

<http://www.rcgroups.com/forums/showthread.php?t=1389668#post17403678>

Turnigy 9x v2 flaps and butterfly settings for ex. Parkzone Radian Pro

First up you'll need an 8ch receiver for this to work and I'm using the stock firmware on my Turnigy 9x v2, actually, that sadly has a broken Butterfly feature.

However no need to throw it away just yet, as building program mixes yourself in Motor plane mode (not Glider mode of the transmitter, so you'll have to change that in SYSTEM for your model) works very well and as additional bonus you'll get to use the Throttle Hold switch for added safety in that model mode for when your motor/throttle is concerned as well.

For usage of the flaps (one position for in-flight / soaring) and butterfly (full on brake for landing or brake whilst diving) we're going to use the three point switch. Which has three modes you can use, Normal mode, ID1 mode and ID2 mode.

Basically the following mix uses up all 7 Prog.Mixes in Motor plane mode of the T9x v2 and uses up 6 channels. In my case I needed the Turnigy 9x v2 8 ch receiver for it to work.

- ch.1** aileron 1,
- ch.2** elevator,
- ch.3** throttle,
- ch.4** rudder,
- ch.5** empty gear channel reserved for transmitter programming,
- ch.6** Flaps with Y-cable,
- ch.8** second aileron

(The 7th channel for some reason only provided ~70% of servo range, and using the same programming on a 6ch receiver I haven't as of yet got it working because of the reserved 'dummy' channel used in the programming)

The only minor issue with this setup is that it's impossible to mix elevator into these mixes unless you want butterfly as the only option, as you've only got 7 prog. mixes at your disposal. But frankly, this plane doesn't really need elevator being mixed into flaps and butterfly that much anyway.

It's easy getting used to just by compensating elevator yourself.

I'm flying Mode 2 with throttle on the left stick by the way.

The Prog. Mixes are as follows;

Prog. Mix 1:

State: ACT
Master: AIL (ch1)
Slave: AUX (ch8)
Offset: 000
Uprate: 100
Downrate: 100
SW: on (means 'always on', used for the Aileron mixing)

Prog. Mix 2:

State: ACT
Master: GYR (dummy channel)
Slave: FLP

Offset: 000
Uprate: 100
Downrate: -100
SW: On

Prog. Mix 3:

State: ACT
Master: GYR
Slave: FLP
Offset: 000
Uprate: -100
Downrate: 100
SW: ID1 (middle location of 3 pos. switch activates Flaps now)

Prog. Mix 4:

State: ACT
Master: GYR
Slave: FLP
Offset: 000
Uprate: -100
Downrate: 100
SW: ID2 (down position activates butterfly of flaps and ailerons, ..)

Prog. Mix 5:

State: ACT
Master: GYR
Slave: FLP
Offset: 000
Uprate: -100
Downrate: 100
SW: ID2 (.. and you need this mix twice for maximum servo movement for the butterfly)

Prog. Mix 6:

State: ACT
Master: GYR
Slave: Aux (ch8, the other aileron for Butterfly upwards mixing)
SW: ID2
Curve: Tune (press + to enter / edit this;
Curve points are; L: 0%
 1: 50%
 2: 50%,
 3: 50%
 H: 0%

(press Menu to save and go back to Prog. Mix 6, then press Menu short again (!) to save Prog. Mix 6)

Prog. Mix 7:

State: ACT
Master: GYR
Slave: AIL (ch1 aileron upwards mix for butterfly)
SW: ID2
Curve: Tune (press + to enter / edit this;
Points are;

L: 100% ,
1: 50%,
2: 50%,
3: 50%,
H: 100%

(Again press Menu shortly to save the curve and then press Menu AGAIN shortly to save Prog.
Mix 7.

You will also have to assign channel 5, the dummy channel, to a switch on the transmitter like
for example Throttle Hold in the AUX / CH menu.

This makes sure the dummy channel is active, even if the 'SW' set to 'ON' should already do that.