



## Vector

### Vector flight control system overview

1. Designed to be your loyal wingman, the Arrows Hobby Vector flight control system is a digital co-pilot programmed specifically for your aircraft.
2. For beginners, Vector will provide a safe flight envelope to assist the pilot in learning the ropes.
3. For intermediate and expert pilots, Vector can mitigate the effects of wind gusts while allowing the pilot to maintain complete control and perform complex maneuvers.

### Functionality

The Vector flight control system operates in 3 flight modes- Stability, dynamic and direct; transition between the 3 flight modes utilizing a 3-position switch on your transmitter- the middle position is the direct mode by default.

Note: if only a 2 position switch is available, the Vector system will only switch between Stability and Dynamic flight modes.

**Stability mode-** Vector will return the aircraft to level flight whenever no control inputs are detected. Perfect for beginner pilots or as a safe mode in emergency situations.

**Dynamic mode-** This mode allows pilots to retain complete control of the aircraft. The Vector flight controller only makes control inputs when it detects movement not initiated by the pilot (wind gusts, cross wind etc).

**Direct mode-** For expert pilots who want to experience a pure flight experience with no electronic intervention, no input is given at any time by the flight controller unless it is switched back to Stability or Dynamic modes.

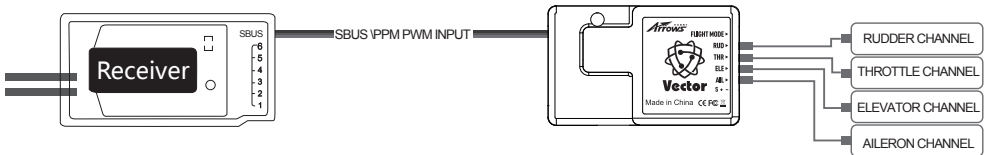
### Initialisation in calibration

1. Set the aircraft on a level surface, turn on the transmitter then power on the aircraft.
2. Wait for the Vector flight control to self calibrate (Status LED flashes rapidly).
3. When the calibration process is complete (after around 3 seconds), the aircraft or cycle its aileron and elevator servos 3 times each- indicating a successful calibration process.
4. Flight mode status LED: Rapid flashes= Stabilized, Short flashes= Direct, On= Dynamic.

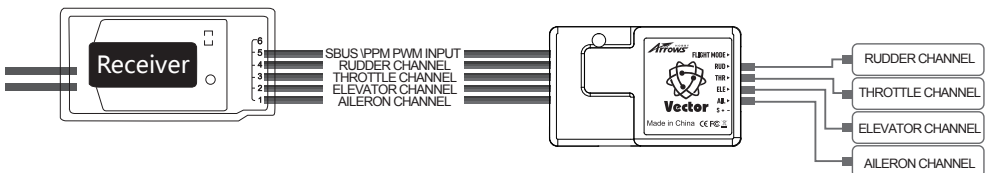
Note: Prior to flight, always check that the control surfaces are responding in the correct direction. Reversed control surface movement can cause the aircraft to be uncontrollable.

### Sbus and PPM receivers

1. Sbus and PPM receivers: connect the Sbus/PPM cable directly to the Sbus port on the receiver, pay close attention to the polarity of the cable. Noticed that the channel order is: ailerons, elevator, throttle and rudder. Use the transmitter to correct the channel order if the default settings on the transmitter do not match this order.



2. PWM receivers: connect the Sbus/PPM cable to a spare channel that can be assigned to a 2 or 3 position switch. Connect to all other channels according to the label on the servo lead.



## 《— 蓝箭维翼飞控说明书 —》



### 维翼飞控系统介绍

1. 维翼是专为各个技能水平的玩家设计的飞行控制器系统,由工厂调试并预安装,玩家到手即用。
2. 维翼飞行系统对于初学者玩家来说,就像一道“安全锁”。它给您的初航提供电子安全,可使您有条不紊地学习各项飞行技巧。
3. 维翼飞行系统对于中级和专业玩家来说,就像一个进阶的“跳板”。想尝试惊险刺激的新玩法,但又担忧操作跟不上意识?将维翼切换到自动校准模式,飞机可从任意姿态自动平飞。

### 功能介绍

维翼飞控系统配有自动校准、优化和待机3种飞行模式,需要使用遥控器上的一个3段开关来切换模式,3段开关中间默认为待机模式。

注意:如果遥控器只有2段开关,则系统默认只有自动校准(自稳)和优化(增稳)2种飞行模式。

自动校准模式(自稳)——此飞行模式是专为初学者设计的,但也可用作更高级飞行员的紧急模式。在未有新指令输入的情况下,自动校准模式通过机载传感器,来使飞机保持水平的飞行姿态。

优化模式(增稳)——此飞行模式利用高精度陀螺仪,可在不干预摇杆操作的前提下,有效消除阵风和湍流的影响,以保持稳定的飞行姿态。

待机模式——此模式将维翼系统置于待机状态,除非切换到其他飞行模式之一,否则维翼系统不会提供任何输入指令。玩家全时全控制飞机。

### 通电与校正

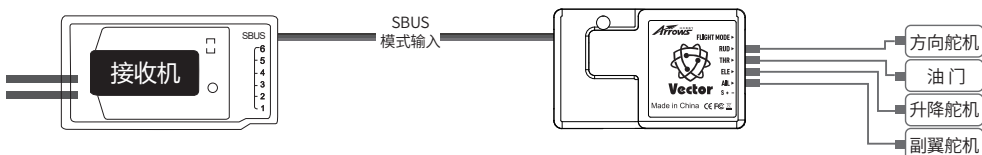
1. 将飞机置于水平表面上,发射机通电,飞机通电。
2. 等待维翼系统自动校准(LED灯快速闪烁)。
3. 校准后(约3秒),副翼和升降舵分别连续上下动作3次,表示上电自检通过。
4. 维翼系统LED灯状态:LED灯快速闪烁表示自动校准模式,LED灯短闪烁表示待机模式、LED灯常亮表示优化模式。

重要信息:检查所有通道是否正常工作,如果通道反向,则维翼系统将提供反向输入。

### 安装与接线

1. SBUS\PPM方式的接收机,直接接入写有SBUS\PPM的那条连接线,注意信号线的方向,注意遥控通道信号的顺序是副翼、升降、油门、方向,如果通道对应不一样,请通过遥控器更改为正确对应的顺序。

注意:模式控制默认5通道,如带有起落架和襟翼,则模式控制默认7通道。



2. PWM方式的接收机,将对应的连接线接入接收机,将写有SBUS\PPM的那条连接线,接入接收机的2段或3段开关输出通道上,此开关用来切换飞行模式。

