing capture of fantastic aerial footages with ease.
可精準鎖定拍攝目標物，能輕鬆拍攝出精彩的畫面。

Supports Spektrum and JR satellite receivers.
支援Spektrum與JR衛星天線。

Supports ALIGN A.BUS / Futaba S.BUS / JR X.BUS / FS iBUS / Graupner Hott Sumd
支援ALIGN A.BUS/Futaba S.BUS / JR X.BUS / FS iBUS/ Graupner Hott Sumd 功能。

iOS
Configuration changes through iOS APP.
支援iOS手機APP調整功能。

Android
Configuration changes through Android APP.
支援Android手機APP調整功能。

RoHS certified.
符合RoHS限用規章。
STANDARD EQUIPMENT

G2P Gimbal DV System
G2P雲台相機組

G2P Gimbal Mount
G2P雲台固定板

PACKAGE CONTENTS

G2P Gimbal DV System
G2P雲台相機組

G2P Gimbal DV System Parts Accessory
G2P雲台相機組零件包
Firstly, please fix the gimbal damper onto the gimbal mount, then assemble the gimbal DV set on the multicopter with four socket screws M2.5x10mm.

Prior to re-assembly, ensure upper plate can lay flat onto the frame, and that all wires are neatly tucked underneath without any pinching.

組裝時請確認上側板是否能平整置於機體組合的位置，所有線材已經整線固定於下側板，避免組合時夾傷線材。
G2P GIMBAL DV SYSTEM WIRING DIAGRAM

Please connect wires following correct orientation.

Connector Label

G2P Power Signal Cable
G2P 電源訊號線

4PIN

6PIN

AP1 Multicopter Control Unit
AP1 多軸飛控系統

PCU Power Control Unit
PCU 電源控制組

4PIN

6PIN

VTD1 HD Digital Video Transmitter
VTD1 高清數位圖傳

Micro USB

PC

Equipment Required

ALIGN
1. **POWER UP PROCEDURE WHEN MOUNTED TO ALIGN MULTICOPTERS**

Connect the 12V output from Align's PCU with the PCU port on gimbal.

1. 搭配多軸機開機步驟
   由多軸機PCU輸出DC12V電壓與雲台PCU連接。

   - **Turn on RC transmitter power**
     開啟遙控器電源
   - **Turn on multicopter power**
     開啟多軸機電源
   - **Gimbal power up**
     雲台電源啓動

   - Power ON
     電源開啟
   - Press and hold for 5 seconds to power up
     長按5秒開機
   - Successful power up is indicated by gimbal status LED shows green.
     雲台狀態指示燈顯示綠燈，代表開機完成。

2. **GIMBAL AUTOMATIC POWER ON TEST.**

Gimbal automatically performs 3-axis neutral point calibration after power on. The process takes about 10 seconds, locking its heading direction to the front.

2. 雲台開機自動檢測回正中立點

   開啟電源後，雲台會自動校正三軸中立定位點檢測，過程約10秒鐘自動完成，鎖定頭朝前。

---

**CAUTION**

If gimbal doesn't automatically performs neutral point calibration and heading direction to the front after power on, please turn on A13 GST transmitter and finish binding, and then adjust slider W2 rear of A13 GST transmitter to control gimbal pitch angle.

若開啟電源後，雲台沒有自行檢測回正中立點，頭向沒有朝前回首，請先開啟A13 GST遙控器完成對頻後，再自行調整A13 GST遙控器後方的搖桿開關/W2來控制雲台俯仰角度。
G2P Gimbal DV System is flashed with the latest firmware version in factory. Visit Align at www.align.com.tw for the latest news and firmware updates. G2P Gimbal DV System settings must be set on AP1 Multicopter Control Unit APP. The AP1 flight controller supports iOS V9.0 or later; Android V7.0 or later.

For the best G2P Gimbal working efficiency, AP1 Multicopter Control Unit and VDT1 HD Digital Video Transmitter; also the specifications of the tablet or mobile phone are recommended as follows: 4GB RAM, and more than 20GB ROM storage space in order to keep the best and fast performance quality.

Please scan QR Code for link to ALIGN website to find related software, or search"ALIGN AP1" in iOS / Android app store.

G2P 雲台相機組，出廠前已是最新版本，請安心使用，您也可以連結至亞拓 G2P 網站查詢，隨時更新亞拓發佈的最新本及各項最新訊息。G2P雲台相機組設定，需透過全新AP1 多軸飛控系統APP進行此項設定。AP1 飛行控制系統支援iOS版本9.0以上、Android版本7.0以上系統。

G2P 雲台考量最佳使用效率，需搭配全新AP1 多軸飛控系統及VTD1高清數位圖傳使用。平板或手機的規格要求建議搭配：記憶體(RAM)4GB，以及儲存空間(ROM)20GB以上；避免因平板或手機效能不足影響作業品質。

請掃描QR Code連接亞拓網站下載相關軟體，或是在iOS/Android App store搜尋"ALIGN AP1"。


Compatible with

TURN ON AP1 INTERFACE
開啟AP1介面

The AP1 Multicopter Control Unit Disclaimer is displayed when the APP is launched for the first time. Please, read Align Ap1 Multicopter Control Unit Agreement in it’s entirety.

免責聲明：首次使用AP1 多軸飛控系統，請詳細免責聲明內容！一旦下載、安裝或使用AP1多軸飛控系統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。
1 MODELS SELECTION
選擇模型

After power on A13 GST transmitter, turn on receiver to start binding. The binding process completed when connected.

After binding, select Multicopter model type on transmitter so to work with AP1 Multicopter Control Unit APP.

2 RC TRANSMITTER SETUP
遙控器設定

MODEL TYPE

Please select receiver type in AP1 APP program. A13 Transmitter has built-in with ALIGN A.BUS system.

3 GIMBAL CONTROL SETUP
雲台控制設定步驟

When AP1 Multicopter Control Unit is used with G2P Gimbal DV System, now you will have full 6 function controls with single RC transmitter: Pan, Tilt, Roll, Photo/Video, Auto Return to Center, and Hook Control. User can assign the switches on RC transmitter for each of the functions in AP1 Multicopter Control Unit APP "Gimbal Control Setup" page. If you use dual RC transmitter, please pass over to next setting.

AP1  多軸飛控系統搭G2P雲台相機組使用時，亦可藉由遙控器控制雲台六項功能：Pan軸、Tilt軸、Roll軸、拍照/錄影、一鍵回中、掛勾，開放AP1多軸飛控系統APP進入『雲台控制設定』依喜好習慣選擇開關使用。使用雙遙控器則跳過此設定。

1) First assign the desire function to an RC channel.

2) On the RC transmitter select the applicable switch, dial, or slider to map to these 6 functions. We recommend using a dial or slider for gimbal's Pan/Tilt/Roll controls.

3) Correct direction for each function. Use the reverse function on RC transmitter to reverse direction if needed.
1) 先將所需要使用的功能配置到所要使用的頻道上。

2) 在遙控器選擇開關、旋鈕開關或滑軌開關來對應此六項功能。雲台的Pan軸、Tilt軸與Roll軸控制建議設置在旋鈕開關或滑軌開關。

3) 確認各功能是否正常動作，如果動作有反向，可由遙控器的正反向功能切換更改。

The four gimbal control functions can all be assigned to individualized channel on your RC transmitter.

Please set the unused functions to X or N/A.

沒使用到的功能請切換到X或N/A。

4. GIMBAL CONTROL SETTING INSTRUCTION

1. Pan control: Control gimbal's pan movement through a designated stick or switch on the RC transmitter.

2. Tilt control: Control gimbal's tilt movement through a designated stick or switch on the RC transmitter.

3. Roll control: Control gimbal's roll movement through a designated stick or switch on the RC transmitter.

4. Photo/Video: designate switch on transmitter to control camera function. Short press to active Photo; extended press to active Video.

拍照/錄影：透過遙控器指定一個開關控制相機功能。短按開啟相機拍照功能；長按開啟錄影功能。
5. Auto Return to Center: Set the channel to the 13th switch through transmitter to start easily.

一键回中：透过遥控器绑定频道为第13开關，啟动即一键回中。

6. Hook Control: Set the channel to the 14th switch through transmitter to release or start hook control.

掛勾：透过遥控器绑定频道为第14开關，可以解除或啓动掛勾。

**CAUTION**

These gimbal control settings are applicable for single RC transmitter controlling the multicopter and G2P gimbal. RC transmitter and receiver must be 8 or more channels.

此雲台控制設定是適用在單一遙控器控制多軸機與G2P雲台時，遙控器與接收機必須具備8 動作以上。
## SPECIFICATIONS

### G2P Gimbal

<table>
<thead>
<tr>
<th>Specification</th>
<th>DC 12V(3S)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input Voltage</strong></td>
<td></td>
</tr>
<tr>
<td>輸入電壓</td>
<td></td>
</tr>
<tr>
<td><strong>Operating Current Consumption</strong></td>
<td>&lt;500 mA</td>
</tr>
<tr>
<td>消耗電流</td>
<td></td>
</tr>
<tr>
<td><strong>Capable of Gimbal Control Angle</strong></td>
<td>Master Controller</td>
</tr>
<tr>
<td>雲台可控制角度範圍</td>
<td>主控單控制操作</td>
</tr>
<tr>
<td></td>
<td>TILT 俯仰 -140° 至 +29°</td>
</tr>
<tr>
<td><strong>Master/Slave Controller</strong></td>
<td>Master/Slave Controller</td>
</tr>
<tr>
<td></td>
<td>PAN 指向 ±200°</td>
</tr>
<tr>
<td></td>
<td>ROLL 浪轉 ±30°</td>
</tr>
<tr>
<td></td>
<td>TILT 俯仰 -140° 至 +29°</td>
</tr>
<tr>
<td><strong>Maximum Control Rotation Rate</strong></td>
<td>PAN60°/sec, ROLL60°/sec, TILT60°/sec</td>
</tr>
<tr>
<td>最大可控制旋轉速度</td>
<td>指向60度/秒，浪轉60度/秒，俯仰60度/秒</td>
</tr>
<tr>
<td><strong>Temperature Range</strong></td>
<td>-20~80 degrees</td>
</tr>
<tr>
<td>工作環境溫度</td>
<td>-20~80度</td>
</tr>
<tr>
<td><strong>Voltage Output</strong></td>
<td>5V / 0.3A</td>
</tr>
<tr>
<td>接收器輸出</td>
<td></td>
</tr>
<tr>
<td><strong>Dimension</strong></td>
<td>109.6x78.6x127.5mm</td>
</tr>
</tbody>
</table>

### 4K DV Specification

<table>
<thead>
<tr>
<th>Specification</th>
<th>4K DV 規格</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Image Sensor</strong></td>
<td>1/2.3&quot; CMOS, 12 million effective pixels</td>
</tr>
<tr>
<td>影像傳感器</td>
<td>1/2.3&quot; CMOS/有效像素1200萬</td>
</tr>
<tr>
<td><strong>Lens</strong></td>
<td>FOV 90° / Aperture : F/2.8</td>
</tr>
<tr>
<td>鏡頭</td>
<td>FOV90° / 光圈F/2.8</td>
</tr>
<tr>
<td><strong>Shutter Speed</strong></td>
<td>2 - 1/8000 s</td>
</tr>
<tr>
<td>快門速度</td>
<td></td>
</tr>
<tr>
<td><strong>Photo Size</strong></td>
<td>4000 x 3000 pixels</td>
</tr>
<tr>
<td>照片尺寸</td>
<td></td>
</tr>
<tr>
<td><strong>Temperature Range</strong></td>
<td>Single Image / Continuous Mode</td>
</tr>
<tr>
<td>照片拍攝模式</td>
<td>單張、連拍</td>
</tr>
<tr>
<td><strong>Image Format</strong></td>
<td>JPEG</td>
</tr>
<tr>
<td>圖片格式</td>
<td></td>
</tr>
<tr>
<td><strong>Video Format</strong></td>
<td>H264 MOV</td>
</tr>
<tr>
<td>影片格式</td>
<td></td>
</tr>
<tr>
<td><strong>Video Resolution</strong></td>
<td>4K: 3840*2160 30fps</td>
</tr>
<tr>
<td>錄影解析度</td>
<td>2.7K: 2716*1524 30fps</td>
</tr>
<tr>
<td></td>
<td>1080p: 1920*1080 120fps</td>
</tr>
<tr>
<td><strong>Support Memory Card</strong></td>
<td>Micro SD card、SD/TF card. SDXC interface support read speeds up to UHS-I Class 10 Micro SD card (60MB/s read/write speed); Support format: FAT32 &amp; ex FAT</td>
</tr>
<tr>
<td>支援存儲卡類型</td>
<td>Micro SD卡、SD/TF卡: SDXC介面，傳輸速度達到UHS-I C10等級的Micro SD卡（讀寫速度60MB/s）: 支援格FAT32、ex FAT</td>
</tr>
</tbody>
</table>
Gimbal status LED does not light up, or gimbal does not have any movement.
Check power is connected to gimbal, and also ensure power cable between PCU and gimbal is properly connected.

雲台指示燈不亮或無動作反應。
檢查雲台是否有供電，PCU與雲台之間電源線是否有正確連接。

Recorded video has wavy lines (jello effect).
(1) Check for excessive vibration on airframe and eliminate the vibration source.
(2) Use an appropriate damper.

雲台拍攝画面有水波影像。
(1) 檢查機體是否有過大震動，且排除震動源。
(2) 選擇正確雲台避震墊圈使用。

Recorded video has slight swaying movement.
Multicopter rudder gain is too low; increase the rudder gain in both Manual and Attitude modes.

雲台拍攝畫面微幅左右晃動。
多軸飛行機尾舵感度偏低，請將手動模式與姿態模式的尾舵感度提高。

No screen image after turning on G2P gimbal?
(1) Check if the signal cable between G2P gimbal and video transmitter is connected well.
(2) Check if the WiFi between tablet and video transmitter is connected well.
(3) Fail connection between tablet and video transmitter, please restart video transmitter.

G2P雲台開機後，無影像畫面？
(1) 檢查G2P雲台與圖傳之間的訊號線是否有連接好。
(2) 確認平板與圖傳之間WiFi是否有正確連線。
(3) 平板與圖傳連線失敗，重新啓動圖傳電源連線。

Gimbal doesn't auto check and perform neutral point after power on G2P.
(1) Heading direction not to the front. Turn on A13 GST transmitter and finish binding, and adjust scroll switch rear of A13 GST transmitter to control gimbal tilt angle.
(2) Turn on A13 GST transmitter and finish binding, enter "Channel Display" in A13 transmitter APP and adjust gimbal tilt angle according to channel instant operation information.

G2P雲台開機後，雲台沒有自行檢測回中立點？
(1) 雲台頭向沒有朝前中，請開啓A13 GST遙控器對頻完成後，自行調整A13 GST遙控器後方的滾輪開關/W2來控制雲台俯仰角度。
(2) 請開啓A13 GST遙控器對頻完成後，點按進入A13 GST遙控器APP內的"各頻道顯示資料"，依據頻道操控的即時資訊來調整雲台俯仰角度。
Thank you for purchasing and supporting ALIGN products.

The Align Team is dedicated to you by innovating and developing new RC Helicopters, Multicopters, and FPV Racing Quads. We strive to provide a more diversified experience for our customers. Visit our website at www.align.com.tw for latest news, information, and updates about our extensive line of products for the RC enthusiasts.

Good Flying!

再次感謝您對亞拓系列商品的喜愛與支持，您的肯定是對我們最大的認同。
亞拓團隊秉持創新研發的宗旨，開發遙控直升機／多軸飛行機／穿越機系列商品，提供給您體驗更多樣化的飛行樂趣。您可以透過下列連結，隨時瞭解亞拓的最新動態，以及各項訊息分享。
祝福您有一個愉快的飛行體驗。

ALIGN Flight Safety 亞拓飛行安全宣導

ALIGN T-REX Helicopter 亞拓遙控直升機

ALIGN Multicopter 亞拓多軸飛行機

ALIGN FPV Racing Quad 亞拓穿越機

ALIGN Website 亞拓官網
http://www.align.com.tw

ALIGN Shopping Cart 亞拓購物車

ALIGN Quick Finder 亞拓零件快速購

ALIGN FaceBook
https://www.facebook.com/Align-Corporation-194493419543/?ref=mf

ALIGN Instagram
https://instagram.com/aligncorporation/

ALIGN YouTube
https://www.youtube.com/channel/UCaPj_K5DNo7HSmP1eytUvMQ

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

ALIGN
SPECIFICATIONS / 產品規格

Weight / 重量：approx. 330g
(Unit / 單位:mm)