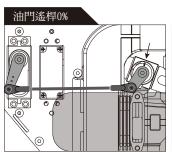


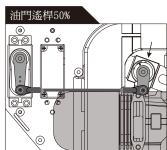
## 安裝與設定

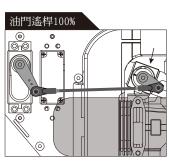
- 1. 請使用AB膠將磁鐵黏貼在相隔180度的引擎風扇凹孔裡,請確保磁鐵的極性相反(一個磁北向上,一個磁南向上)隨附之磁鐵有記號的一面為磁北。(請勿使用CA瞬間膠)
- 2. 將磁鐵感應器連接到 GAUI 定速器。
- 3. 安裝磁鐵感應器到機身,磁鐵感應器和引擎風扇上磁鐵之間的 距離建議為1mm。
- 4. 將油門伺服機連接到GAUI定速器連接線的「Throttle In」。
- 5. 請視您遙控器的通道配置,將GAUI定速器的「油門訊號線」 連接到接收器的油門(THRO)通道。
- 6. 請視您遙控器的通道配置,將GAUI定速器的「感度訊號線」 連接到接收器的GOVERNOR輔助通道。這將透過遙控器設定選項中的 GOVERNOR 功能來設定定速轉速值。
- 7. 接上接收器的電源,GAUI定速器燈號顯示紅色LED燈表示非定速模式 顯示綠色LED燈表示定速模式。
- 當磁北向上的磁鐵通過磁鐵感應器下方時,GAUI定速器燈號會熄滅 通過後亮起。

當磁南向上的磁鐵通過磁鐵感應器下方時,GAUI定速器燈號不會熄滅。

8. 設定油門伺服機行程,確認遙控器油門曲線"Normal模式"是線性的(0-25%-50%-75%-100%)。 確認油門遙桿50%的位置時,引擎化油器閥門為半開狀態。(請參照引擎化油器閥門上的指示刻度) 確認引擎化油器閥門與伺服機動作量在油門遙桿100%的位置時,引擎化油器閥門為全開的狀態。 油門遙桿0%的位置時,引擎化油器閥門為全關的狀態。(請參照引擎化油器閥門上的指示刻度)







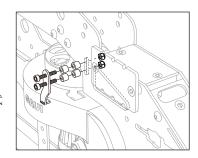
9. 將油門撥到0%最低的位置。

按住「Set"按鈕至少3秒。LED指示燈將閃爍紅色和綠色燈號。

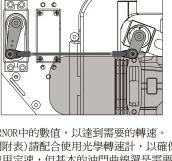
然後把油門搖桿推至100%最高的位置後燈號熄滅。等待約3秒後指示燈號重新亮起,油門行程已經過校準。

工作電壓: 4.8V~8.4V 消耗電流: <20mA@4.8V(不含伺服機) 工作温度: -20度C~+60度C 工作濕度: 0%~99% 本體外殼尺寸: 16.7 x 21.8 x 9.3mm 定速範圍: 10100~22000 RPM 重量(全配重量): 13g



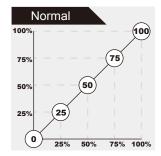


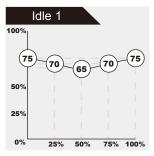


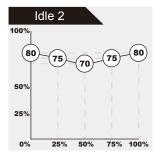


10. 校準完成後設定引擎怠速。設定遙控器選項中大小行程量功能(ADJ或 END POINTS功能)在油門遙桿0%的位置調整數值至化油器閥門開起約1mm(請參照引擎化油器閥門上的指示刻度),待實際發動引擎後,在視實際引擎怠速狀態調整。 油門遙桿怠速

- 11. 調整搖控器功能中的定速選項GOVERNOR中的數值,以達到需要的轉速。 (各數值代表的大約引擎轉速請參閱附表)請配合使用光學轉速計,以確保主旋翼轉速是合適的。
- 12. 搖控器油門曲線建議設定(就算有使用定速,但基本的油門曲線還是需要設定的,當定速在運作過程中因不知明原因失效後就會轉為以油門曲線為主)







以上建議值可視您的飛行習慣自行調整,但不建議設定過高的數值,以免在定速失效後照成轉速過高導致引擎超轉。

# FUTABA 轉速表

55% = 11250	90% = 20000
60% = 12500	95% = 21250
65% = 13750	100% = 22000
70% = 15000	
75% = 16250	
80% = 17500	
85% = 18750	

(51%以上定速開啟,定速器燈號綠燈)

運算公式:(%數-50)\*250+10000=引擎轉速例:搖控器GOVERNOR中的數值設定82%

82-50=32

32\*250=8000

8000+10000=18000 (引擎轉速)

# R 轉速表

-2% = 10100	-70% = 16900
-10% = 10900	-80% = 17900
-20% = 11900	-90% = 18900
-30% = 12900	-100% = 19900
-40% = 13900	-110% = 20900
-50% = 14900	-120% = 21900
-60% = 15900	-

(請設-值)(-1%以上定速開啟,定速器燈號綠燈)

運算公式:(%數-1)\*100+10000=引擎轉速例:搖控器GOVERNOR中的數值設定82%

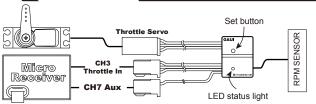
82-1=81

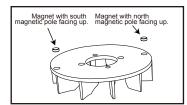
81\*100=8100

8100+10000=18100 (引擎轉速)

GAUI 37引擎在18000轉時輸出最大扭力1.4匹,建議定速數值設定介於17500轉至18500轉之間 NX4在引擎轉速設定在18000轉時主旋翼轉速約為2550轉





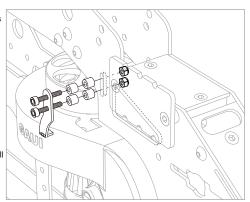


1) Install magnets into recessed holes of engine fan using CA or AB glue. GAUI recommends gluing both magnets into the fan.

180 degrees apart. Please ensure magnets are of opposite polarity (one with North facing up, one with South facing up).

- 2) Plug RPM Sensor into Sensor Port of GAUI Governor.
- 3) Mount Governor Sensor bracket and spacers to frame. Recommended distance between RPM sensor and engine fan magnet is 1mm.
- 4) Plug-in throttle servo to "Throttle In" connector.
- 5) Connect "Ch 3 Throttle" to Throttle channel of receiver.
- 6) Connect "RPM control" wire to Auxiliary channel of receiver (Channel 7). This will be used to set the engine speed using your radio Endpoints or Governor Function.
- 7) Power on receiver, GREEN LED indicator shows Governor On. RED LED indicator indicates Governor Off. Rotate engine fan until LED indicator turns off when magnet passes under the RPM sensor. Adjust the RPM sensor bracket to achieve this. This test ensures the RPM sensor is mounted appropriately. If the LED does not turn off when magnet is passing under the RPM sensor, please inspect magnet polarity and/ or sensor bracket positioning.
- 8) Set throttle servo limits using End Points or servo limits in the radio menu. Ensure full throttle (on engine barrel) is 100% on throttle stick. Also ensure appropriate idle at low collective stick. Lastly, set engine cut.
- 9) Ensure that your "Normal Mode" Throttle curve is linear: (0->25%->50%->75%->100%)
- 10) Put Throttle stick to "idle" position.
- 11) Press and hold "Set button" for at least 3 seconds. LED indicator will flash RED & GREEN. Then, simply raise throttle stick to full position. Leave throttle stick at maximum position for at least 3 seconds. Once LED indicator light comes back on, the throttle has been calibrated.

Operating voltage: DC 4.8V ~ 8.4V		
Current consumption: <20mA@4.8V		
Operating temperature: -20°C ~ +60°C		
Operating humidity: 0% ~ 99%		
Sensor cable length: 250mm		
Weight (including sensor, cables, brackets & screws): 13g		
Governor case size: 16.7 x 21.8 x 9.3mm		
Governor speed range: 10100 ~ 22000 RPM		



12) Create a throttle curve for "Idle Up 1" and "Idle Up 2". As long as the throttle channel is above 30%, the governor will be on. Therefore, create a "V Throttle Curve" on both "Idle Up 1" and "Idle Up 2". (100%->75%->60%->75%->100%)

13) Adjust End Points on Channel 7 (or Governor menu on radio) to achieve desired headspeed. Please use an Optical Tachometer to ensure head speed is appropriate for model and engine combination.

## TWO DIFFERENT METHODS FOR GOVERNOR OPERATION

#### Method 1: Governor ON/OFF USING SWITCH

- 1) Assign Auxiliary channel to a Switch on Radio.
- 2) Set up switch so that the Governor is Off (RED LIGHT) with switch in the up position, and On (GREEN LIGHT) in the down position.
- 3) Spool up helicopter and put the model into a hover. Then turn the Governor On using the Auxiliary switch. You can leave the Governor on all the time if you desire (Even in Auto-rotations or during an idle). As long as the stick is below 30%, the Governor will not actually engage (assuming the switch is in the ON position).
- 4) Adjust the End Points (Or Servo Travel Menu) in the radio for the Aux Channel (Channel 7) for different switch positions. This will allow you to have different head speeds for different switch positions.

#### NOTE: Governor Function on radio can also be used.

### Method 2: Governor ON at all times (Preferred)

- 1) Assign Auxiliary channel to the Idle Up Switch on Radio.
- 2) Set up switch so that the Governor is On (GREEN LIGHT) when in Normal, Idle Up 1, and Idle up 2 conditions. If the Governor is Red during these conditions, reverse the Aux Channel (Channel 7) to achieve Governor On at all times.
- 3) Use End Points (or Servo Travel Menu) in the radio for Aux Channel (Channel 7) to desired head speeds for

NOTE: Governor Function on radio can also be used.

Normal Mode:	2000 rpm	
Idle Up 1:	2200 rpm	
Idle Up 2:	2400 rpm	
Intermediate to Extreme Flying		
Normal Mada:	2200 rnm	

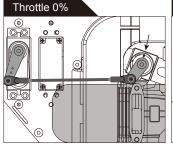
RECOMMENDED HEAD SPEED SETTINGS FOR GAUI NX4

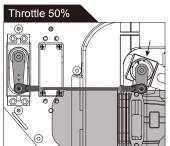
Rasic Sport Flying

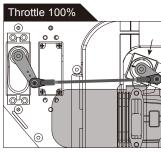
Hommai Wode.	2000 ipiii	
Idle Up 1:	2200 rpm	
Idle Up 2:	2400 rpm	
Intermediate to Extreme Flying		
Normal Mode:	2300 rpm	
Idle Up 1:	2500 rpm	
Idle Up 2:	2700 rpm	

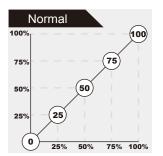
**Governor Instruction Manual** 

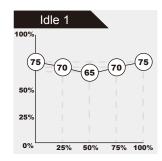
Rev 1.0 (October, 2012)

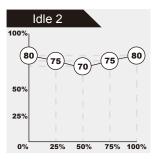












Above are setting examples, adjust depending on pilot's own personal flying style. High settings are not recommended, to avoid overspeed of Engine due to failure of the Governor.