Thank you for buying ALIGN Products. Please read this manual carefully before assembling. We recommend that you keep this manual for future reference regarding tuning and maintenance.

Compatible with helicopter of all sizes from T-REX 250 to T-REX 800 MICROBEAST PLUS Flybarless System. Here we use T-REX 700L DOMINATOR as an example.

MICROBEAST PLUS 無平衡翼系統電子設備相容小型直昇機至大型直昇機T-REX 250～T-REX 800。在此我們以T-REX 700L DOMINATOR作為操作範例。
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IMPORTANT NOTES

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.

WARNING LABEL LEGEND

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>❌ Forbidden</td>
<td>Do not attempt under any circumstances.</td>
</tr>
<tr>
<td>⚠️ Warning</td>
<td>Mishandling due to failure to follow these instructions may result in serious damage or injury.</td>
</tr>
<tr>
<td>🚨 Caution</td>
<td>Mishandling due to failure to follow these instructions may result in danger.</td>
</tr>
</tbody>
</table>

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。
SAFETY NOTES

安全注意事項

• 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 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。

• 每次飛行前必須確保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。

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.

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.

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.

PREVENT MOISTURE
遠離潮濕環境

R/C aircraft half consists 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.

R/C aircraft half is also made 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.
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.

WARNING
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.)

WARNING
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.

CAUTION
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，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傷。
Radio controlled (R/C) helicopters are not toys! The rotor blades rotate at high speed and pose potential risk. They may cause severe injury due to improper usage. It is necessary to observe common safety rules for R/C models and the local law. You can gather information from your local R/C model club or from your national modelers association.

遙控直昇機不是玩具！螺旋槳高速旋轉帶來的潛在風險相當高，它們可能會導致嚴重的傷害，一切的使用要符合並遵守共同的安全規則，並且遵守當地的無線電遙控模型協會制度規定。您可以從當地的模型俱樂部或從您的國家航模運動協會取得相關資訊。

Pay attention to your own safety and the safety of other people and property in your vicinity when using our product. Always fly in areas away from other people. Never use R/C models in close proximity to housing areas or crowds of people. R/C models may malfunction or crash due to several reasons like piloting mistakes or radio interference, and cause severe accidents. Pilots are fully responsible for their actions, and for damage or injuries caused by the usage of their models.

注意自己與他人以及財物的安全，在您使用我們的產品時，請遠離建築與人群。遙控直昇機可能在飛行中出現任何意外，可能是飛行員的操控失誤，或者是無線電干擾，並導致嚴重事故的發生。飛行員必須為自己的行為負完全責任，以及所造成的任何損害。

Please read the following instructions thoroughly before the first use of your MICROBEAST PLUS and setup the system carefully according to this manual. Allow sufficient time for the setup procedure and check each step carefully. Watch for a mechanically clean and proper build of your helicopter. A wrong system setup can lead to a serious accident and damage to the model.

設置 MICROBEAST 時請仔細閱讀以下說明, 並且一定要留出足夠的時間來仔細設定, 並小心檢查每一個步驟。除此之外, 也要特別注意無平衡旋翼頭的組裝是否正確, 稍有差錯或機械故障, 可能導致嚴重的事故發生。

Radio controlled (R/C) models consist of several electrical components. It is therefore necessary to protect the model from moisture and other foreign substances. If the model is exposed to moisture this may lead to a malfunction which may cause damage to the model or a crash. Never fly in the rain or extremely high humidity.

無線遙控模型，是藉由許多電子零件組裝而成，因此有必要保護這些脆弱的電子零件，例如防水、防塵等工作，如果遙控模型受潮可能導致故障，請絕對不要在雨天或濕度極高的環境中飛行。

When operating the helicopter with a MICROBEAST PLUS ensure there is a sufficiently large and stable receiver power supply. Because of the direct coupling of the rotor blades to the servos, without the use of a flybar mixer, the servos are exposed to increased actuating forces. In addition, because of the intermediary electronic gyro system, the servos are driven more often than with traditional use. These factors can make the power consumption increase a lot compared to a flybar helicopter. When the supply voltage falls below 3.5 volts for a short amount of time, the system will power off and reboot. In this case a crash of the helicopter is unavoidable.

操控您的直昇機時，請確保 MICROBEAST PLUS 有一個充足、穩定的接收器電源。由於十字電調直接連接十字盤，主旋翼，不像傳統貝爾希拉混控螺旋槳頭那樣的省力，所以請特別注意！無平衡翼直升機使用的伺服器會顯得特別的耗電，請務必確定您的供電系統有足夠的供電能力。若電壓低於 3.5V，即使是很短暫的時間，系統將關閉並重新啓動。在這種情況下，墜機是很難避免的。
Do not expose the MICROBEAST PLUS system to extreme variations in temperature. Before powering up the system, wait some time so that the electronics can acclimatize and any accumulated condensation is able to evaporate.

The sensors of MICROBEAST PLUS consist of highly sensitive electromechanical components. These can be damaged due to moisture or mechanical or electrical impact. Do not continue using this product, if it has been exposed to such influences, e.g., due to a crash of the model or due to overvoltage caused by a defective receiver power supply. Otherwise, a failure may happen any time.

MICROBEAST PLUS includes highly sensitive electronic components, which may be damaged by moisture, mechanical or electrical impact. Do not continue using this product if it has been exposed to such influences, e.g., due to a crash of the model or due to overvoltage caused by a defective receiver power supply. Otherwise, a failure may happen any time.

When operating electric helicopters make sure that the electric motor cannot start inadvertently during the setup procedure. Particularly pay attention if using a single-line receiver and if the ESC is connected directly to the MICROBEAST PLUS. We recommend disconnecting the electric motor from the ESC during the setup procedure. Prior to the first usage please slide the motor/pinion away from the main gear, then check that the motor does not start inadvertently when the receiver is switched on.

When operating the RPM Governor feature of MICROBEAST PLUS it is essential to ensure that the motor cannot start by accident when making adjustment or performing preparations to start the engine. Carefully read this manual and make sure you fully understand how the RPM Governor feature is operated before making any adjustments. Also, make sure the motor does not start when the radio link is interrupted or when you switch on the transmitter initially. With electric driven models do not dock the motor to the main gear unless all necessary adjustment procedures have been finished. Always maintain sufficient safety distance to the motor and other rapidly rotating components of the helicopter.

Operating MICROBEAST PLUS's RPM Governor feature requires careful attention to avoid accidental startup of the motor during setup procedures. Ensure the motor is disconnected from the ESC during setup to prevent inadvertent startup.

Always maintain sufficient safety distance to the motor and other rapidly rotating components of the helicopter.
MICROBEAST PLUS with AttitudeControl can be used as a flying aid for beginners as the reaction of the helicopter to stick inputs can be limited and as an electronic control circuit can help to stabilize the helicopter. However, this does not provide that the helicopter can always be flown safely! By incorrect control inputs the helicopter still may crash or be placed in a position in which the pilot becomes disoriented even when using AttitudeControl. In addition, the helicopter can drift due to external influences and it is not guaranteed that the artificial horizon of the device can stabilize the helicopter at any time and recover from any orientation. Influences such as temperature fluctuations or vibrations may cause incorrect results and distort the position calculation of the system in consequence. There is no guarantee that the system will always work correctly. Only the pilot is responsible for the control of the helicopter and thus also for the use of the system. You must always be able to turn off the system immediately and be able to take over full control of the helicopter.

We suggest you to seek the support of an experienced helicopter pilot before you undertake the first flight of your model. Additionally, flight training with a R/C simulator can help make flying easier and more enjoyable. Ask your local dealer if you need technical support or if you observe problems during the usage of our system.

AttitudeControl can help to facilitate flying of model helicopters by briefly passing over control to the system if the pilot becomes disoriented. By using the built-in artificial horizon the helicopter can be brought to a nearly horizontal position so that the pilot gains time to reorient. Thus there can be no assurance that the model is saved from a crash in general. Depending on the current attitude and the speed of the model and depending on how fast the AttitudeControl is activated, the model may crash before or while the system tries to recover. In addition, the helicopter can drift due to external influences and it is not guaranteed that the artificial horizon of the device can stabilize the helicopter at any time and recover from any orientation. Influences such as temperature fluctuations or vibrations may cause incorrect results and distort the position calculation of the system in consequence. Strictly observe the general safety rules for dealing with RC models and do not totally rely on the system. The pilot is responsible for the control of the helicopter and thus also for the use of the system. You must always be able to turn off the system immediately and be able to take over full control of the helicopter.

If the helicopter is flying incorrectly, the attitude mode can quickly control the system, helping to stabilize the helicopter. The system automatically takes over, allowing the pilot to recover and return to normal control. However, this does not ensure safe flight always! Incorrect input commands can still cause the helicopter to crash or be placed in a disorienting position even when using AttitudeControl. The helicopter can also drift due to external influences and it is not guaranteed that the artificial horizon of the device can stabilize the helicopter at any time and recover from any orientation. Influences such as temperature fluctuations or vibrations may cause incorrect results and distort the position calculation of the system in consequence. There is no guarantee that the system will always work correctly. The pilot is responsible for the control of the helicopter and thus also for the use of the system. You must always be able to turn off the system immediately and be able to take over full control of the helicopter.

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Dear customer,

Thank you for purchasing our product.

MICROBEAST PLUS is a high-end gyro system for RC helicopters that has been developed in Germany using latest technology and setting high standards. It can be used with many different types of helicopters like 3D aerobatic helis, F3C competition helicopters as well as scale helicopters with 2 or more rotors blades.

The system comes with BASIC flybarless stabilization functionality and can be upgraded by paid update to the PRODITION. This enables additional features like AttitudeControl for release bailout or constant leveling and a feature called "Bank Switching " which allows to switch between parameter presets in flight to serve different flight conditions or flying styles.

To setup MICROBEAST PLUS there is no need for any additional devices. All you need is your radio system and your helicopter. Thanks to the well proven "EasySetup" concept you can do all the necessary adjustment directly at the device and you are ready for take off within a few minutes.

This Quickstart Guide is a clearly arranged guide that will lead you step-by-step through the basic flight setup. Please follow this guide carefully and make sure to read the attached safety notes. For a detailed instruction manual and further details, tips, tricks and notes about the product please visit WIKI.BEASTX.COM

Designed for STUDIOX

If you like to get more insight into the system and like to have a more visualized type of setup you can use the StudioX App for PC/mac or StudioXm for your smartphone/tablet in combination with the USB2SYS interface (PC/mac) or BLE2SYS interface (smartphone/tablet) (optional available).

These apps are the source to get even more out of your device like saving/restoring parameters, firmware updates, loading preset heli configurations and making advanced adjustment to fully customize your MICROBEAST PLUS to your needs.

StudioX can be downloaded from: STUDIOX.BEASTX.COM

STUDIOX设计理念

如果您希望进一步了解系统设定内容或流程，以下适配功能可供使用，您可连接USB2SYS介面透过StudioX App在PC/MAc上设定，或连接BLE2SYS介面透过StudioXm在手机/平板上设定。以上App系统具有保存参数、编码升级、下载参数和透明功能设定等，能更符合您使用MICROBEAST PLUS的需求。

StudioX下载点：STUDIOX.BEASTX.COM

This guide is intended to be used with MICROBEAST PLUS firmware version 5.0.x only! After power up when the Status-LED lights red, for a few seconds in the left row menu LEDs A and C indicate major version "5". In the right row no LED lights up.

本快速指南所描述的调整内容，只适合 MICROBEAST PLUS Version 5.0.x 版本！

开机后，Status-LED灯亮红色，数秒之后，在左排选单中LED灯号A和C显示了主版本的版本"5"，右排选单LED无亮号。
You can position MICROBEAST PLUS flat or upright on the helicopter. The large socket must point to the front or to the rear of the helicopter.

The small white socket must be aligned with the longitudinal axis. The sensor axis (housing edges of the device) must be aligned exactly parallel to all three rotation axis of the helicopter. However, it is allowed to position the device offset from the rotation axis.

In summary there are 8 mounting orientations possible:
1. flat, sticker on top, socket pointing to front
2. upright, button up, socket pointing to front
3. flat, sticker showing to ground, socket pointing to front
4. upright, button down, socket pointing to front
5. flat, sticker on top, socket pointing to rear
6. upright, button up, socket pointing to rear
7. flat, sticker showing to ground, socket pointing to rear
8. upright, button down, socket pointing to rear

總共有八種不同安裝方向供您選擇：
1. 平放/貼紙朝上側/插口朝飛行方向。
2. 垂直/按鈕朝上側/插口朝飛行方向。
3. 平放倒置/貼紙朝底部/插口朝飛行方向。
4. 垂直倒置/按鈕朝底部/插口朝飛行方向。
5. 平放/貼紙朝上側/插口朝尾端。
6. 垂直/按鈕朝上側/插口朝尾端。
7. 平放倒置/貼紙朝底部/插口朝尾端。
8. 垂直倒置/按鈕朝底部/插口朝尾端。

Flight Direction
飛行方向
Use one of the supplied 3M gyro pads to stick the device to your helicopter. The device housing must not directly touch the chassis of the helicopter. When connecting and laying out the servo and receiver wiring later onwards please make sure the wires do not pass tension to the MICROBEAST PLUS. It is not recommended to bundle or tie down the leads close to the MICROBEAST PLUS device.

請使用隨貨附贈的 3M 陀螺儀專用泡棉來固定 MICROBEAST。安裝 MICROBEAST PLUS 時，請勿將連接線拉得太緊，請確保 MICROBEAST PLUS 本體能保持足夠的晃動空間。這樣才能不會因為連接線太緊而產生導線受損感應器。也不建議在附近 MICROBEAST PLUS 本體的接地線環或繃緊帶。另一方面，所有線材均須確實接好，以免飛行時 MICROBEAST PLUS 因外力而脫落。特別是，請不要在靠近 MICROBEAST PLUS 的連接線上使用任何熱縮套管、保護套管來捆綁連接線，這會使電線圈硬不靈活，引起振動，進而影響到 MICROBEAST PLUS 的功能。

2 CONNECTING THE RECEIVER

The illustrations are only intended as examples! The function assignment of the transmitter determines which channel on the receiver controls which function.

The assignment of functions to the radio channels is mentioned in the manual of your radio system. Also you may find out the function assignment by checking your transmitter's servo monitor. The connectors of MICROBEAST PLUS are assigned to the functions as follows:

AIL|CH5 = Aileron, ELE|DI1 = Elevator, RUD (orange wire) = Rudder, PIT (red wire) = Thrust, Aux (brown wire) = Gyro gain

The wires for aileron and elevator additionally transfer the power between MICROBEAST PLUS and receiver.

Using a Single-Line receiver all channels/functions are transferred by one single connection wire. This allows to use even more than 5 channels, i.e. for controlling the headspeed Governor, Attitude Control function and additional output channels.

用於單線接收器時，所有通道/功能都是由一條連接線來傳達。允許超過 5 個以上的通道分配，可分配功能如：頭轉速 RPM 定速模式，姿態模式和額外的輸出頻道。
Supported receivers/transmission protocols:
- JR X-Bus (Mode B), JR+U, Multiplex SRXL (V1+V2), Jeti UDI, Graupner/SJ HOTT SUMD, Spektrum SRXL
- Futaba SBUS
- Remote satellites (Spektrum DSM2/DSMX, JR RJ-01 DMSS)
- Jeti EXBUS
- ALIGN/ FlySky iBUS
- PPM serial signal (SPPM)

支 援 接 收 器 / 遙 控 器 種 類 :
- JR* X-Bus (Mode B), Multiplex SRXL (V1+V2), Jeti UDI, Graupner/SJ HOTT SUMD, Spektrum SRXL
- Futaba SBUS
-衛 星 卵 (Spektrum DSM2/DSMX, JR RJ-01 DMSS)
- Jeti EXBUS
- ALIGN/ FlySky iBUS
- PPM 系 列 信 號 (SPPM)

Using a single remote satellite is only recommended for 450 size helis or smaller! For larger helis please use a SRXL compatible Single-Line receiver for your radio brand.

若您使用的是單線衛星天線，建議只使用在 450 級或更小的直升機上！若您的直升機是較大的機型，建議使用 SRXL 相容單線連接接收器來搭配您的遙控器。

Always make sure the power supply is stable and dimensioned sufficiently for the intended application. If possible always connect the power source directly to MICROBEAST PLUS (not at port [AUX/PIT/RUD]) but additional supply cables can be plugged into free receiver ports, too. Especially when using standard size servos it is recommended to use more than one power supply cable in parallel to preserve a stable voltage and to reduce power loss due to connection resistance.

請確定使用的電源規格符合系統要求。如果可能，請將 MICROBEAST PLUS 一個直接的電源。(不必透過 AUX/PIT/RUD端口，連接線可接到一個開關的接收機端口。)尤其是在使用標準級伺服器時，建議您使用一個以上的供電連接線，並使其保持平行而穩定的電壓，以減少因電流傳輸產生電阻而損耗功率。

3 PREPARING YOUR TRANSMITTER
準備遙控器

Create a new helicopter model memory in your transmitter that supplies different flight modes for controlling throttle, pitch and the tail gyro gain in different flight situations.

在您的遙控器上設置並儲存一個新的直升機模式，它支援不同的飛行模式，在不同的情況下，控制油門、螺距和尾舵陀螺儀靈敏度。
You must not use any mixing functions on the output channels! Especially it is not allowed to use mixing functions for the swashplate servos. Deactivate all output channels that are not used. In the basic configuration we only need pitch, aileron, elevator, rudder, throttle and one channel to adjust the tail gyro gain.

Each control function must exactly control one output channel. Initially the servo throws must be set to 100% and all trims and sub trims must be zero. For the basic setup do not change the pitch curves yet. The throttle curves and throttle servo settings can be adjusted as necessary for this model in case you do not intend to use the internal Headspeed Governor function of MICROBEAST PLUS.

With electric driven models remove the motor from the main gear when performing the basic setup for safety reason! Additionally deactivate the throttle by using the "Throttle HOLD" switch, so the motor won't start to turn when moving the thrust stick.

When flying a nitro or gasser heli remove the servo horn from the throttle servo before first power up to prevent jamming of the servo due to wrong servo setup.

To initiate bind procedure on a single Spektrum remote satellite connect the Spektrum bind plug to [SYS] port. When using a DSM2 remote satellite, push and hold the button and turn on power while still holding the button down. The LED on the satellite will flash together with Menu LED N on the MICROBEAST PLUS. When binding a DSMX remote satellite do not touch the button but only power on the device. The LED on the satellite will flash together with Menu LED H. Initiate the bind procedure on the transmitter. Power off and remove the bind plug when finished successfully.

To bind the JR RJ01 remote satellite initiate the bind procedure on the transmitter and power on the MICROBEAST PLUS. The remote satellite will bind instantly. Connecting a bind plug or similar is not necessary.
RECEIVER SETUP

To enter RECEIVER MENU MICROBEAST PLUS must be switched off completely. Push and hold the button before and while powering on. The menu LEDs will start to cycle from A to N. Now you can release the button.

Make sure your transmitter is on and sending signals to the receiver. At menu point A you can start automatic receiver type detection by briefly pressing the button once. The color and state of the Status LED indicates which type is currently scanned for. When the receiver has been detected the menu will skip to point B; when there was some error the Status LED will flash in red color and the menu stays at A. In this case please make sure you’ve connected the receiver correctly and try again!

在進入接收器選單前，必須將 MICROBEAST PLUS 完全關閉。進入接收器選單時，請長按按鈕開機，此時選單LED會由第 A 點至第 N點循環亮燈，即可開機按鈕。

請確認您的遙控器與接收器作業正常，於設定選單A點時，您可以輕壓按鈕一次，系統將自動偵測接收器類型，LED 指示燈的顏色表示當前的選擇。當完成接收器偵測後，設定選單會跳至第 B 點。如接收器肯測有問題，則Status LED紅燈會閃爍，且停留在第 A 點，接著請確認您的接收器是否安裝正確後再重覆以上偵測程序。

Single-Line receiver (Status LED off, purple or red at menu point A)

When at menu point B press and hold the button for 2 seconds to load the default function assignment that has been preset for the detected radio system. Alternatively you may program a different function assignment manually in case the default assignment does not match to your transmitter’s function layout. How this works in detail you can read from the detailed instruction manual which you can get at wiki.beastx.com.

Preset function assignment for the different single-line receiver protocols (indicated by Status LED color at A):

| Single-line receiver (Status LED off, purple or red at menu point A): |
| --- | --- | --- | --- | --- | --- | --- |
| THR | AIL | ELE | RUD | GER | PIT | AX2 | AX3 |
| 油門[CH5] | 副翼 | 升降舵 | 尾舵 | 感度 | 螺距 | 通道[CH1] | 定速模式* |

PPM serial signal (SPPM) 複合信號

<table>
<thead>
<tr>
<th>CH1</th>
<th>CH2</th>
<th>CH3</th>
<th>CH4</th>
<th>CH5</th>
<th>CH6</th>
<th>CH7</th>
<th>CH8</th>
</tr>
</thead>
<tbody>
<tr>
<td>螺距</td>
<td>副翼</td>
<td>升降舵</td>
<td>尾舵</td>
<td>通道[CH6]</td>
<td>油門[CH6]</td>
<td>感度</td>
<td>定速模式*</td>
</tr>
</tbody>
</table>

Futaba SBUS/SBus2 or BEASTXFASST compatible receiver 相容的接收器

<table>
<thead>
<tr>
<th>CH1</th>
<th>CH2</th>
<th>CH3</th>
<th>CH4</th>
<th>CH5</th>
<th>CH6</th>
<th>CH7</th>
<th>CH8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aileron</td>
<td>Elevator</td>
<td>Throttle [CH5]</td>
<td>Rudder</td>
<td>Gyro Gain sensitivity</td>
<td>Pitch</td>
<td>Aux [CH8]</td>
<td>Governor*</td>
</tr>
<tr>
<td>副翼</td>
<td>升降舵</td>
<td>油門[CH5]</td>
<td>尾舵</td>
<td>感度</td>
<td>螺距</td>
<td>通道[CH8]</td>
<td>定速模式*</td>
</tr>
</tbody>
</table>
**Multiplex SRXL v1 and v2, JR XBUS Mode B, JETI UDI 12+ 16ch**

<table>
<thead>
<tr>
<th>CH1</th>
<th>CH2</th>
<th>CH3</th>
<th>CH4</th>
<th>CH5</th>
<th>CH6</th>
<th>CH7</th>
<th>CH8</th>
</tr>
</thead>
<tbody>
<tr>
<td>飛翼</td>
<td>升降舵</td>
<td>尾舵</td>
<td>駛距</td>
<td>機門[CH5]</td>
<td>感度</td>
<td>輔助通道[CH6]</td>
<td>定速模式*</td>
</tr>
</tbody>
</table>

**Graupner SUMD**

<table>
<thead>
<tr>
<th>CH1</th>
<th>CH2</th>
<th>CH3</th>
<th>CH4</th>
<th>CH5</th>
<th>CH6</th>
<th>CH7</th>
<th>CH8</th>
</tr>
</thead>
<tbody>
<tr>
<td>駛距</td>
<td>飛翼</td>
<td>升降舵</td>
<td>尾舵</td>
<td>輔助通道[CH6]</td>
<td>機門[CH5]</td>
<td>感度</td>
<td>定速模式*</td>
</tr>
</tbody>
</table>

**Spektrum SRXL**

<table>
<thead>
<tr>
<th>THR</th>
<th>AIL</th>
<th>ELE</th>
<th>RUD</th>
<th>GER</th>
<th>PIT</th>
<th>AX2</th>
<th>AX3</th>
</tr>
</thead>
<tbody>
<tr>
<td>機門[CH5]</td>
<td>飛翼</td>
<td>升降舵</td>
<td>尾舵</td>
<td>感度</td>
<td>輔助通道[CH6]</td>
<td>定速模式*</td>
<td></td>
</tr>
</tbody>
</table>

*Governor channel is used to set headspeed for governor function with nitro or gas driven helicopters.

定速模式通道是用於引擎直升機頭轉速定速功能使用。

---

**WARNING 警告**

At menu point N the throttle output CH5 is active, when using an electric helicopter the motor may start to run! Move the throttle to the desired failsafe position which will be set in case the receiver connection is interrupted or gets disconnected.

警告！在選單第 N 點，通道 5 (CH5) 機門輸出已經被啟用！當使用電動直升機，馬達可能開始轉動，請將油門拉桿移到您理想的位置，這裡就是油門失控保護的位置。如果使用接收器，這裡就是中斷油門指令的位置。

---

When pushing the button after setting throttle failsafe position all the receiver settings will be stored. Then all menu LEDs will flash repeatedly and the system will reboot after 3 seconds.

Receiver with "Standard" 5-wire layout (Status LED blue at menu point A)

Here the function assignment is simply determined by the order of physical connection of the wires to the receiver outputs. Assignment by software is not provided and will not appear when choosing this type of receiver. When a "Standard" receiver (Status LED blue at menu point A) was detected the receiver setup is "finished" and the system will reboot immediately. Menu point B will not appear!

完成油門失控保護的位置設定後，按下按鈕，接收器的設定將會被儲存紀錄。所有的選單 LED 將會重覆閃爍，系統將會在3秒後重新啓動。

5通道的傳統接收器（選單第 A 點 Status LED 亮藍燈）

若使用「傳統接收器」，只能利用接收器連接線的物理顺序來決定通道功能。若您選擇使用傳統接收器，系統所提供的通道分配功能和接收機類型將不會出現。因此當選單第 A 點選擇 "Standard" 後（第 A 點 Status LED 亮藍燈），接收器的設定就等於完成了，系統將會馬上重新開機。選單第 B 點將會消失。
After power up or finishing RECEIVER MENU adjustment wait until the system has initialized

Then enter SETUP MENU for making the basic adjustments

Press and hold (!) button
Keep button pressed for 2 seconds
Release button when LED A stops flashing

Operation mode
(Status LED blue or purple)
Menu LED A flashes (= PARAMETER MENU A)
Menu LED A lights solid (= SETUP MENU A)

Calibration of sensor rest positions
Status LED lights up blue or purple
Menu LED A lights A point
Menu LED A lights A point

Calibration of radio channels
Do not move sticks on the radio!
Do not move the helicopter!

Firmware version: 5.0.x
主程式 V 5.0.x:
Check the selected device orientation and change it if necessary by (repeatedly) moving the rudder stick into one direction until the Status LED color corresponds to the real device orientation. Then briefly push the button to save the setting and to proceed to the next menu point.

請檢查 MICROBEAST 所放置的方位是否正確，您可以將尾舵搖桿重複往一個方向移動，直到 Status-LED 燈號對應到 MICROBEAST 的方位為止。然後按按鈕保存設定，並進入下一選單點。

**SETUP MENU POINT A - DEVICE ORIENTATION (MENU LED A SOLID LIT UP)**
設定選單第 A 點 - 放置方位（設定選單 LED 燈第 A 點恆亮）
SETUP MENU POINTS B, C AND D
設定選單第 B、C、D 點
Adjust swashplate update rate (B), rudder servo pulse width (C) and rudder update rate (D) again by moving the rudder stick to one or another direction until the Status LED lights in the correct color necessary for the servos used in your helicopter. Briefly pressing the button will store the selected option and skip to the next menu point.
設定十字盤伺服器的更新速率(B)，尾舵中心頻寬(C)和尾舵更新速率(D)，請左右移動尾舵搖桿到一個方向，直到此選單點Status LED的顏色根據您的伺服器來選擇符合的燈號，然後短按按鈕，儲存您的選項，並移動到下一個選單點。

Status-LED Changes Color/State
Status-LED燈改變顏色狀態

Status LED Shows Current Swashplate Update Frequency
Status-LED顯示目前十字盤更新頻率

Status LED Shows Current Swashplate Servo Frame Rate
Status-LED顯示目前十字盤伺服器速率

Press Button Briefly
短按按鈕

Move Rudder Stick Left or Right
燈左或燈右移動尾舵搖桿

Setup Menu Point C
設定選單第 C 點

<table>
<thead>
<tr>
<th>Status-LED</th>
<th>Purple</th>
<th>Flashing Red</th>
<th>Red</th>
<th>Flashing Blue</th>
<th>Blue</th>
</tr>
</thead>
<tbody>
<tr>
<td>B Swashplate update rate</td>
<td>50 Hz*</td>
<td>65 Hz</td>
<td>120 Hz</td>
<td>120 Hz</td>
<td>200 Hz</td>
</tr>
<tr>
<td>C Rudder Servo pulses width</td>
<td>760 µs</td>
<td>———</td>
<td>980 µs</td>
<td>———</td>
<td>1520 µs*</td>
</tr>
<tr>
<td>D Rudder Update Rate</td>
<td>50 Hz*</td>
<td>120 Hz</td>
<td>270 Hz</td>
<td>333 Hz</td>
<td>(560 Hz)</td>
</tr>
</tbody>
</table>

If you don’t know which update rate is best for your servos never use more than 50 Hz. The higher the update rate the better it is for the flight performance of MICROBEAST PLUS but you must check the servo specifications before increasing the update rate. Otherwise the servos may get damaged! For a list with parameter examples for most common servo types see WIKI.BEASTX.COM.

Always use 1520 µs rudder servo pulse width except you’re using a very special type of rudder servo with reduced pulse width (only these servo can be used with an increased update rate of 560 Hz!). Check the servo data sheet!

警告
設定選單第 B 點

If you don’t know which update rate is best for your servos never use more than 50 Hz. The higher the update rate the better it is for the flight performance of MICROBEAST PLUS but you must check the servo specifications before increasing the update rate. Otherwise the servos may get damaged! For a list with parameter examples for most common servo types see WIKI.BEASTX.COM.

Always use 1520 µs rudder servo pulse width except you’re using a very special type of rudder servo with reduced pulse width (only these servo can be used with an increased update rate of 560 Hz!). Check the servo data sheet!

警告
設定選單第 C 點

If you don’t know which update rate is best for your servos never use more than 50 Hz. The higher the update rate the better it is for the flight performance of MICROBEAST PLUS but you must check the servo specifications before increasing the update rate. Otherwise the servos may get damaged! For a list with parameter examples for most common servo types see WIKI.BEASTX.COM.

Always use 1520 µs rudder servo pulse width except you’re using a very special type of rudder servo with reduced pulse width (only these servo can be used with an increased update rate of 560 Hz!). Check the servo data sheet!

警告
設定選單第 D 點
Plug the rudder servo connector into CH4 output of MICROBEAST PLUS. Put the servo arm on the servo so that it forms roughly an angle of 90 degrees with the rudder linkage rod and adjust the length of the linkage rod as described in the helicopter manual.

Push and hold the rudder stick into one direction to move the rudder servo and release the stick when the servo reaches the maximum or minimum allowed servo throw. Using the rudder stick you can reposition the servo at any time to adjust the exact servo limit. If you do not touch the rudder stick for several seconds the current servo position will be saved as maximum or minimum (the Status LED will flash and then light up solid in blue or red color). Then move the servo to the opposite direction adjust as described above and wait until also this position gets stored (Status LED becomes purple).

Press Button Briefly
短按按鈕

Menu LED F Solid
設定選單 LED F 消失

Status LED Purple
Status-LED 燈紫紅色

Release Rudder Stick
放開尾舵搖桿

Status LED Blue or Red
Status-LED 燈藍色或紅色

Menu LED E Solid
設定選單 LED E 消失

Release Rudder Stick
放開尾舵搖桿

Use rudder stick to move the servo to the maximum allowed deflection
用尾舵搖桿來移動伺服器，使其達到尾舵的最大傾斜角度。

Status LED Blue or Red
Status-LED 燈藍色或紅色

Press Button Briefly
短按按鈕

Use rudder stick to move the servo to the minimum allowed deflection
用尾舵搖桿來移動伺服器到最小偏差角度。

Status LED Purple
Status-LED 燈紫紅色

Release Rudder Stick
放開尾舵搖桿

Menu LED E Solid
設定選單 LED E 消失

1. Move the rudder stick and check the rudder direction on the helicopter.

1. 將尾舵搖桿往一個方向移動，確認直升機尾舵方向是否正確。

Correct 正確
Wrong 錯誤

Rudder stick to the right 尾舵搖桿往右
Tail rotor pushes tail left, so heli turns to right. 尾旋翼向左移，所以直升機會轉向右

If the stick is moving the servo into the wrong direction use the servo reverse function of your transmitter and reverse the rudder channel to change stick control direction.

移動尾舵搖桿來檢查尾舵伺服器移動的方向是否正確，如果方向不正確，請利用遙控器的反向功能來調整即可。

2. Now set the rudder direction of the MICROBEAST PLUS gyro

When you move the rudder stick to the right, the Status LED must light up or flash in blue color.
When you move the rudder stick to the left, the Status LED must light up or flash in red color.
When the display is inverted (red = right and blue = left) reverse the display (internal control direction) by tapping the aileron(!) stick once.

2. 設定MICROBEAST PLUS尾陀螺儀方向

當您將尾舵搖桿往右時，Status LED燈號藍燈會閃爍，當尾舵搖桿往左時，Status LED燈號紅燈會閃爍。如果燈號反向顯示(紅燈=往右/藍燈=往左)，請輕推副翼(!)搖桿一次，即可反向設定燈號(內定控制方向)。

Correct 正確
Wrong 錯誤

Rudder stick to the right 尾舵搖桿往右
Status LED blue Status LED藍燈
Status LED red Status LED紅燈
Tap aileron stick to swap colors 輕推副翼搖桿反向設定燈號

Always set servo direction in the transmitter first, then check the display on the MICROBEAST PLUS or in the software and change the internal control direction if it does not match the real direction. Do not change the internal direction in order to change the servo direction! This is only used for telling the gyro in which direction it must move the servo. Be very conscientious when doing this setup step, as wrong gyro direction will cause loss of control during takeoff and you probably crash the helicopter!

請優先在遙控器設定伺服器方向，然後確認MICROBEAST PLUS上或介面上的伺服器方向顯示是否正確。如有異議修正並設定反向，確保方向正確。請不要更改內定控制方向來修正伺服器移動方向，因為內定控制方向是下指令給陀螺儀要它將伺服器移動到某一個方位。所以請務必小心此設定，陀螺儀方向錯誤將可能造成起飛失控，甚至可能會造成摔機。
3. Optional: When you move the rudder stick to full deflection, the Status LED should light solid, not just flash. If this is not the case, increase the servo throw/endpoint of the rudder channel in the transmitter just as far so that the Status LED changes from flashing to solid when the rudder stick reaches the end position. Note: Do not increase the endpoint too much in the transmitter. We need an exact match of full stick position and stick end position, the Status LED should just change from flashing to solid when reaching the end position.

3. 補充：當尾舵搖桿移動至極限行程，Status LED會恆亮，並不會閃爍。如果燈號顯示異常，請在搖控器中的尾舵通道。

**SETUP MENU POINT G - SWASHPLATE MIXING TYPE**
設定選單第 G 點-十字盤混控類型

![Image of setup menu point G](image)

<table>
<thead>
<tr>
<th>Status LED</th>
<th>Purple</th>
<th>Flashing Red</th>
<th>Red</th>
<th>Flashing Blue</th>
<th>Blue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status shows currently selected mixing type</td>
<td>Mechanical</td>
<td>90°</td>
<td>120°</td>
<td>140°</td>
<td>135°-140° (1:1)</td>
</tr>
</tbody>
</table>

For ALIGN T-REX helicopters you can keep the default setting of 120 degrees electronic swash mixing (Status LED solid red).

使用ALIGN T-REX直升機，建議可以使用十字盤混控類型系統預設120度(Status LED燈紅色恆亮)。

⚠️ **CAUTION 注意**

Never use any swashplate mixing in your transmitter even when electronic mixing is required!

Deactivate the swashplate mixing in your transmitter or set it to mechanical mixing (which is often called “normal”, “H1” or “1 servo” mixing), so that each stick function only moves one receiver output channel. The swashplate mixing is all done by MICROBEAST PLUS!

請勿使用遙控器中的任何十字盤混控功能，即使電動混控是必須的。
請將遙控器中十字盤混控功能設定為機械混控(簡稱“Normal”或“H1”或“1 Servo”混控)，保持每一搖桿僅能控制單一接收通道。所有的十字盤混控會由MICROBEAST PLUS控制完成。
In the following connect the servos to the outputs marked with CH1 to CH3 (CH7) as shown below. With electronic swashplate mixing the two aileron servos have to be connected to CH2 (=left) and CH3 (=right). With a mechanical mixed head (H1) the aileron servo connects to CH2 and collective pitch servo to CH3. Plug the the elevator servo into CH1 port. When using a scale helicopter with 90 degrees eCCPM you can connect a second elevator servo to CH7 output on the MICROBEAST PLUS. Note that CH7 only is a signal output, so you must power the servo from elsewhere, i.e. by getting power from the SYS-port or CH5 using a Y-adapter (for + and - only!).

When you route the wire leads in your model make sure that there is no tension passed to the MICROBEAST PLUS. Make sure that MICROBEAST PLUS is able to move freely, so no vibrations get passed onto the unit by the wire leads. Do not use any shrink tubing or fabric hose to bundle or encase the wiring in close proximity to the point at which the cables are plugged into the MICROBEAST PLUS. This makes the cables stiff and inflexible and can cause vibrations being transmitted to MICROBEAST PLUS.
At SETUP MENU point H we trim the servo center positions so that each servo horn forms an exact 90 degrees angle with the adjustment linkage. This is necessary as usually you will not be able to attach the servo horns in exact center position to the servo. After all servos have been trimmed do not proceed to the next menu point yet. With active trimming adjust the linkage rods according to your helicopter’s manual.

Initially when the trimming is 0 on all servos the Status LED will be off. Attach the servo horns in center position as good as possible. By tapping the aileron stick you can select one servo after another. Every color of the Status-LED is corresponding to a specific servo channel that is indicating its selection by a short up and down move. Use the rudder stick to change the servo trimming/adjust the center position. You can switch back and forth between the servos as often as you need.

設定選單第H點是調整伺服器中心位置，使每一伺服臂和伺服器連桿精確地定位於90度的位置。這是必須的調整過程，因為您通常無法精確地將伺服器臂定位至伺服器中心點。當所有伺服器臂已調整完成後，請不要跳至另一個設定選單。請再根據您直升機說明書內容微調伺服器連桿。

首先，當所有伺服器微調為0時，Status LED熄滅，接著請盡可能將伺服器臂調至中心點，移動副翼搖桿選擇要調整的伺服器組合。一個Status LED燈代表一個伺服器組合，快速上下移動顯示目前選擇的伺服器設定。移動尾舵搖桿向前/向後調整/校正中心位置。

Choose one of the servos connected at CH1 - CH3 (CH7)

由CH1-CH3(CH7)中，選擇一個伺服器

Status LED off
(= no servo active)
Status LED 燈號熄滅
(=伺服器未啓動)

Tap aileron stick left or right
to choose servo
向左或向右輕推副翼搖桿選擇伺服器

Move rudder stick to adjust servo
center position
移動尾舵搖桿調整伺服器中心點

When you’ve perfectly adjusted the servos now adjust the linkage rods going from servos to the swashplate and from the swashplate to the blade grips. The swashplate must be leveled and centered on the main shaft and the blade grips should be set to 0° of pitch.

當伺服器調整完成時，接著調整伺服器連桿在十字盤和主旋翼桿的軸心動態連接。十字盤的位置必須置中並直於主軸，主旋翼桿的標度必須為0度。

If necessary adjust the swashplate anti-rotation so that the swashplate phasing is not shifted (only applies to 2-blade rotors/heads).

必要時可調整十字盤的控制臂，使其無十字盤定相 (swashplate phasing) 僅適用於雙螺旋桿旋翼機及單螺旋桿。

Hint: To reset the servo trims push and hold the button for at least 10 seconds.

提示: 按按鈕至少10秒，可重設伺服器微調系統及控制器。
Move the thrust stick and check whether all servos push the swashplate up and down simultaneously. If this is not the case by tapping the aileron stick you can select one servo after another. Every color of the Status-LED is corresponding to a specific servo channel that is indicating its selection by a short up and down move. Tap the rudder stick once to change the servo direction. You can switch back and forth between the servos as often as you need.

移動油門搖桿來檢查伺服器行程是否正確，請將十字盤向上或向下推動。如果動作不正確，可移動副翼搖桿切換伺服器組合，一個Status LED燈代表一個伺服器組合，快速上下移動顯示目前選擇的伺服器設定。輕推尾舵搖桿一次來變更伺服器方向，根據您的需求，您可重覆以上搖桿切換動作。

Move thrust stick up and down
上下移動油門搖桿

Correct 正確
Wrong 錯誤

Tap aileron stick left or right to choose servo
移動副翼搖桿向左或向右一次選擇伺服器組合

Tap rudder stick left or right to reverse servo
移動尾舵搖桿向左或向右一次

After adjusting servo directions make sure that the pitch direction is correct! You can either do this by setting the servo directions correctly right from the beginning or by changing the direction of the pitch channel in the transmitter later.

完成伺服器方向設定後，請再確認螺距方向是否正確。您可以一開始就正確地設定伺服器方向，或待一會兒在遙控器上變更螺距通道方向。

Please note: It’s not possible to reverse the servos with the servo reverse function of your transmitter! The transmitter only controls the functions of MICROBEAST PLUS, not the servos! Reversing a channel in the transmitter will reverse the control function in total, not the direction of a single servo (except when using mCCPM swashplate mixing).

請注意：您無法在遙控器上使用反向功能變更伺服器方向！遙控器只能控制 MICROBEAST PLUS，無法控制伺服器！所以遙控器反向功能會將所有設定值都設定為反向，並且不會只改變單一伺服器方向。(如您使用的是mCCPM十字盤混控型類，則另當別論。)
Align rotorhead and rotorblades in parallel to the helicopter's longitudinal axis. Attach a pitch gauge/level meter to one of the rotor blades or to a blade grip in order to measure aileron pitch. Use your smartphone to scan QR Code or link to Align website for more complete instruction:

Align 直升機的頭軸和旋翼頭的設計是平行於直升機的 X 軸，並且提供螺距槳和十字盤校正器(另購品)，可以用來校正螺距，非常方便好用。請參考相關網頁，手機掃描 QR Code 將會有更完整的亞拓產品介紹。若手機無法掃描 QR Code 請上亞拓官網

At SETUP MENU point J we adjust the internal servo throw so that MICROBEAST PLUS has a reference on how far it must move the servos when controlling the helicopter. To set the throw you have to align one rotorblade on the longitudinal axis (in parallel to the tail boom) and measure the cyclic pitch with a digital pitch gauge on this rotorblade.

設定選單第 J 點是設定伺服器行程量，如此 MICROBEAST PLUS 在控制直升機、推動伺服器時才有依據。設定伺服器行程量時，您必須將主旋翼保持水平（與尾管水平對齊），並使用電子螺距槳校正螺距。

Menu LED J Solid
Status Led Off
Menu-LED 燈第 J 燈熄滅
Status-LED 消滅

Tap aileron stick to switch to measure Position
輕推副翼搖桿切換測量位置

Use rudder stick to adjust blade pitch to exact +6 or -6 degrees
使用尾舵搖桿校正螺距，直到螺距達到 +6 或 -6 度

Status LED should be solid blue
(see instruction manual for further details on the LED colors)
Status-LED 燈須恆亮藍色
（參考說明書LED燈號介紹）
1. Set internal control direction
   1. 設定內部控制方向

   Correct
   正確

   Move thrust stick to maximum positive pitch
   and let it stay there
   移動螺桿搖桿到最大正螺距並停留。

   Status LED blue
   Status-LED燈藍色

   Wrong
   錯誤

   Tap aileron stick once to swap colors
   輕推副翼搖桿一次切換顏色

   Status LED red
   Status-LED燈紅色

2. The Status LED must light solid, not just flash. If this is not the case, increase the servo
   throw/endpoint of the pitch channel in the transmitter just as far so that the Status LED
   changes from flashing to solid when the rudder stick reaches the end position. But do not
   increase the endpoint too much in the transmitter!

   We need an exact match of full stick position and stick
   end position, the Status LED should just change from
   flashing to solid when reaching the end position.

3. Now use rudder stick to adjust maximum positive
   collective pitch (i.e. +12°)

3. 移動尾舵搖桿調整最大正集體螺距 (例如 +12°)

4. Finally move thrust stick to full negative position and
   repeat steps 2. and 3. for the negative pitch.

4. 最後，移動油門搖桿至最大負值位置，接著重覆第2和3的動作直到
   螺距為負。

   Do not change control direction anymore!
   請勿再變更控制方向。
SETUP MENU POINT L - SWASHPLATE SERVO LIMIT
設定選單第 L 點-十字盤伺服器極限

You can remove the pitch gauge now! Simultaneously move the sticks for thrust, aileron and elevator to the maximum deflection and check if the servos, swashplate or linkages get jammed in a certain position. By pushing and holding the rudder stick left or right you can increase or decrease the limit for the servos! Adjust the limit so that the servos just don’t get jammed in any possible stick position but don’t limit the servos more than necessary.

現在，您可以移除螺紋規！同時，請移動油門搖桿、副翼和升降舵到最大偏轉的位置，接著檢查螺桿、十字盤或連桿是否會在某個位置卡卡的。利用向左或向右移動尾舵搖桿，您可以增加或減少伺服器行程！此調整是為了提高搖桿在控制伺服器時的順暢度，但也沒有必要超過極限。

Press Button Briefly
按按鈕

Menu LED L solid Status
Menu-LED 檢第 L 點恆亮

Move thrust, aileron and elevator sticks carefully to maximum deflection!
小心地移動油門、副翼和升降舵到最大偏轉！

Move rudder stick to adjust the servo limit
移動尾舵搖桿調整伺服器極限

Status LED should be solid blue
Status LED 應為亮藍色
(See instruction manual for further details)
(參考說明書的詳細介紹)

SETUP MENU POINT M - SWASHPLATE CONTROL DIRECTIONS
設定選單第 M 點-十字盤控制方向

1. If not already done, move the stick(s) for aileron and elevator on the radio and check whether the swashplate is moved in the correct directions on the helicopter. The swashplate must follow the stick movement: pushing elevator forward will tilt the swashplate forwards, adding aileron to the right will move the swash to the right and so on. If the stick is moving the swashplate into the wrong direction use the reverse function of your transmitter and reverse the aileron and/or elevator channel to set stick control direction correctly.

1. 如果此動作還未完成，請移動升降舵和副翼搖桿來確認直升機的十字盤方向是否正確。十字盤動作必須遵循搖桿動作指令：將升降舵搖桿往前移，十字盤會向前傾，再將副翼搖桿往右，十字盤也會跟著向右傾。如果十字盤動作和搖桿動作方向不一致，請在遙控器上設定反向功能，轉換升降舵和副翼搖桿的動作方向，使搖桿與十字盤動作方向一致。

2. Now set the internal control direction of the MICROBEAST PLUS gyro
2. 現在設定 MICROBEAST PLUS 的內部控制方向。

There are four possible options, only one is correct!
共有4種可能的選項，僅有1個是正確的。
SETUP MENU POINT N - INTERNAL HEADSPEED GOVERNOR

This menu point is only accessible if you're not using a Standard type receiver! Otherwise pressing the button at menu point M will exit the menu and lead back to operation mode.

Enable the Headspeed Governor function by choosing the type of drive system of your helicopter. If you're using the governor function of the ESC or an external governor or if you want to fly without headspeed governing at all, select "Governor off".

When you're using the Headspeed Governor of MICROBEAST PLUS now connect the RPM sensor (i.e. magnetical, optical or brushless phase sensor) or the wire for RPM signal of your ESC to the white sensorport on the long side. For this you may need the optional available BXA76401 adapter.

<table>
<thead>
<tr>
<th>Status-LED</th>
<th>Off</th>
<th>Red</th>
<th>Blue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status-LED shows current RPM Governor mode</td>
<td>Governor Off*</td>
<td>Electric Helio</td>
<td>Nitro/Gas Helio</td>
</tr>
</tbody>
</table>

Magnetical sensor mounted close to clutch bell of motor

Throttle servo connected to CH5

Speed controller connected to CH5

Press Button Briefly

Move rudder stick left or right

Status LED changes color (= Changing RPM Governor mode)

Status LED shows current RPM Governor mode

Press Button Briefly

Status LED shows current RPM Governor mode
If the Governor was activated at Setup menu point N (set to "electric" or "nitro/gas" heli) you will access the Governor menu immediately afterwards. At point A we check if the speed sensor is functioning properly and if the sensor wire is connected correctly.

Electric Heli With Brushless Phase Sensor
電動直升機含無刷相位感應器

Menu LED A flashes
Status LED off
Menu LED 燈第 A 點 閃爍 Status-LED 燈熄滅

Rotate the motor by hand.
The Status LED must light red
請小心增加電量電門直到馬達轉動，Status-LED 燈為亮紅色

Turn clutch bell by hand
用手轉動離合器

Status LED solid blue
when magnet triggers sensor
電磁鐵觸發傳感器，Status-LED 燈亮藍色。

When using a helicopter with combustion engine adjust the throttle servo positions in the transmitter (servo throw and servo center) and setup the throttle on the heli (throttle linkage rod length and servo arm position) if necessary. Attach the servo horn at thrust mid stick position. The throttle linkage must form a right angle with the servo horn.

Adjust the length of the linkage according to the instructions of the helicopter so that it also is positioned perpendicular to the linkage lever at the carburetor. The carburetor must be opened halfways (note the markings on the carburetor!). Then adjust the servo throw so the carburetor can be fully opened and fully closed without jamming the throttle servo.

若您使用的是引擎直升機，可在遙控器調整油門伺服器的位置（伺服輸出和伺服中立點），如果有必要，也可以調整直升機的油門伺服器的連桿長度和伺服臂位置。伺服器臂要在油門中立點的位置，它和伺服器連桿頭必須成直角，請參考下圖。

請根據直升機的結構來調整連桿球頭的長度，必須讓它的位置垂直於化油器的連桿控制臂。調整化油器控制臂時，請將化油器開啓至一半的位置（請注意化油器的標記！）。然後調整伺服器輸出的最大及最小行程量，並注意其順關度。
GOVERNOR MENU POINT B - MOTOR OFF/IDLE POSITION

Using an electric heli move the throttle to the position at which the motor is just before to start running, i.e. by adding throttle until the motor starts to turn and then reducing the throttle a little. With a nitro/gas heli move the throttle to a stable idle position.

GOVERNOR MENU POINT C - FULL THROTTLE POSITION

Move throttle to maximum position. Note: In electric governor mode the throttle input will not be passed to CH5 output to prevent from motor damage by running the motor without load! Thus, you have to check before that the full throttle position runs the motor at maximum speed in reality, i.e. by correctly programming your throttle end points in the transmitter or ESC.

GOVERNOR MENU POINT D - TRANSMITTER SETUP

Here we can set the desired rotor headspeed and throttle curves. The Status LED can be used to verify the transmitter setup.

Governor off = off, Autorotation = purple, Gov active = red or blue (at max. RPM).

When using an electric heli the throttle is completely independent from the thrust stick. The throttle curves are set to horizontal lines which stand for a certain headspeed and governor operation mode. Using the flight mode switch you can switch between the different curves/rpm presets in the transmitter.
The Governor for nitro/gas models can be operated in two different ways: One possibility is to operate the governor using the throttle channel similar to the electric mode. Only difference here is that the range below 50% throttle is used to manually control the throttle servo, i.e., for starting the motor. The range above 50% activates the governor and preset a specific rotor headspeed just like in electric mode.

The second option to control the Governor for nitro/gas helicopters is to use a separate switch channel. Here the throttle curves/throttle channel is used for manual throttle servo control only. The Governor is activated and the headspeed is set by using the additional channel. When the throttle channel is above 25% and a headspeed is set, the Governor will activate and control the headspeed. Moving the throttle channel below 25% will switch to Autorotation mode.
Manual Control
- Throttle curve controls servo
- Governor off
- Governor channel below 5% (-90)

Idle Up
- Governor channel set between 5% and 100%
  (or -60 and +100 on some transmitters)
  equals headspeed of 500-3000rpm
- +5% (or 10 clicks) = +131rpm
- throttle channel must stay above 25%

Idle Up
- Governor channel set in 5% to 100% range (some transmitters are -90 to +100)
  equals headspeed of 500-3000rpm
- +5% (or 10 clicks) = +131rpm
- Throttle channel must stay above 25%

Throttle Curve (Throttle Channel)
Governor Control Channel

Status LED off
Status LED on

For proper governing the headspeed should not be set higher than 80% of the maximum possible headspeed of the helicopter. When using the nitro governor, make sure that slow rampup speed and fast rampup speed are not set too high in PARAMETER MENU. Otherwise the throttle may be opened too quick and may lock in at full throttle position.

建議適當的定速模式，不要將最高轉速設定超過80%。當使用引擎定速模式時，請確保在參數選單中緩升速度與緩降速度不可設過高，否則油門啓動會過快且在全速時會被鎖定。
**GOVERNOR MENU POINT E - SIGNAL DIVIDER**

Electric helicopter with brushless phase sensor or phase signal from ESC: signal divider = motor pole count : 2

Nitro/Gas helicopter with magnetical or optical sensor: signal divider = number of triggers (i.e. magnets or optical markers)

<table>
<thead>
<tr>
<th>Status-LED</th>
<th>Off熄滅</th>
<th>Flashing Purple紫燈閃爍</th>
<th>Purple紫燈</th>
<th>Flashing Red紅燈閃爍</th>
<th>Red紅燈</th>
<th>Flashing Blue藍燈閃爍</th>
<th>Blue藍燈</th>
</tr>
</thead>
<tbody>
<tr>
<td>E Signal Divder訊號分配表</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4*</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

**GOVERNOR MENU POINTS F G H - MAIN GEAR RATIO**

When the helicopter has a single stage main gear: Main gear ratio = Main gear tooth count : Motor pinion tooth count

Set the Status LED color/state at each of the menu points F, G and H so that the main gear ratio can be calculated as sum of the three menu points, i.e. 8.55:1 = F flashing purple + G purple + H flashing red

<table>
<thead>
<tr>
<th>Status-LED</th>
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<th>Purple紫燈</th>
<th>Flashing Red紅燈閃爍</th>
<th>Red紅燈</th>
<th>Flashing Blue藍燈閃爍</th>
<th>Blue藍燈</th>
<th>Red/Blue紅色藍色</th>
</tr>
</thead>
<tbody>
<tr>
<td>F Custom自訂</td>
<td>8.00</td>
<td>9.00*</td>
<td>10.00</td>
<td>11.00</td>
<td>12.00</td>
<td>13.00</td>
<td>14.00</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>+0.00</td>
<td>+0.20</td>
<td>+0.40*</td>
<td>+0.60</td>
<td>+0.80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>+0.00</td>
<td>+0.05</td>
<td>+0.10*</td>
<td>+0.15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The tail gyro gain is adjusted by one of the transmitter’s auxiliary channels. The more servo throw this channel produces, the higher the tail gyro gain will be. The direction of servo throw determines whether the gyro works in Normal-Rate mode or in Heading Lock mode. The color of the Status-LED indicates the selected mode when MICROBEAST PLUS is operation. Purple means Normal-Rate and blue indicates Heading Lock mode. When changing the gain and after initialization, the amount of gain is displayed by one of the menu LEDs for 4 seconds.

For the first flight we suggest to use Heading Lock mode (Status LED blue) and start with medium gain (not higher than LED G). In case the tail of the helicopter starts to oscillate with high frequency in flight, immediately reduce the gain! If on the other hand the rudder control feels imprecise and the gyro doesn’t hold position very well, increase the gain. Most radio systems provide an automatic switching for the tail gyro gain depending on flight modes. In the flight mode with the lowest rotor headspeed you can use the most gain. Reduce the gain the higher the headspeed is. Before the first flight make sure the tail gain is set correctly and is also set when switching flight modes. Use the LED display to see how the gyro is setup and do not rely upon the values of your transmitter as signs and percentages may vary depending on radio brand and radio type.

Before the first take off make a stick direction check and check if swash and tail gyro are correcting to the right direction when you tilt, roll or yaw the helicopter by hand. Just before lift-off make sure that the swashplate is horizontal and that the tail pitch slider is close to center position. Avoid excessive steering during lift-off otherwise the helicopter may tip over! The best way is to give a fair and direct collective pitch input to lift the helicopter quickly up into the air.

Adjusting the three dials on top of MICROBEAST PLUS you can optimize the control loop and customize it to your helicopter. For the first flight all three dials should be centered. If necessary only adjust one dial at a time and only in little steps. Turning a dial clockwise will increase the effect, turning it counter-clockwise will decrease the effect of the parameter.

In Normal-Rate mode (Status-LED: Purple) the first flight in a normal situation needs to be performed with a headspeed of about 50%. Also, please set the antennas to a suitable position before take-off. If the flight is too prone to roll or too sensitive to rudder input, reduce the gain. Additionally, check the tail gain after a sharp turn. The left tail rotor stall is an important indicator of the tail gyro performance. The closer to zero the reading the better the gyro’s performance. The tail rotor stall indicates the correct tail rotor operation. If the tail rotor stall is too high, it indicates a problem with the tail rotor control or the tail rotor itself. If the tail rotor stall is too low, it indicates that the tail rotor is not getting enough power from the transmitter.

In Heading Lock mode (Status-LED: Blue) the gain is set to a higher level than in Normal-Rate mode. The gain should be adjusted to the highest level that the helicopter can maintain a stable flight. If the gain is too high, the helicopter may become unstable and difficult to control. If the gain is too low, the helicopter may not be able to maintain a stable flight.

To adjust the MICROBEAST PLUS tail gain, place the helicopter on a level surface and adjust the tail gain until the helicopter is stable in flight. Make sure to check the gain after each adjustment and if necessary, make another adjustment. By adjusting the gain, you can control the amount of tail up and down movement. A lower gain will result in less tail movement, while a higher gain will result in more tail movement. This allows you to fine-tune the helicopter's flight characteristics to your liking.
1 - Cyclic gain

The higher the gain the harder the helicopter will stop after cyclic moves and the more stable and precise the helicopter will fly. If the gain is too high the helicopter will tend to shake (especially on the elevator axis) as the system overcompensates. With low gain the helicopter does not stop precisely and overshoots after a cyclic movement. Additionally it is unstable and control feels sluggish. Due to their low mass small helicopters typically do not need as much gain as large helicopters.

1- 循環增距感度

感度越高，循環增距變化後，直昇機的剎車就會比較緊，這樣會使得停態較穩定。但是，如果感度太高，直昇機在上下飛行時會有過度的現象產生，並容易抖動。由於這些現象大多發生在較小型的直昇機上（450級含以下），所以，小型直昇機的主旋翼感度一般來說要比大型直昇機來得低。但如果感度太低，直昇機的煞車動作將不準確，執行循環動作（滾轉及俯仰）後會失準，此外，直線快速飛行和停懸時也會感覺遲鈍不穩定。

2 - Cyclic feed forward

Feed forward connects the servo movements with your stick inputs, bypassing the control loop. This will give a more natural control feel and quicker reactions to stick inputs. But if the cyclic feed forward is too high, stick control will fight against the control loop. The heli will bounce back when stopping from a cyclic movement and it will react over sensitive and pitch up easily in fast forward flight.

2- 十字盤直接輸出量

如果十字盤直接輸出量過大，當在打舵時，過大的十字盤反應，會使得直昇機有抖動的現象產生，也會覺得直昇機的反應過度敏感。同時，當增加感度時，直昇機會快速向前飛。反之，如果十字盤直接輸出量過低，會出現延遲現象和感覺非常機械化和不自然。

3 - Tail gyro response

Increasing the tail gyro response will cause harder stopping and more aggressive response to rudder stick inputs. If response is set too high, the tail will bounce back when doing a hard stop (especially when turning against rotor torque). If the dynamic is set too low, the rudder control feels dull and stopping is very soft. Ideally the tail should stop perfectly to the point without making any flapping noises.

3- 尾舵動態反應

增加「尾舵動態反應」的感度，會影響到直昇機在自旋剎車時的動作及敏感度。如果感度設定太高，直昇機在自旋剎車時，會感到直昇機有過度敏感的反應及過尾現象，在快速變化方向時又會感覺變渾無力。如果感度設定太低，在打舵時，會感到遲鈍和軟力。理想情況是直昇機在自旋剎車時，尾部要完美停止，沒有任何拖泥帶水的干擾。

33
### MENU POINT A - SWASHPLATE QUICK TRIM (MENU LED A FLASHING)

Move the stick(s) for aileron and elevator to trim the swashplate into the desired direction. With rudder you can trim the collective up/down. When using the tail gyro in Normal-Rate mode you can trim the rudder servo with the rudder stick. To delete all trimming push and hold the button for at least 10 seconds.

### MENU POINTS B TO K

Color and state of the Status LED indicate which option is currently selected at each menu point. By pushing the rudder stick repeatedly you can cycle through the available options at each menu point and change the setting if necessary. Briefly pushing the button will skip to the next menu point. After the last menu point the system will exit Parameter menu and change back to operation mode.

### Status-LED LED Table

<table>
<thead>
<tr>
<th>Status-LED</th>
<th>Off</th>
<th>Purple</th>
<th>Flashing Red</th>
<th>Red</th>
<th>Flashing Blue</th>
<th>Blue</th>
</tr>
</thead>
<tbody>
<tr>
<td>B Control Style</td>
<td>Custom</td>
<td>Normal</td>
<td>Sport</td>
<td>Pro</td>
<td>Extreme</td>
<td>Tx Mode</td>
</tr>
<tr>
<td>C Speed Flight Stability</td>
<td>Custom</td>
<td>very low</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td>Very High</td>
</tr>
<tr>
<td>D Rudder Rate Consistency</td>
<td>Custom</td>
<td>very low</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td>Very High</td>
</tr>
<tr>
<td>E Stick Deadzone</td>
<td>Custom</td>
<td>very small</td>
<td>Small</td>
<td>Medium</td>
<td>Large</td>
<td>very large</td>
</tr>
<tr>
<td>F Torque Precompensation</td>
<td>Custom</td>
<td>Off</td>
<td>low - nor.</td>
<td>High - Nor.</td>
<td>Low - Inv.</td>
<td>High - Inv.</td>
</tr>
<tr>
<td>G Cyclic Response</td>
<td>Custom</td>
<td>Normal</td>
<td>Slightly Increased</td>
<td>Increased</td>
<td>Aggressive</td>
<td>Very Aggressive</td>
</tr>
<tr>
<td>H Pitch Boost</td>
<td>Custom</td>
<td>Off</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td>Very High</td>
</tr>
<tr>
<td>I Throttle Response</td>
<td>Soft</td>
<td>Normal</td>
<td>Slightly Increased</td>
<td>Increased</td>
<td>Aggressive</td>
<td>Very Aggressive</td>
</tr>
<tr>
<td>J Slow Rampup Speed</td>
<td>Custom</td>
<td>50 rps</td>
<td>100 rps</td>
<td>200 rps</td>
<td>300 rps</td>
<td>400 rps</td>
</tr>
<tr>
<td>K Fast Rampup Speed</td>
<td>Custom</td>
<td>Using Slow Rampup Speed</td>
<td>300 rps</td>
<td>500 rps</td>
<td>700 rps</td>
<td>900 rps</td>
</tr>
</tbody>
</table>
### Setup Menu (Menu LED Solid)

<table>
<thead>
<tr>
<th>Device Orientation</th>
<th>Factory Setting</th>
<th>Out of Stock Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>horizontal pins to front</td>
<td>Off</td>
<td>50 Hz</td>
</tr>
<tr>
<td>vertical pins to front</td>
<td>Flashing Purple</td>
<td>65 Hz</td>
</tr>
<tr>
<td>horizontal pins to back</td>
<td>Flashing Red</td>
<td>120 Hz</td>
</tr>
<tr>
<td>vertical pins to back</td>
<td>Red</td>
<td>165 Hz</td>
</tr>
<tr>
<td>horizontal pins to front</td>
<td>Flashing Blue</td>
<td>200 Hz</td>
</tr>
<tr>
<td>vertical pins to back</td>
<td>Blue</td>
<td>333 Hz</td>
</tr>
</tbody>
</table>

### Swashplate frequency

<table>
<thead>
<tr>
<th>Servo Ch1</th>
<th>Factory Setting</th>
<th>Out of Stock Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 Hz*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Rudder pulse width

<table>
<thead>
<tr>
<th>Servo Ch2</th>
<th>Factory Setting</th>
<th>Out of Stock Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>760 μs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Rudder frequency

<table>
<thead>
<tr>
<th>Servo Ch3</th>
<th>Factory Setting</th>
<th>Out of Stock Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>165 Hz</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Rudder limits

<table>
<thead>
<tr>
<th>Left</th>
<th>Right</th>
</tr>
</thead>
<tbody>
<tr>
<td>120°*</td>
<td>140°*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No trim</th>
<th>no mixing</th>
</tr>
</thead>
</table>

### Serve trim

<table>
<thead>
<tr>
<th>No trim*</th>
<th>左/右</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serve Ch1</td>
<td>左/右</td>
</tr>
</tbody>
</table>

### Serve directions

<table>
<thead>
<tr>
<th>No trim*</th>
<th>not good</th>
</tr>
</thead>
</table>

### Cyclic throw (set to 6 degrees)

<table>
<thead>
<tr>
<th>OK</th>
<th>Perfect</th>
</tr>
</thead>
<tbody>
<tr>
<td>not good</td>
<td></td>
</tr>
</tbody>
</table>

### Collective pitch

<table>
<thead>
<tr>
<th>check throw!</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>120°*</td>
<td>140°*</td>
</tr>
</tbody>
</table>

### Servo limit

<table>
<thead>
<tr>
<th>OK</th>
<th>Perfect</th>
</tr>
</thead>
<tbody>
<tr>
<td>not good</td>
<td></td>
</tr>
</tbody>
</table>

### Cyclic directions

<table>
<thead>
<tr>
<th>OK</th>
<th>Perfect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Left/back</td>
<td>Rightforward</td>
</tr>
</tbody>
</table>

### Headspeed Governor

<table>
<thead>
<tr>
<th>Governor Off</th>
<th>Electric Hall</th>
<th>Nitro/Gas Hall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governor on</td>
<td>Governor on</td>
<td>Governor on</td>
</tr>
<tr>
<td>Governor on</td>
<td>Governor on</td>
<td>Governor on</td>
</tr>
<tr>
<td>Governor on</td>
<td>Governor on</td>
<td>Governor on</td>
</tr>
</tbody>
</table>

### Governor Setup Menu (Menu LED Flashing Slowly)

<table>
<thead>
<tr>
<th>Test Mode</th>
<th>Factory Setting</th>
<th>Out of Stock Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Nitro/Gas Hall&quot;: Status LED Blue When Magnet Passes Sensor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Electric Hall&quot;: Status LED Red When Motor Is Running</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Nitro/Gas Hall&quot;: Throttle Servo To (increased) Idle Position</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Electric Hall&quot;: Throttle In &quot;Motor Off&quot; Position, Just Before Motor Start (throttle unlocked)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Nitro/Gas Hall&quot;: Throttle Servo To (increased) Idle Position</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Nitro/Gas Hall&quot;: Throttle Servo To (increased) Idle Position</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Electric Hall&quot;: Throttle In &quot;Motor Off&quot; Position, Just Before Motor Start (throttle unlocked)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Nitro/Gas Hall&quot;: Trigger Servo To (increased) Idle Position</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Electric Hall&quot;: Throttle In &quot;Motor Off&quot; Position, Just Before Motor Start (throttle unlocked)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Motor Off Idler Position

<table>
<thead>
<tr>
<th>Motor Off Idler Position</th>
<th>Electric Hall: Trigger Servo To (increased) Idle Position</th>
<th>Nitro/Gas Hall: Trigger Servo To (increased) Idle Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governor on</td>
<td>Governor on</td>
<td>Governor on</td>
</tr>
<tr>
<td>Governor on</td>
<td>Governor on</td>
<td>Governor on</td>
</tr>
<tr>
<td>Governor on</td>
<td>Governor on</td>
<td>Governor on</td>
</tr>
<tr>
<td>Governor on</td>
<td>Governor on</td>
<td>Governor on</td>
</tr>
</tbody>
</table>

### Full Throttle Position

| Electric Hall: Motor speed does not change anymore - Nitro/Gas Hall: servo at maximum |
| Governor on | Governor on | Governor on |
| Governor on | Governor on | Governor on |
| Governor on | Governor on | Governor on |
| Governor on | Governor on | Governor on |
| Governor on | Governor on | Governor on |

### Transmitter Setup

<table>
<thead>
<tr>
<th>Signal Dividers</th>
<th>Custom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governor off</td>
<td>Governor on</td>
</tr>
<tr>
<td>Governor on</td>
<td>Governor on</td>
</tr>
<tr>
<td>Governor on</td>
<td>Governor on</td>
</tr>
<tr>
<td>Governor on</td>
<td>Governor on</td>
</tr>
<tr>
<td>Governor on</td>
<td>Governor on</td>
</tr>
</tbody>
</table>

### Main Gear Ratio

<table>
<thead>
<tr>
<th>Custom</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>9*</td>
<td>10</td>
</tr>
<tr>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>13</td>
<td>14</td>
</tr>
</tbody>
</table>

### Heli Main Gear Ratio

<table>
<thead>
<tr>
<th>Custom</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>8,00</td>
<td>9,00</td>
</tr>
<tr>
<td>9,00</td>
<td>10,00</td>
</tr>
<tr>
<td>10,00</td>
<td>11,00</td>
</tr>
<tr>
<td>11,00</td>
<td>12,00</td>
</tr>
<tr>
<td>12,00</td>
<td>13,00</td>
</tr>
<tr>
<td>13,00</td>
<td>14,00</td>
</tr>
</tbody>
</table>

### Enter SETUP MENU by pressing button for at least 2 seconds in operation mode. Skip to next Menu Point by pressing button briefly, after last point menu will exit.

R Use rudder to adjust value/choose setting. A Use a/e barring to switch menu option. T Set throttle to desired position if you like to change the setting.

* Default setting: hold button for 10 seconds at any Menu Point (except H) to reset setup and parameter data. Holding button at H only the trim will be reset.

---

* Long按住2秒進入設定選單，輕按按鍵一次切換至下一選單，最後一個選單之後會出設定選單。
* 移動尾舵搖桿設定/校正調整。A 移動側面搖桿切換設定選單選項。T 移動油門搖桿希望的設定位置。
* 除H選單外，長按按鍵10秒可出設定選單。在H選單，長期10秒，側面測數會重設。

---

### 35
### PARAMETER MENU (Menu-LED is Flashing Quickly)

**Quick Trim**
- **Control Style**: Custom
- **Speed Flight Stability**: Custom
- **Rudder Rate Consistency**: Custom
- **Stick Deadzone**: Custom
- **Torque Precompensation**: Custom
- **Cyclic Response**: Custom
- **Pitch Boost**: Custom
- **Throttle Response**: Custom
- **Slow Ramped Speed**: Custom
- **Quick Rate Change**: Custom
- **Attitude Control Mode**: Disabled
- **Attitude Control Pitch**: >0%

**Factory Setting**
- **Off**
- **Purple**
- **Flashing Red**
- **Red**
- **Flashing Blue**
- **Blue**

**Out of Factory Setting**
- **Gyro in HIL Mode**: Trim aileron and elevator with stick, use rudder to trim collective. **Gyro in Rate Mode**: Rudder stick trimm, rudder. **Attitude Control Adjust**: Auto adjust pitch. **High Speed Mode**: Push to adjust. **High Speed Cue**: Push and hold to adjust. **High Speed Gain**: Push and hold to adjust. **High Speed Mode**: Push to adjust. **High Speed Gain**: Push and hold to adjust. **High Speed Mode**: Push to adjust. **Out of Factory Setting**

### RECEIVER SETUP MENU (Menu-LED is Flashing)

**Receiver Type**: Specrum (JR Satellite)
- **Analog Serial Input**: Analog Serial Input
- **Digital Serial Input**: Digital Serial Input
- **Standard RX**: Standard RX

**Pitch Channel**: Controller
- **Aileron Channel**: Controller
- **Elevator Channel**: Controller
- **Rudder Channel**: Controller
- **Gyro Channel**: Controller
- **Throttle Channel**: Controller
- **Aux Channel (CH6)**: Controller
- **Governor Channel**: Controller
- **Attitude Control Channel**: Controller
- **Throttle Safe**: Safe

**Factory Setting**
- **Off**
- **Purple**
- **Red**
- **Blue**

**Out of Factory Setting**
- **Gyro in HIL Mode**: Trim aileron and elevator with stick, use rudder to trim collective. **Gyro in Rate Mode**: Rudder stick trimm, rudder. **Attitude Control Adjust**: Auto adjust pitch. **High Speed Mode**: Push to adjust. **High Speed Cue**: Push and hold to adjust. **High Speed Gain**: Push and hold to adjust. **High Speed Mode**: Push to adjust. **Out of Factory Setting**

Please note: Attitude Control options are only accessible when PRO EDITION firmware upgrade is installed.
A FEW NOTES

1. Reset will not work when the system is not operational! When in calibration mode (Status LED red and LED rows A-G or H-N cycling up and down) pushing the button will have no significant effect. It will only change the display but won’t enter any menu or reset anything.

2. The reset procedure as described above will work with any BEASTX device: MICROBEAST, MICROBEAST PLUS, Spektrum AR7200BX, Spektrum AR7210BX and with any firmware version. With early MICROBEAST PLUS firmware 5.0.x the reset was not indicated by menu LEDs by accident. But it will happen when you push and hold the button in SETUP MENU long enough. Just you won’t get any visual feedback. This issue was fixed in the meantime already (firmware 5.1.2).

3. With Microbeast PLUS Firmware 5.x.x and latest StudioXm App/PC software, you can also reset the device from the app. You will find this in the section “Backup/Restore” inside the app.

其他注意事項

1. 開機狀態下執行重設初始化無效！在校正模式(Calibration Mode)下LED狀態顯示燈會亮紅燈, 按兩次Menu LED燈A-G / H-N會循環亮燈, 此時按下按鈕，僅會面轉換但不會進入設定選單或進行系統重設初始化。

2. 以上重設初始化步驟可適用任何BEASTX設備，版本：包含 MICROBEAST, MICROBEAST PLUS, Spektrum AR7200BX, Spektrum AR7210BX。請注意，MICROBEAST PLUS V5.0.x以前的版本初始化時，Menu LED燈顯示並不會循環亮燈，僅需要在設定選單下長按按鈕數秒即可，系統不會有其他燈號顯示反應，V5.1.2版已解決此問題。

3. 如使用Microbeast PLUS V5.X.X版最新的StudioXm APP開關變更，可直接由APP上重設初始化，APP可進入Backup/Restore(備份/重設)選單內進行初始化設定。