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ALIGN 模擬器電腦硬體基本需求
ALIGN Simulator Basic Hardware Requirements

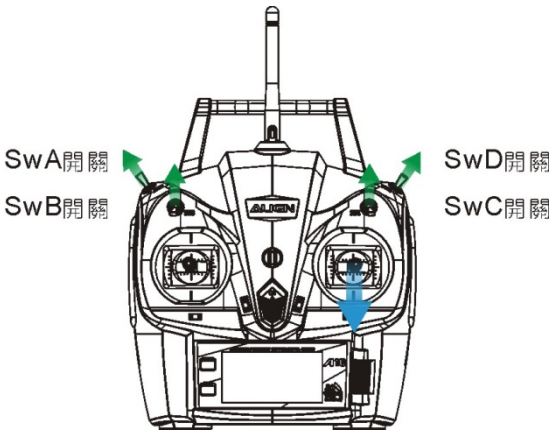
系統需求 System	Windows 11	v
	Windows 10	v
	Apple Mac OSx(64-bit)	10.12 or later
	Ubuntu Linux(64-bit)	22.04 or later
硬體需求 Hardware Requirements	USB2.0 (A10 Transmitter Simulator Cable) (A10 遙控器模擬線)	v
	Dedicated graphics cards (Nvidia / AMD series) 獨立顯卡(Nvidia / AMD 系列)	v
基本運行需求 (最低限制) Basic operational requirements (Minimum requirements)	CPU	1.83GHz
	System memory 系統記憶體	3 GB RAM
	Hard drive space 硬碟空間	1.15 GB
	Graphics card 顯示卡	GPU Dx10 and 256 MB RAM
最佳使用系統規格 (Full HD 影像輸出) Optimal system Optimal system for Full HD video output	CPU	2.3GHz
	System memory 系統記憶體	8 GB RAM
	Hard drive space 硬碟空間	1.4 GB
	Graphics card 顯示卡	GPU Dx10 、 2048 MB RAM

備註 ： 若您的筆電設備本身無內建『USB外接孔』，建議您更換筆電或改用電腦。因目前市面上的USB轉接器並非都有支援模擬軟體搖桿動作，可能會造成無法讀取動作、而無法使用。

Remark: If these is no build-in USB port on your tablet, we suggest you to change and use another tablet or computer which support build-in USB port. Because that not all available USB Adapters are working for transmitter/ joystick input devices. This is not specific to ALIGN Simulator, it's a common problem. So that will cause the computer can't read transmitter/joystick correctly.

A10 遙控器開機步驟
Turn on A10 Transmitter

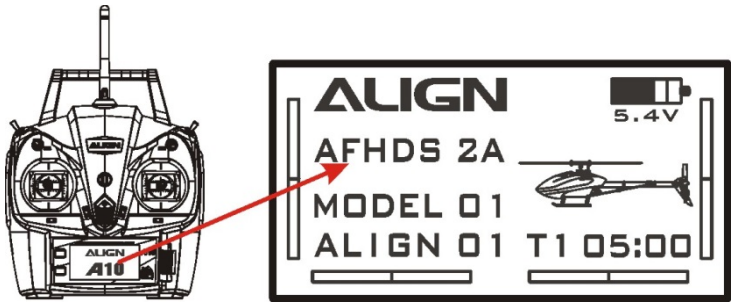
檢查系統狀態，確保電池充滿電並且安裝正確，開關(SwA~D)全部向上並且油門搖桿向下。
Pre-check transmitter, make sure battery is fully charged and well installed. Put all switches (SwA~SwD) in upright position and pull down throttle stick to the bottom.



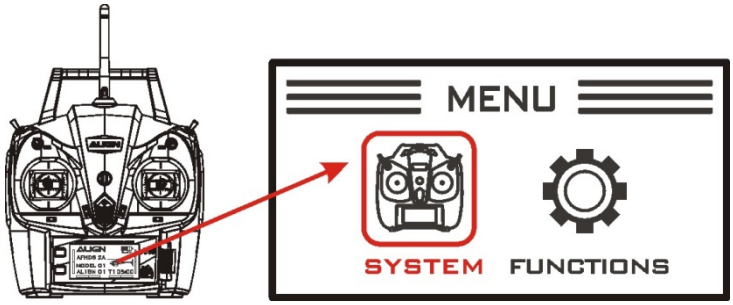
接著先將電腦開機，再將 A10 遙控器透過 A10 模擬線連接上電腦(USB 接頭)，開啟 A10 遙控器電源，直到螢幕亮起，此時正確開機會有開機聲響。
Firstly, turn on the computer, then follow below diagram to connect A10 Transmitter to computer, turn on A10 transmitter until screen is lighted and a beep is heard.

A10 遙控器介面設定
A10 Transmitter Set up

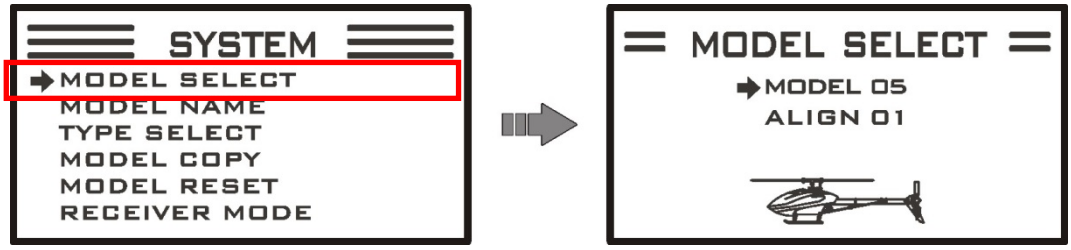
安裝 ALIGN 模擬器前，請先依循以下步驟設定 A10 遙控器介面。選單分為兩部分，『系統設定 SYSTEM』和『功能設定 FUNCTIONS』，滾輪下壓長按進入選單。
Before installing ALIGN simulator, please follow below instruction to set up A10 transmitter firstly. Hold down roller to enter HOME page, there are two sections : SYSTEM and FUNCTIONS.



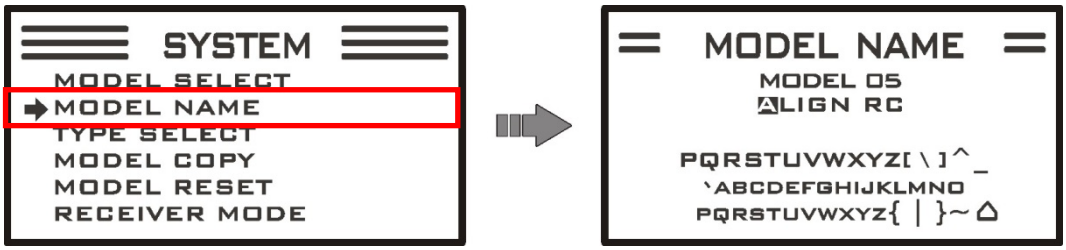
方框為已選取，進入『系統設定 SYSTEM』頁面，滾輪下壓短按進入選單，在遙控器上建立一個新的模型。
The selecting subject is framed. Hold down roller to enter SYSTEM page to create a new model.



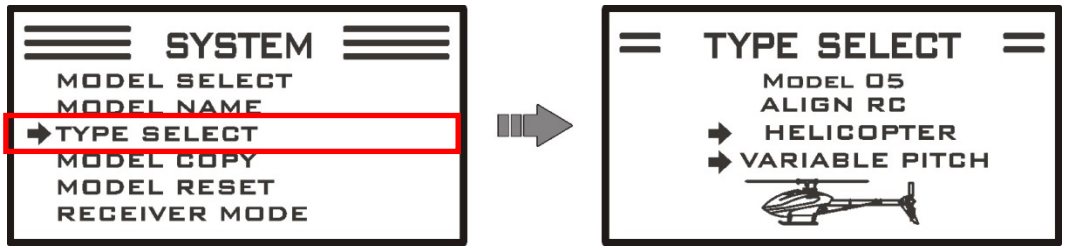
點按『模型選擇 MODEL SELECT』頁面，滾輪下壓短按進入選單，滾輪向左或向右移動到 MODEL 05 新增一款模型。
Hold down roller to enter MODEL SELECT page, move the roller to left/right to select MODEL 05. Then press CONFIRM button.



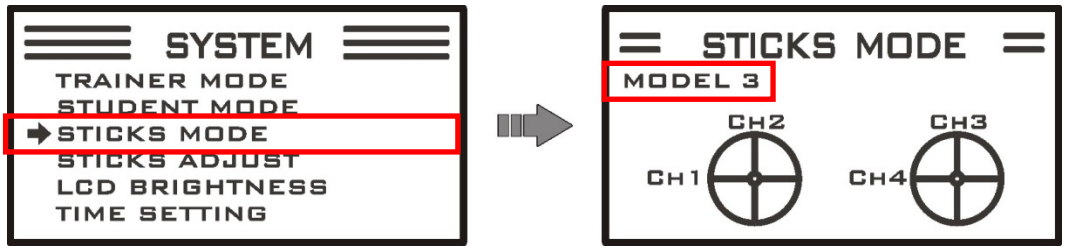
滾輪向右移動到『模型命名 MODEL NAME』頁面，滾輪下壓短按進入選單，左右選取下方英文，命名一個新的模型名稱為『ALIGN RC』。點按『CONFIRM』確認
Move roller to right for MODEL NAME then hold down roller to enter the page. Move roller to left/right to choose the letter for new model name “ALIGN RC”. Then press CONFIRM button.

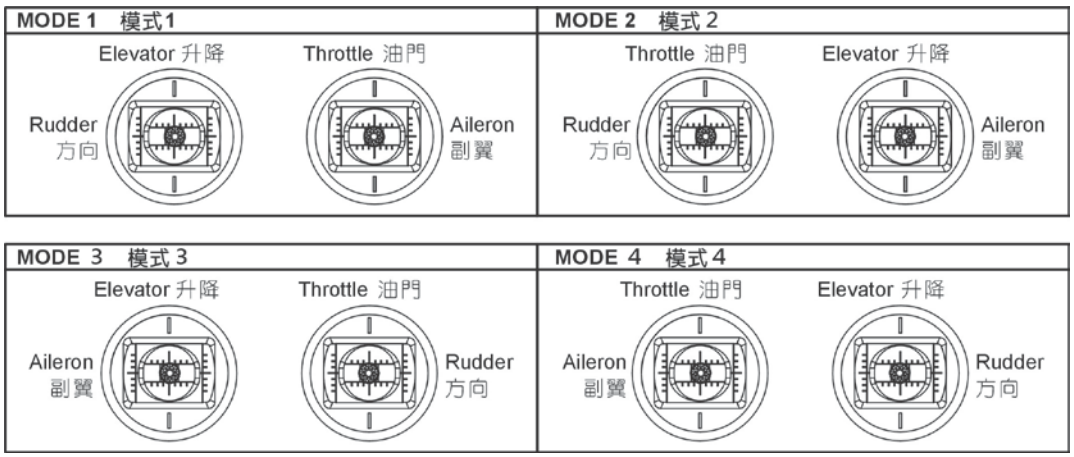


滾輪向右移動到『模型類型 TYPE SELECT』頁面，滾輪下壓短按進入選單，設定選擇直升機 VARIABLE PITCH，請點按『CONFIRM』確認儲存設定。
Move roller to right for TYPE SELECT then hold down roller to enter the page. Move roller to left/right to choose “VARIABLE PITCH”. Then press CONFIRM button.

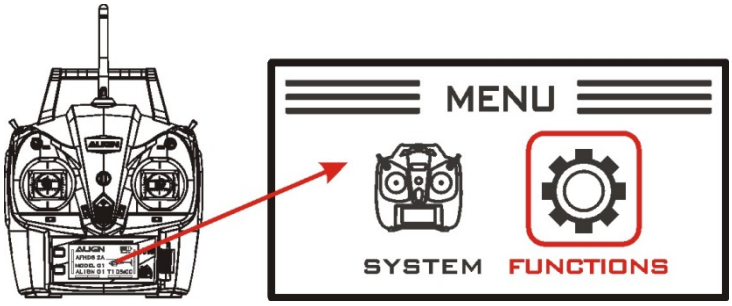


進入『搖桿模式 STICK MODE』設定搖桿模式，選擇您的搖桿模式，然後請點按『CONFIRM』確認儲存設定。
Move roller to right for STICK MODE then hold down roller to enter the page. Move roller to left/right to choose your own STICK MODE. Then press CONFIRM button.

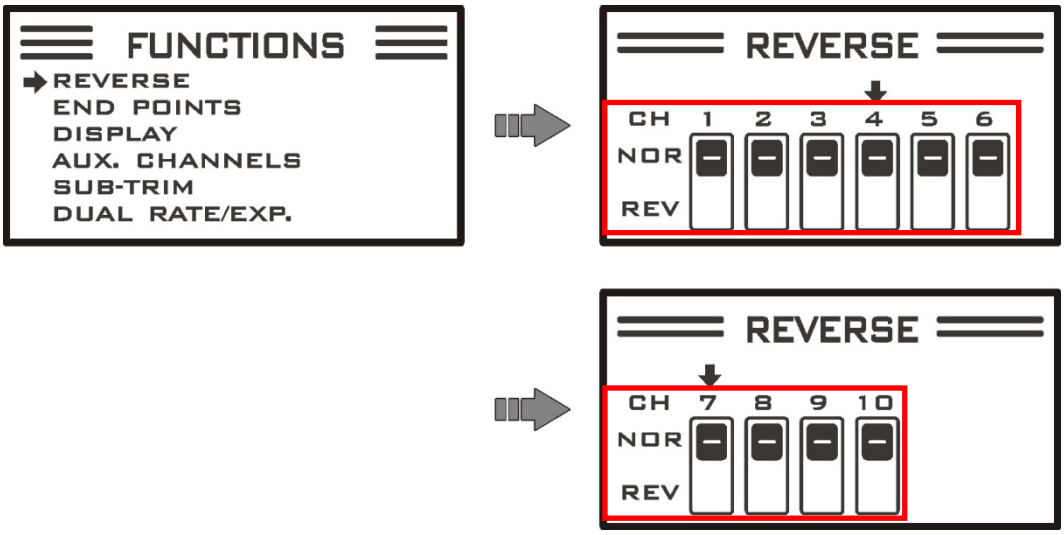




按『BACK』返回鍵，回到遙控器選單介面，方框為已選取，滾輪向右移動到『功能設定 FUNCTIONS』頁面，滾輪下壓短按進入『功能設定』選單。
Press BACK button to HOME page. Selecting subject is framed. Move roller to right for FUNCTIONS, then hold down roller to enter the page.



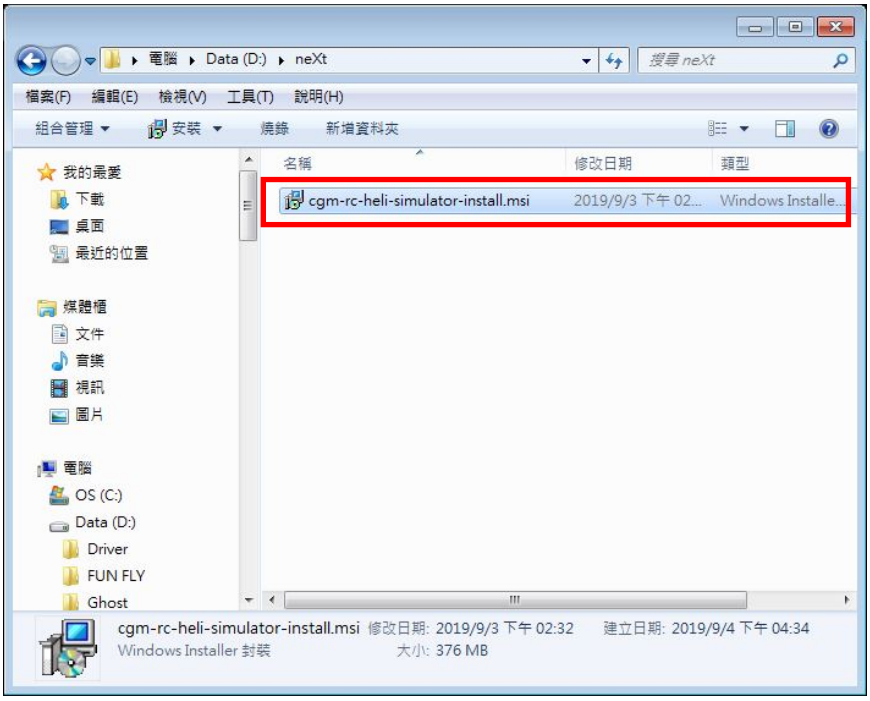
進入『正反向 REVERSE』設定伺服器，選擇所有通道 CH1~10 皆設定為『正向 NOR』位置，最後請點按『CONFIRM』確認儲存設定，A10 遙控器完成設定。
Hold down roller to enter REVERSE page for servo setup. Set all channels CH1~CH10 at NOR position. Move roller for changes and hold down roller to the next. Then press “CONFIRM” button for confirmation. Now finish A10 Transmitter set up.



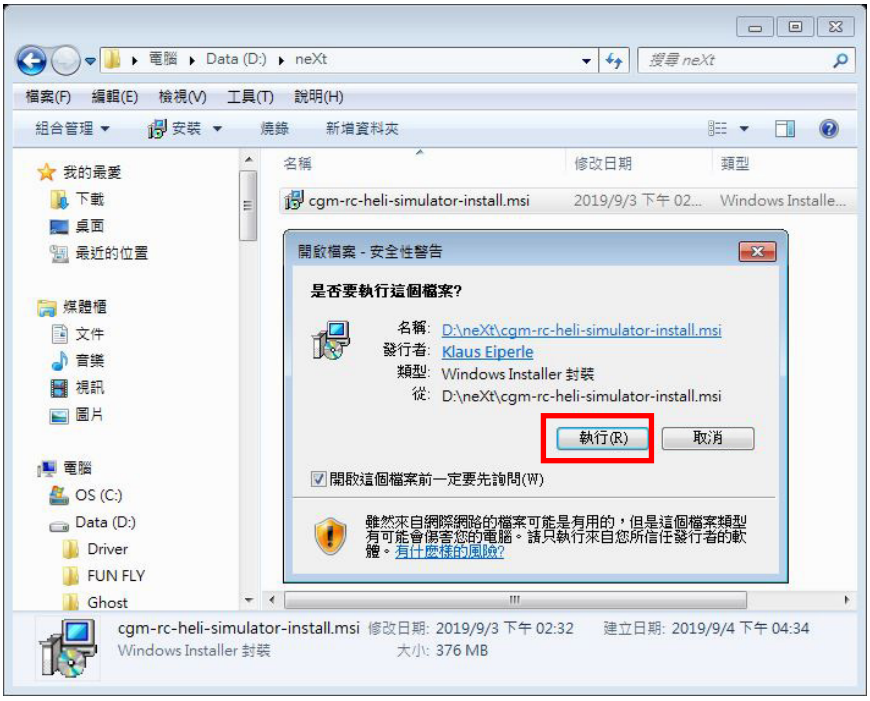
ALIGN 模擬器安裝教學
ALIGN Simulator Installation

請確認是否已連接網路。請上『亞拓官網/技術支援/升級下載/飛行模擬器/ALIGN 飛行模擬器』下載安裝 ALIGN 模擬器的安裝程式，點按『cgm-rc-heli-siomulator-install.msi』，開始進行安裝。

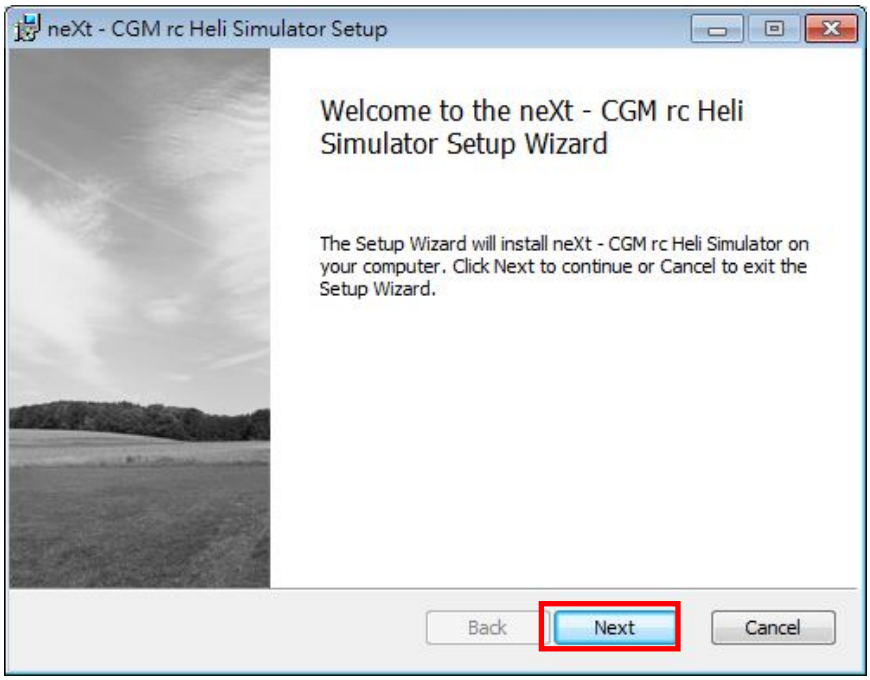
Please connect your computer to the Web and please get to" https://www.align.com.tw/index.php/download-en/simulators/" and start downloading "ALIGN Flying Simulators". Then click "cgm-rc-heli-siomulator-install.msi" to install.



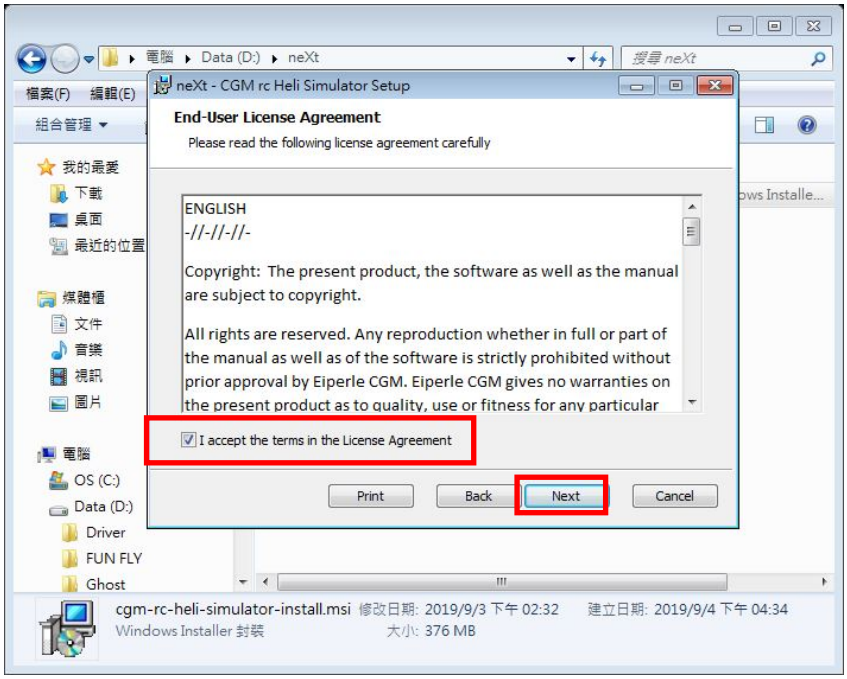
請確認是否安裝，點按『執行(R)』後，開始進行安裝。
Click “Install(R)” to start installation.



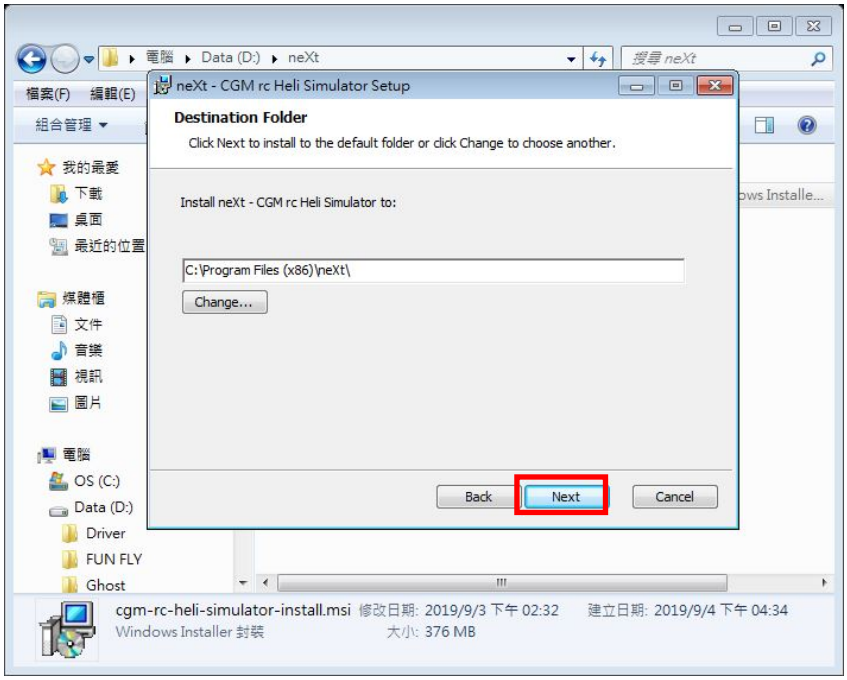
點按『Next』繼續安裝。
Click “Next” to continue.



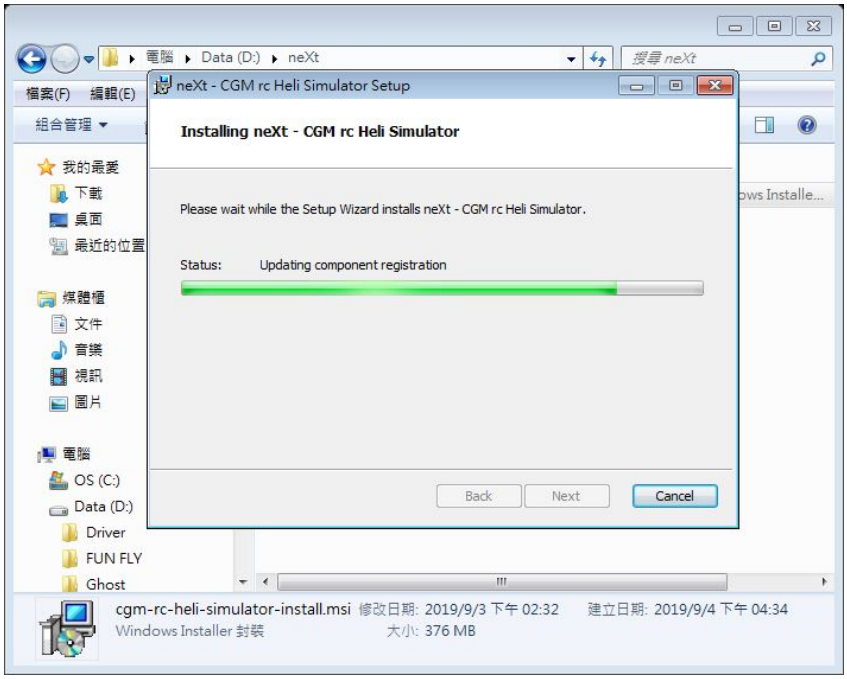
勾選『I accept the terms in the License Agreement』後，點按『Next』繼續安裝。
Click “I accept the terms in the License Agreement” then click “Next”.



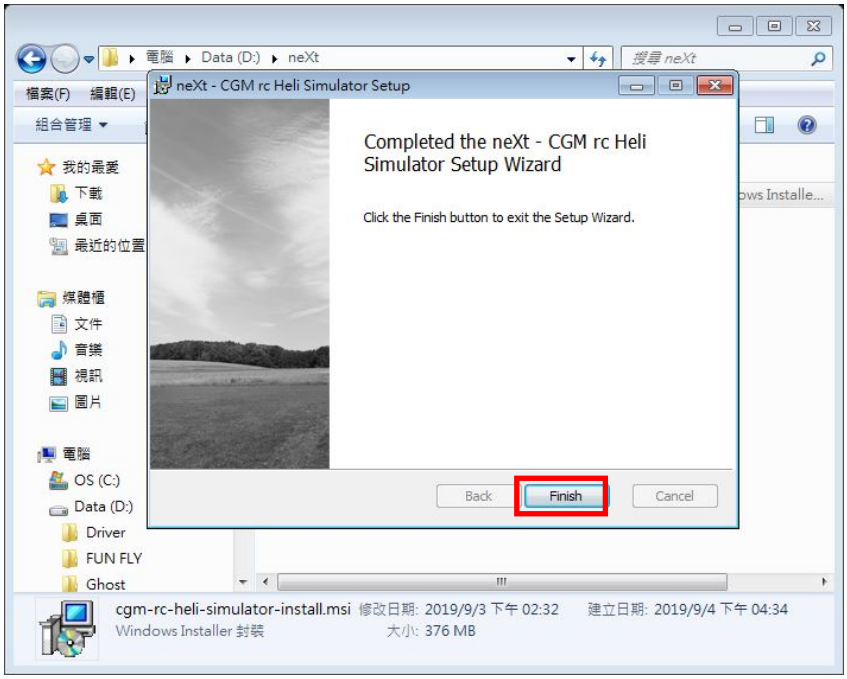
繼續點按『Next』安裝。
Click “Next”.



安裝視窗中會呈現目前安裝進度。
Now it will show the status of installation.



安裝完成後，會出現『Completed the next-CGM rc Heli Simulator Setup Wizard』，接著請點按『Finish』。
It shows “Completed the next-CGM rc Heli Simulator Setup Wizard” when installation is done, then click “Finish”.



ALIGN 模擬器基本設定教學
ALIGN Simulator Basic Setup

安裝完成後，請點按開啟桌面的『neXt』 icon 開啟模擬器。開啟後，開機畫面即為預設的飛行場景及預設的 ALIGN E1 植保機。
After installation, click “neXt” icon from desktop to open simulator. The ALIGN E1 model is default setting.

請點按鍵盤『ESC』或滑鼠『右鍵』進入設定選單。
Press “ESC” from keyboard or right click to enter the setup Menu.

開機畫面即為預設的 ALIGN E1 植保機。可依自行需求及喜好點選 『模型切換 Model』，選擇欲練習的機型。
ALIGN E1 is default model. You can change and select your preferred model from “Model” section.

點按『設定 Setting』，點選右上『語言 Language』，選擇語系。
Click “Setting” and click “Language” on upright corner to select your own language.

接著下拉『輸入裝置 Input Device』選項，選擇『執照 License』。
Then click “Input Device” to drop-down the list, select “License” tab.

輸入您的姓/名字/序號/密碼，或可自行輸入喜好的名稱，進行註冊。若無註冊，僅為試用，限制飛行時間 2 分鐘。
Type in your name/license/password to register and active simulator. The “Demo” only for 2-mins flying.

備註: 姓/名字不可一樣，輸入字元僅限英文大小寫，至少 1 個字以上，不可有空格或其他符號。
Remark: The first name and last name fields should have more than one letter and must differ from each other. Special characters should not be used. Letters are A - Z, a - z.

輸入完畢後，請點按『添加許可證』。完成後左下顯示狀態會由『試用』轉換為『已註冊』。
Then click “Activate Online”, then the status will turn to “Registered” after completion.

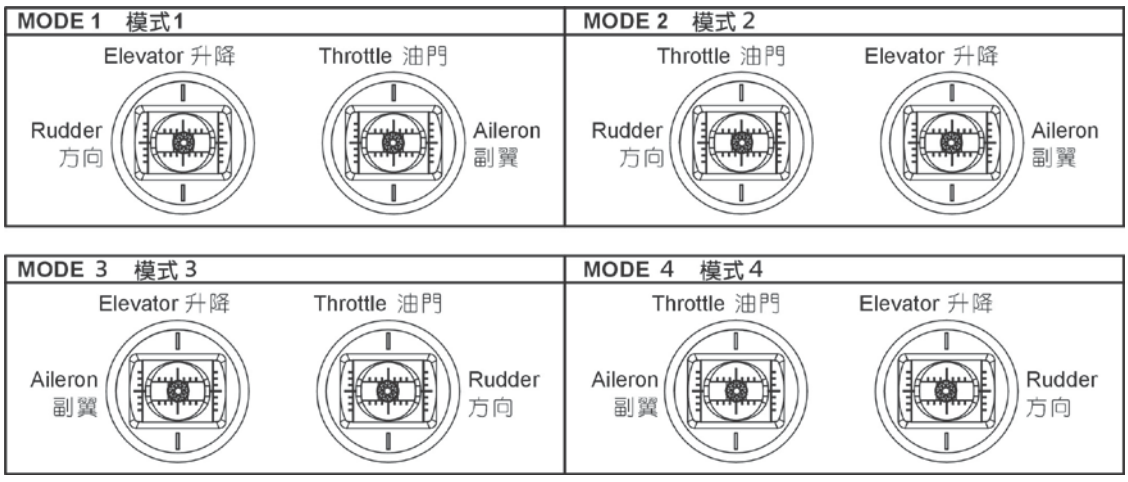
點按『飛行場景』，會出現預設的飛行場景，也可點按『下載飛行網站』選擇喜愛的飛行場地後，點按下載。下載完成後，會出現在左方的選單中。
Click “Scenery” tab on the top. The default sceneries are listed on the left, others available to download are on the right. Allow to select preferred scenery and click “Download” to keep it in your simulator. After completion, the downloaded scenery will list on the left.

『設定 Setting』選單下，下拉選擇『輸入裝置 Input Device』，搖桿模式 Stick Mode 選擇『3』，或依自行喜好的搖桿模式選擇其代表數字。在此僅以模式 3 為示範，請點按『開始校準 Calibration』。

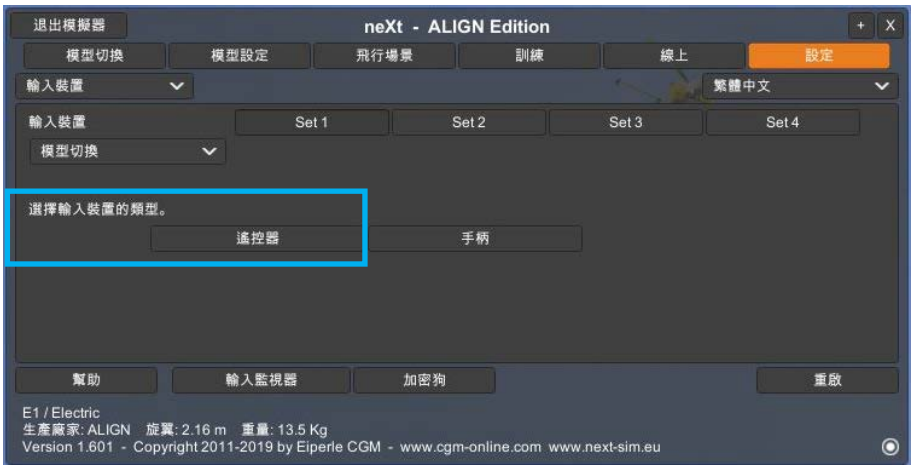
Click “Setting” tab on the upright corner and click “Input Device” to drop-down the list and select “Input Device”. Set “Stick Mode” according to your transmitter stick mode setup. Then click “Calibration” to calibrate your transmitter.

MODE 1~ MODE 4 搖桿模式位置參考，請依循此搖桿模式位置設定您所使用的模式。

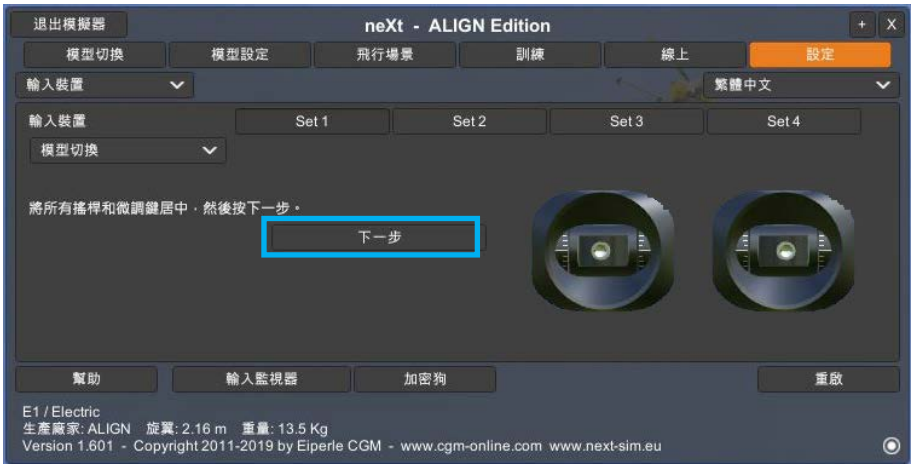
Here is stick mode MODE 1~MODE 4 list for your reference. Make sure to check your gimbal and setup your stick mode.



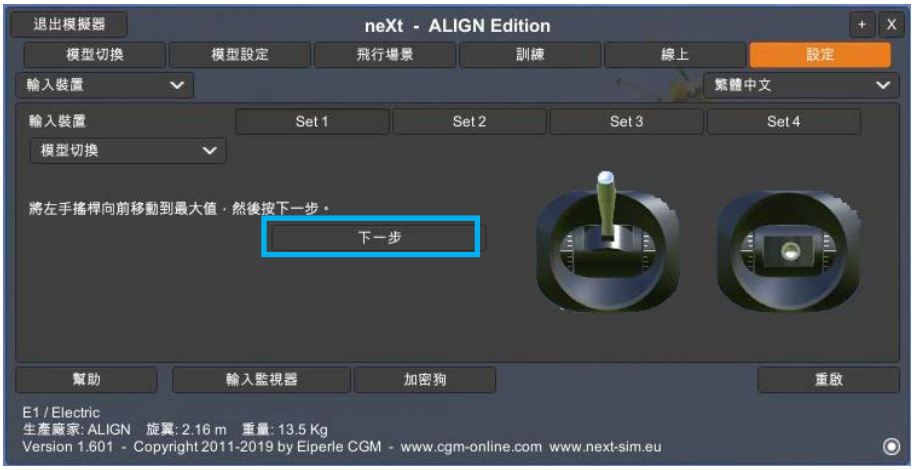
選擇輸入裝置的類型：遙控器。
Select the type of your input device, and select “Gimbal/Transmitter”.



依 neXt 指示操作、完成校準。 將所有搖桿和微調鍵居中，然後點按『下一步』。
Follow the instruction to calibrate the transmitter. Center all sticks and trims then press “next”.

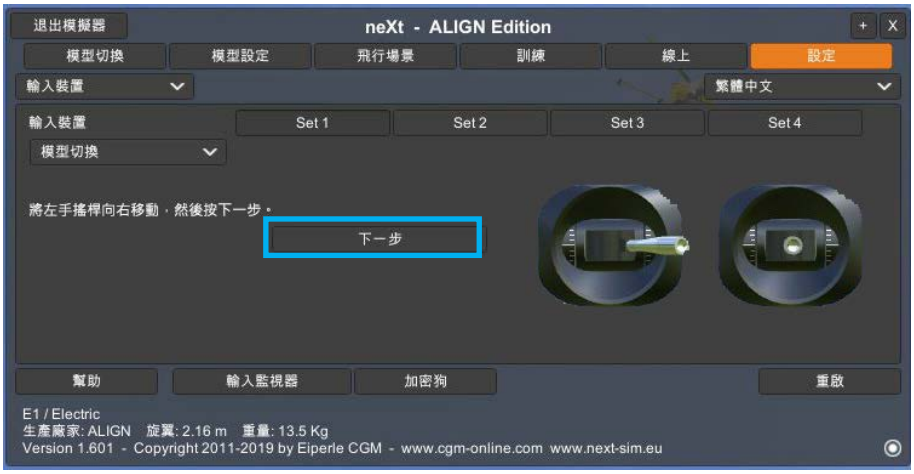


將左手搖桿向前移動到最大值，然後點按『下一步』。
Move your left stick to maximum forward and press “next”.

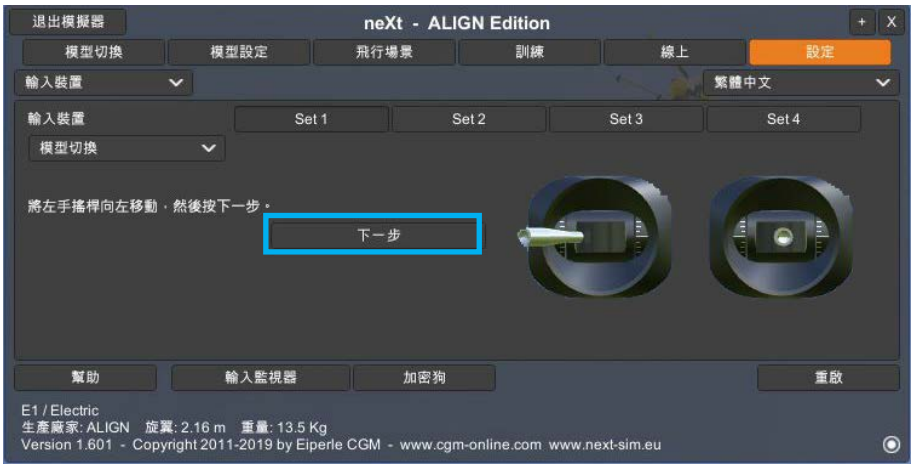


將左手搖桿向後移動到最大值，然後點按『下一步』。
Move your left stick to maximum backward and press “next”.

將左手搖桿向右移動，然後點按『下一步』。
Move your left stick to maximum right and press “next”.



將左手搖桿向左移動，然後點按『下一步』。
Move your left stick to maximum left and press “next”.



將右手搖桿向右移動，然後點按『下一步』。
Move your right stick to maximum right and press “next”.

將右手搖桿向左移動，然後點按『下一步』。
Move your right stick to maximum left and press “next”.

將右手搖桿向前移動到最大值，然後點按『下一步』。
Move your right stick to maximum forward and press “next”.

將右手搖桿向後移動到最大值，然後點按『下一步』。
Move your right stick to maximum backward and press “next”.

按『完成』以保存校準。
Press finish to save the calibration.

在所選的螢幕解析度和品質設定中未達到所需的幀速率（每秒 60 幀）。如下圖所示，右上角低於 60fps，下方出現警告視窗。

If the required frame rate (60 fps) is not reached in the selected screen resolution and quality settings, see the number on the upright corner of the screen. Then simulator will pop out a warning window to ask “Please reduce the screen resolution or lower the anti-aliasing level.”

請進入『設定 Setting』選單下，下拉選擇『圖像 Graphics』

Click “Setting” tab on the upright corner, then click “Input Device” to drop-down the list and choose “Graphics”.

請降低『螢幕解析度』，建議選擇『1024*640』。視窗畫面會自動調整為 1024*640 的視窗大小。
Reduce “Screen Resolution” and choose “1024 x 640” to adjust the resolution.

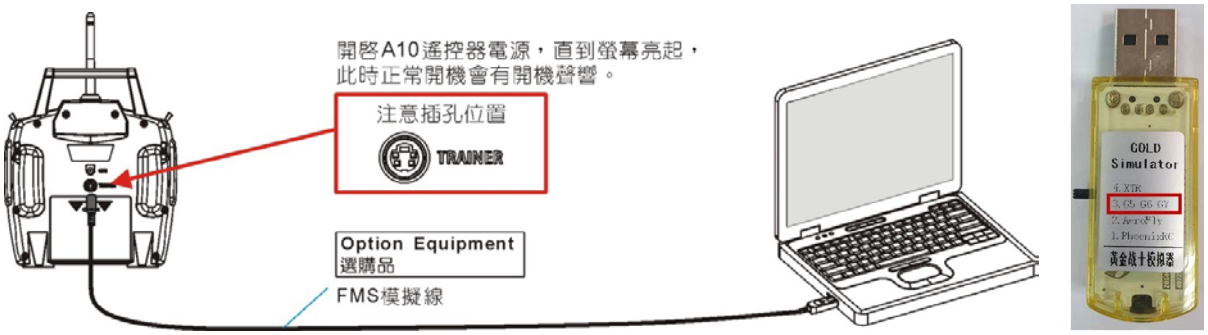
請調整『陰影』選項，建議選擇『沒有』。Then click “Shadow” tab and select “None”.

請調整『抗鋸齒』級別，建議選擇『殘』。
Click “Anti-Aliasing” tab and select “Disabled”. Then finish resolution adjustment.

設定完成右上角數據則會高於 60fps，下方警告視窗即會消失。即完成模擬器的安裝設定。
After adjustment, the frame rate on the upright corner should be over 60 fps. Then there will be no more warning. So that's all about simulator basic setup.

直昇機機型基本設定教學
Basic Setup For Other Heli Models

選擇 ALIGN E1 以外的機型，請使用 8 動鳳凰解碼線，請根據以下圖示連接遙控器與電腦，並將解碼線設置在『3.　G5 G6 G7』通道。
For flying other heli models, please use 8-channels dongle. Follow below instruction to connect A10 Transmitter to computer, then set up the dongle at "3.　G5 G6 G7" section.



請點按鍵盤『ESC』或滑鼠『右鍵』進入設定選單。點選 『模型切換 Model』，可依自行需求及喜好選擇欲練習的機型。
Press “ESC” from keyboard or right click to enter the setup Menu. Then click “Model” tag on the top left side, and you can change and select your preferred model from “Model” section.

點選『模型設定 Model Setup』後，下方會顯示直升機的圖示、飛行條件、參數預設值。
三款飛行條件分別代表三種飛行模式-Normal/IDLE1/IDLE2，可供使用者依需求及喜好調整設定。

Click “Model Setup”, the system shows the picture of heli, Flight Condition and default ettings. The Flight Condition refers to flight mode-Normal/IDLE1/IDLE2. Allow users to adjust the settings based on their preference.

如點選下方『螺距曲線 Pitch Curve』，螺距曲線視窗會跳出，可點選不同的飛行條件，依需求分別調整設定各模式下的螺距曲線。

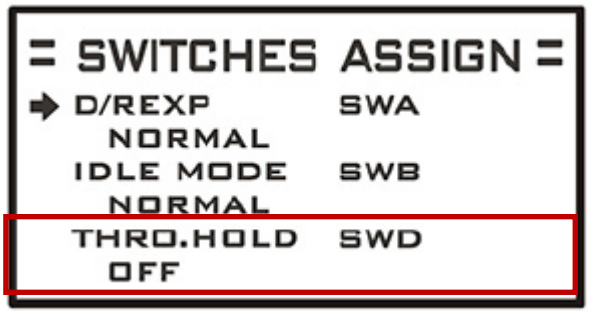
Click “Pitch Curve” at the bottom, the Pitch Curve diagram will show up. You can click and select different flight condition to adjust each pitch curve accordingly based on your preference.

如點選下方『專家 Expert』，則進階參數設定值會新增至表內下方。如點選右下『回復預設值 Back to Preset』，則所有參數值將會回歸至預設值。
To click “Expert” at the bottom, the other advanced settings will be listed in the column. To click “Back to Preset”, then all the settings will be set to default.

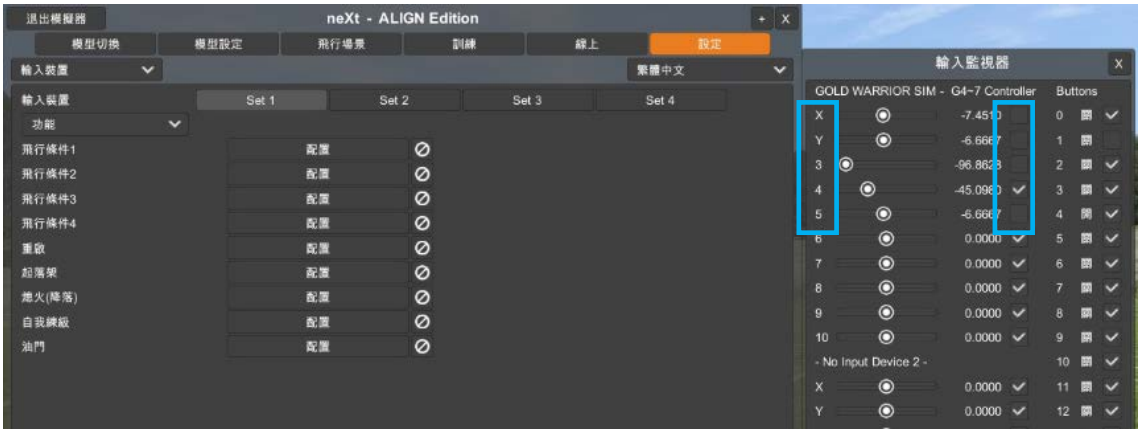
接著，點選 『設定 Setting』後，接著下拉『模型切換 Model』選項，選擇『功能 Function』。遙控器除升降/副翼/油門/尾舵遙桿動作外，其他通道配置，須依需求及喜好在此設定。
Then click “Setting”, and select “Function” tab from the drop-down list. Except Elevator / Aileron / Throttle / Rudder, you can assign other channels function here.

以下以設定熄火(降落)開關功能為例。
Here we take “Autorotation” as example for switch assignment.

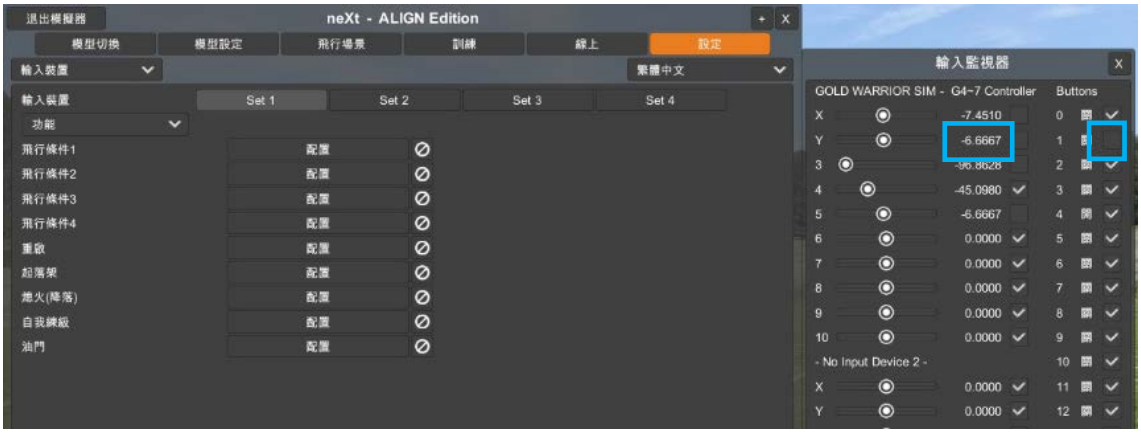
首先，請先確認遙控器開關設定。進入遙控器『系統設定 SYSTEM』頁面，滾輪下壓短按進入選單，滾輪向右移動到『開關設定 SWITCHES ASSIGN』頁面，滾輪下壓短按進入選單，設定您需要的開關位置，請點按『CONFIRM』確認儲存設定。這裡我們將熄火開關設在 SWD 撥桿。
First, confirm your transmitter switch assignment. Hold down roller to get into “SYSTEM” page, and move roller to left/right to “SWITCHES ASSIGN” then press down roller to enter. Then assign your own switch position, and press “CONFIRM” to save settings. Here we set “Throttle Hold” at SWD two-step switch.



請回到模擬器/功能頁面，在輸入監視器視窗上，移動遙控器搖桿時，搖桿動作會反應在該通道上，在此是通道 X. Y. 3. 5，請先將此四個通道的『✓』移除。
Please back to “Functions” in simulator, check on the Input Monitor. When you move transmitter sticks, the stick movement will show its channels on the Input Monitor, they are channel no.: X. Y. 3. 5. So please remove “✓” from channel no.: X. Y. 3. 5.



同時，如果發現某通道數值有跳動的情形，請將該通道的 Buttons 欄位的『✓』移除。這裡，發現通道 Y 數值有此狀況，先將『✓』移除。
At the meantime, if the channel value number is jittered, please remove “✓” from the Buttons column. Here channel no. Y number is jittered, so we remove its “✓” from the Buttons.

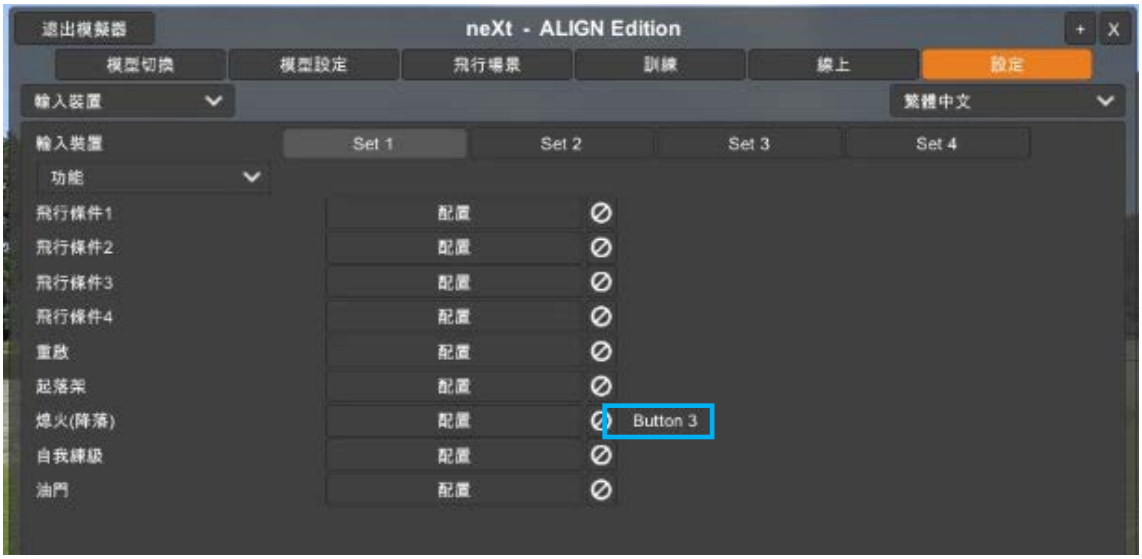


接著，選擇『熄火(降落)』，然後點按『配置』。
Then, select and click “Assign” tab for Autorotation.

選擇輸入原件類型，共三種類型。在選擇前，請先將遙控器熄火(降落)的開關切到『OFF 位置』。接著，依遙控器的設定，選擇『撥桿開關』。
There are three types of input element. Before selecting, please switch Autorotation Throttle Hold to OFF position in transmitter. Then click “Switch” for this setup.

接著，將遙控器熄火(降落)的開關切到 ON 位置。
Please switch Autorotation Throttle Hold to ON position in transmitter.

完成配置後，該熄火(降落)功能後方即會出現設定值(例如：Button 3)，即配置成功。
Then system will show setup value next to “Autorotation”, so it means it’s completed.



如欲取消或重新配置該功能，可點按功能後方的『⊘取消符號』即可。
If you’d like to cancel or re-assign functions, then click “⊘” for reset.