

F5J - EdgeTX

Radiomaster TX16S with ExpressLRS



*EdgeTX v2.9.4
with ExpressLRS 3.3.2*

Basic configuration

SA = Motor: Off – Off - On

This switch arms the motor.

SB = Motor speed: High – Mid – Low

This switch selects between 3 different motor speeds.

SC = Flight Mode: 'DISTANCE' – 'CRUISE' – 'THERMAL'

This switch selects Flight Mode.

Extended configuration

SF = When in Thermal, selects between fixed camber ('THERMAL')
and variable camber ('THERMAL V')

LS = Variable camber setting in Flight Mode 'THERMAL V'

Adjustable thermal camber.

SH = Motor speed: Turbo (spring-loading returning switch)

Turbo is for max motor speed.

SH = Thermal Camber++ (spring-loading returning switch) Extra camber when in Flight Mode 'Cruise/Thermal'.

SD = Flight Mode: 'DISTANCE' or 'SPEED'.

SnapFlap

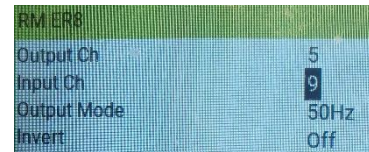
F5J Time

TX16S models link:
[X-Tail and V-Tail](#)

Email: magnus@maghed.se [2024-May]
Latest document version: [Link](#)

Information

- For EU, use LBT-version with max 100mW output power.
- Set the Transmitter (Tx) Packet Rate to 100Hz Full (8ch) or 333Hz Full (8ch).
- Set the Receiver (Rx) Packet Rate to the same as the transmitter (Tx).
- Rx channel 5 is used for arming the ExpressLRS system. Assign ch9 to be selected for output 5 on the receiver.



- Assigning the failsafe to have motor = off !!
When the receiver (Rx) is powered on and the transmitter (Tx) is off, i.e. no connection, the ExpressLRS system goes into failsafe mode.
- The following receiver outputs (1-6 and 1-8) have been tested for F5J height meter functionality with 'RC Multi 3' (FAI v4.02):



- **2024-05-30:**
Who should update to ExpressLRS v3.4 or newer:
"This release contains critical bugs fixes for PWM and LBT (Regulatory_Domain_EU_CE_2400) users. These users MUST upgrade."

See:

[ExpressLRS - Releases](#)

See also:

[Lua Init Rate](#)

Links:

[EdgeTX.org](#)

[github/EdgeTX](#)

[ExpressLRS.org](#)

[ExpressLRS.org/Radiomaster](#)

[github/ExpressLRS](#)

Outputs

- In this document the channels are assigned according to the following list:

ch1: Elevator	(or Vtail left)	Output 1
ch2: Rudder	(or Vtail right)	Output 2
ch3: Aileron left		Output 3
ch4: Aileron right		Output 4
ch5: <i>armed</i>		-
ch6: Motor		Output 6
ch7: Flap left		Output 7
ch8: Flap right		Output 8
ch9: Spare		Output 5

Configurations

Basic

- *Motor, Cruise, Thermal, Distance, Landing*
- X-tail or V-tail
- Aileron and Flap
- Motor speed
- Camber settings
- Break (Butterfly)
- Aileron differential
- Aileron to rudder
- Elevator compensation

Extended

- *Speed, Thermal V*
- Motor Turbo speed
- Variable camber settings (Thermal V)
- Camber++
- SnapFlap
- Timer: F5J time
- Timer: Flight time
- Timer: Chronograph (stopwatch)
- Warning: Receiver/Motor battery low
- Telemetry: Receiver quality

(Global Elevator Trim)
(Dual Rate)

BASIC CONFIGURATION

Preparation

INPUTS

I1:Ail	Ail Weight (+100%)
I2:Ele	Ele Weight (+100%)
I3:Brk	Thr Weight (-50%) No Trim Offset (50%)
I4:Rud	Rud Weight (+100%)

Use Expo where needed (Aileron, Elevator, Rudder).

Aileron:

INPUTS
Ail

Input name: Ail
Line name: -
Source: Ail
Weight: 100% GV
Offset: 0% GV
Switch: --
Curve: Expo 0% GV

Side: -
Trim: ON
Modes: 0 1 2 3 4
5 6 7 8

Elevator:

INPUTS
Ele

Input name: Ele
Line name: -
Source: Ele
Weight: 100% GV
Offset: 0% GV
Switch: --
Curve: Expo 0% GV

Side: -
Trim: ON
Modes: 0 1 2 3 4
5 6 7 8

Break (Butterfly):

INPUTS
Brk

Input name: Brk
Line name: -
Source: Thr
Weight: -50% GV
Offset: 50% GV
Switch: --
Curve: Expo 0% GV

Side: -
Trim: OFF
Modes: 0 1 2 3 4
5 6 7 8

Rudder:

INPUTS
Rud

Input name: Rud

Line name: —

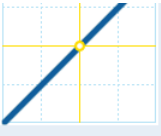
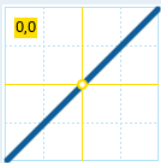
Source: Rud

Weight: 100% GV

Offset: 0% GV

Switch: —

Curve: Expo 0% GV



INPUTS
Rud

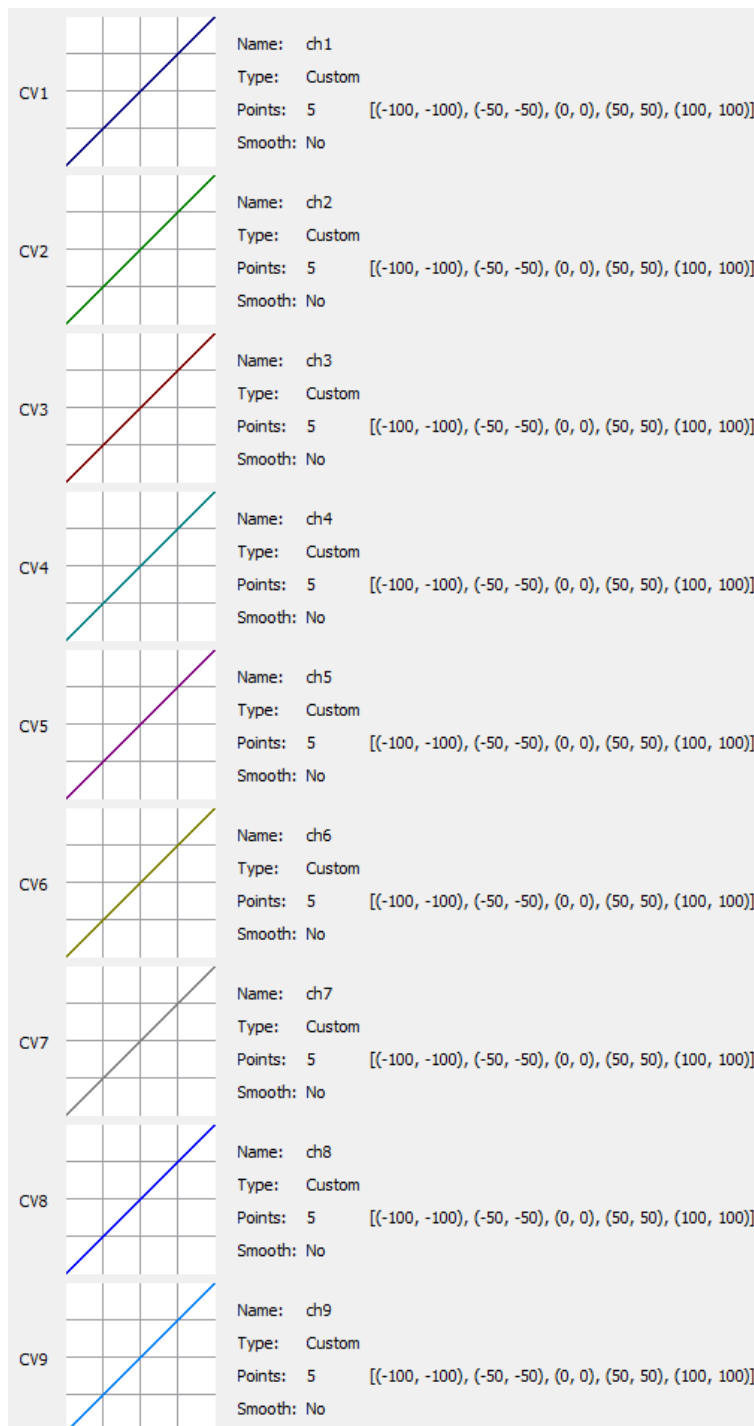
Side: —

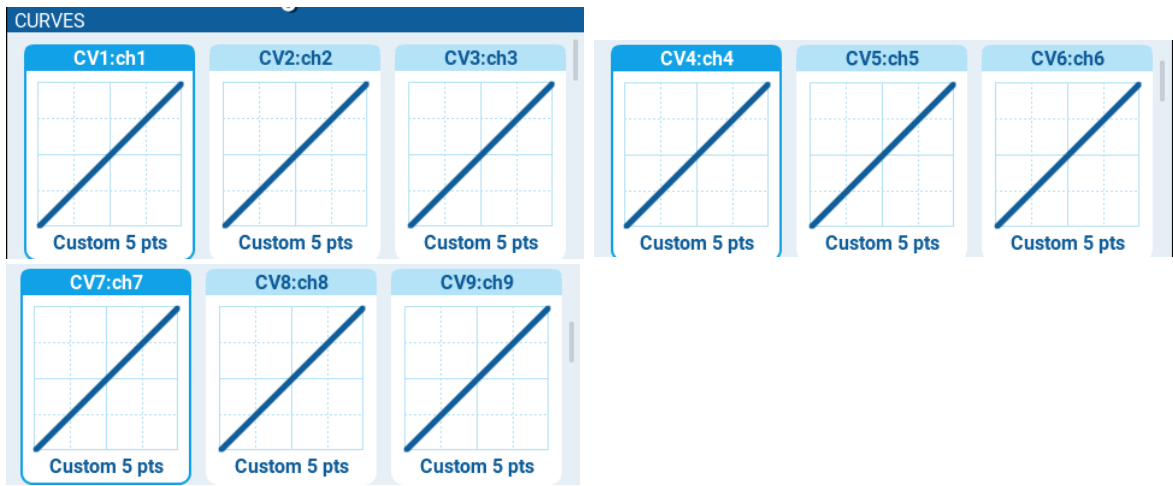
Trim: ON

Modes: 0 1 2 3 4
5 6 7 8

CURVES

CV1-CV9 (Output curve):





CURVES CV1

Name: **ch1** Smooth: **0,0**

Type: **Custom** 5pts

1	2	3	4	5
X -100	-50	0	50	100
Y -100	-50	0	50	100

CURVES CV9

Name: **ch9** Smooth: **0,0**

Type: **Custom** 5pts

1	2	3	4	5
X -100	-50	0	50	100
Y -100	-50	0	50	100

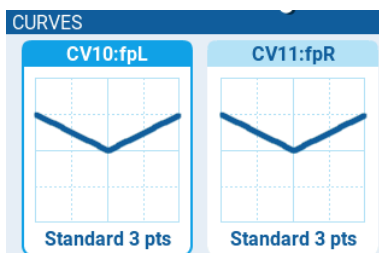
CV10-CV11 (Flap curve):

CV10

Name: **fpL**
 Type: **Standard**
 Points: 3 [50, 0, 50]
 Smooth: No

CV11

Name: **fpR**
 Type: **Standard**
 Points: 3 [50, 0, 50]
 Smooth: No



CURVES CV10

Name: **fpL** Smooth: **0,0**

Type: **Standard** 3pts

1	2	3
X -100	0	100
Y 50	0	50

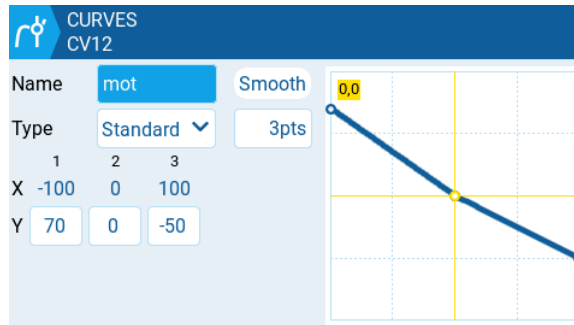
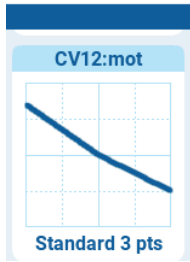
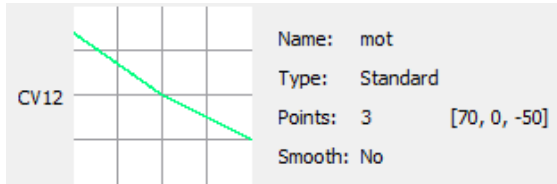
CURVES CV11

Name: **fpR** Smooth: **0,0**

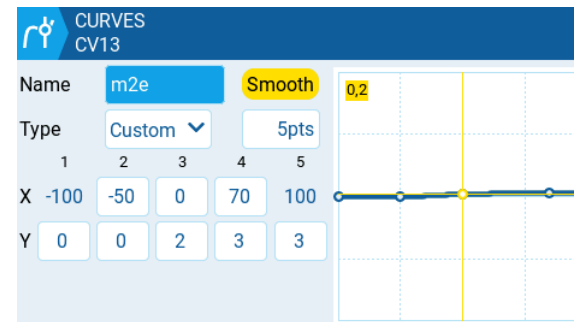
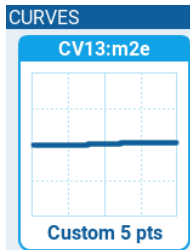
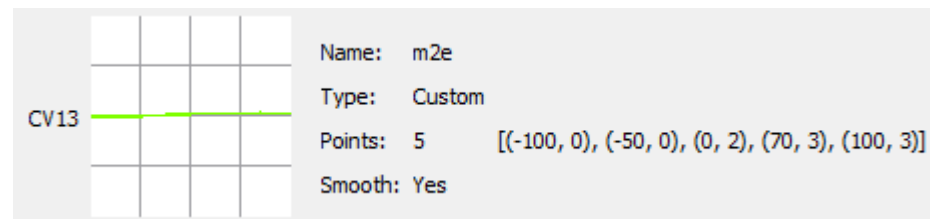
Type: **Standard** 3pts

1	2	3
X -100	0	100
Y 50	0	50

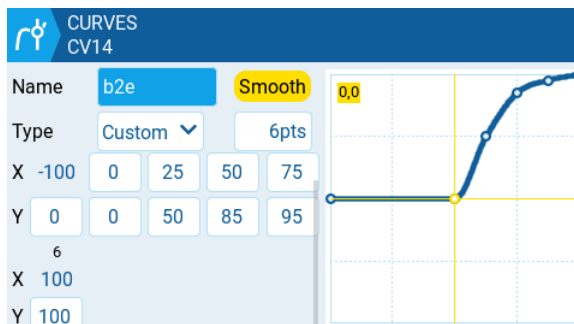
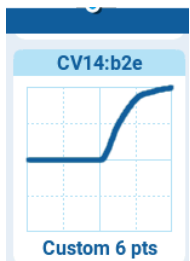
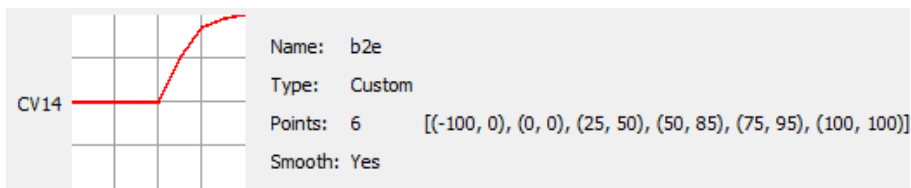
CV12 (Motor curve):



CV13 (Motor to elevator curve):



CV14 (Break to elevator curve):



GLOBAL VARIABLES

Name	Value	Unit	Prec	Min	Max	Popu
GVAR1 dif	0%	%	0._	-1024%	1024%	<input type="checkbox"/>
GVAR2 cal	0%	%	0._	-1024%	1024%	<input type="checkbox"/>
GVAR3 car	0%	%	0._	-1024%	1024%	<input type="checkbox"/>
GVAR4 cfl	0%	%	0._	-1024%	1024%	<input type="checkbox"/>
GVAR5 cfr	0%	%	0._	-1024%	1024%	<input type="checkbox"/>
GVAR6 a2r	0%	%	0._	-1024%	1024%	<input type="checkbox"/>
GVAR7 del	0%	%	0._	-1024%	1024%	<input type="checkbox"/>

GLOBAL VARIABLES									
dif	FM0 0%	FM1 FM0	FM2 FM0	FM3 FM4	FM4 0%	FM5 FM6	FM6 0%	FM7 FM0	FM8 FM0
cal	FM0 0%	FM1 FM0	FM2 FM0	FM3 -10%	FM4 -5%	FM5 FM6	FM6 10%	FM7 FM0	FM8 FM0
car	FM0 0%	FM1 FM0	FM2 FM0	FM3 -10%	FM4 -5%	FM5 FM6	FM6 10%	FM7 FM0	FM8 FM0
cfl	FM0 0%	FM1 FM0	FM2 FM0	FM3 -10%	FM4 -5%	FM5 FM6	FM6 10%	FM7 FM0	FM8 FM0
cfr	FM0 0%	FM1 FM0	FM2 FM0	FM3 -10%	FM4 -5%	FM5 FM6	FM6 10%	FM7 FM0	FM8 FM0
a2r	FM0 0%	FM1 FM0	FM2 FM0	FM3 FM0	FM4 FM0	FM5 FM0	FM6 FM0	FM7 FM0	FM8 FM0
del	FM0 0%	FM1 FM0	FM2 FM0	FM3 FM0	FM4 FM0	FM5 FM0	FM6 FM0	FM7 FM0	FM8 FM0

dif: Aileron differential

cal: Aileron (left) camber setting

car: Aileron (right) camber setting

cfl: Flap (left) camber setting

cfr: Flap (right) camber setting

a2r: Aileron to rudder

del: Elevator differential

V-tail:

GVAR8 dru	0%	%	0._	-1024%	1024%	<input type="checkbox"/>
-----------	----	---	-----	--------	-------	--------------------------

dru	FM0 0%	FM1 FM0	FM2 FM0	FM3 FM0	FM4 FM0	FM5 FM0	FM6 FM0	FM7 FM0	FM8 FM0
-----	-----------	------------	------------	------------	------------	------------	------------	------------	------------

dru: Rudder differential

LOGICAL SWITCHES

#	Function	V1	V2	AND Switch	Duration	Delay
L01	AND	SA↓	----	----	0,0	0,0
L02	a<x	Thr	92	----	0,0	0,0
L03	---					
L04	AND	SC↑	----	----	0,0	0,0
L05	---					
L06	AND	SC↓	----	----	0,0	0,0

LOGICAL SWITCHES						
L01	AND	SA↓	--	--		
L02	a<x	Thr	92	--		
L04	AND	SC↑	--	--		
L06	AND	SC↓	--	--		

LOGICAL SWITCHES L01

Function: AND

V1: SA↓

V2: --

AND switch: --

Duration: 0.0s

Delay: --

Used for FM1 (MOTOR ON)

LOGICAL SWITCHES L02

Function: a<x

V1: Thr

V2: 92

AND switch: --

Duration: 0.0s

Delay: --

Used for FM2 (LANDING)

LOGICAL SWITCHES L04

Function: AND

V1: SC↑

V2: --

AND switch: --

Duration: 0.0s

Delay: --

Used for FM4 (DISTANCE)

LOGICAL SWITCHES L06

Function: AND

V1: SC↓

V2: --

AND switch: --

Duration: 0.0s

Delay: --

Used for FM6 (THERMAL)

FLIGHT MODES

FLIGHT MODES										
FM0	CRUISE		=0	=0	=0	=0	=0	=0	0.0s	0.0s
FM1	MOTOR ON	L01	=0	=1	=0	=0	=0	=0	0.0s	0.0s
FM2	LANDING	L02	=0	=2	=0	=0	=0	=0	0.4s	0.4s
FM3			=0	=3	=0	=0	=0	=0	0.0s	0.0s
FM4	DISTANCE	L04	=0	=4	=0	=0	=0	=0	0.0s	0.0s
FM5			=0	=6	=0	=0	=0	=0	0.0s	0.0s
FM6	THERMAL	L06	=0	=6	=0	=0	=0	=0	0.0s	0.0s
FM7			=0	=0	=0	=0	=0	=0	0.0s	0.0s
FM8			=0	=0	=0	=0	=0	=0	0.0s	0.0s

Note: FM3, FM5, FM7, FM8 = Not used.

FLIGHT MODES FM0

Name: CRUISE

Fade in: 0.0

Fade out: 0.0

Trims:

- Rud: 0
- Ele: 0
- Thr: 0
- Ail: 0
- T5: 0
- T6: 0

FLIGHT MODES FM1

Name: MOTOR ON

Switch: L01

Fade in: 0.0

Fade out: 0.0

Trims:

- Rud: = 0
- Ele: = 1
- Thr: = 0
- Ail: = 0
- T5: = 0
- T6: = 0

FLIGHT MODES FM2

Name: LANDING

Switch: L02

Fade in: 0.4

Fade out: 0.4

Trims:

- Rud: = 0
- Ele: = 2
- Thr: = 0
- Ail: = 0
- T5: = 0
- T6: = 0

FLIGHT MODES FM4

Name: DISTANCE

Switch: L04

Fade in: 0.0

Fade out: 0.0

Trims:

- Rud: = 0
- Ele: = 4
- Thr: = 0
- Ail: = 0
- T5: = 0
- T6: = 0

FLIGHT MODES FM6

Name: THERMAL

Switch: L06

Fade in: 0.0

Fade out: 0.0

Trims:

- Rud: = 0
- Ele: = 6
- Thr: = 0
- Ail: = 0
- T5: = 0
- T6: = 0

OUTPUTS

#	Name	Subtrim	Min	Max	Direction	Curve	Plot	PPM Center	Linear Subtrim
CH1	Ele	<input type="checkbox"/> GV 0,0%	<input type="checkbox"/> GV -100,0%	<input type="checkbox"/> GV 100,0%	---	CV1:ch1		1500us	<input type="checkbox"/>
CH2	Rud	<input type="checkbox"/> GV 0,0%	<input type="checkbox"/> GV -100,0%	<input type="checkbox"/> GV 100,0%	---	CV2:ch2		1500us	<input type="checkbox"/>
CH3	Al_L	<input type="checkbox"/> GV 0,0%	<input type="checkbox"/> GV -100,0%	<input type="checkbox"/> GV 100,0%	---	CV3:ch3		1500us	<input type="checkbox"/>
CH4	Al_R	<input type="checkbox"/> GV 0,0%	<input type="checkbox"/> GV -100,0%	<input type="checkbox"/> GV 100,0%	---	CV4:ch4		1500us	<input type="checkbox"/>
CH5	armed	<input type="checkbox"/> GV 0,0%	<input type="checkbox"/> GV -100,0%	<input type="checkbox"/> GV 100,0%	---	CV5:ch5		1500us	<input type="checkbox"/>
CH6	Motor	<input type="checkbox"/> GV 0,0%	<input type="checkbox"/> GV -100,0%	<input type="checkbox"/> GV 100,0%	---	CV6:ch6		1500us	<input type="checkbox"/>
CH7	Flp_L	<input type="checkbox"/> GV 0,0%	<input type="checkbox"/> GV -100,0%	<input type="checkbox"/> GV 100,0%	---	CV7:ch7		1500us	<input type="checkbox"/>
CH8	Flp_R	<input type="checkbox"/> GV 0,0%	<input type="checkbox"/> GV -100,0%	<input type="checkbox"/> GV 100,0%	---	CV8:ch8		1500us	<input type="checkbox"/>
CH9	CH9	<input type="checkbox"/> GV 0,0%	<input type="checkbox"/> GV -100,0%	<input type="checkbox"/> GV 100,0%	---	CV9:ch9		1500us	<input type="checkbox"/>

V-tail:

#	Name	Subtrim	Min	Max	Direction	Curve	Plot	PPM Center	Linear Subtrim
CH1	Vt_L	<input type="checkbox"/> GV 0,0%	<input type="checkbox"/> GV -100,0%	<input type="checkbox"/> GV 100,0%	INV	CV1:ch1		1500us	<input type="checkbox"/>
CH2	Vt_R	<input type="checkbox"/> GV 0,0%	<input type="checkbox"/> GV -100,0%	<input type="checkbox"/> GV 100,0%	---	CV2:ch2		1500us	<input type="checkbox"/>

CH1-CH2 for X-tail

OUTPUTS CH01 Ele 1500us

Name: Ele Subtrim: 0.0 GV

Min: -100.0 GV Max: 100.0 GV

Inverted: Curve: ch1

PPM Center: 1500 Subtrim mode: Δ (center only)

OUTPUTS CH02 Rud 1500us

Name: Rud Subtrim: 0.0 GV

Min: -100.0 GV Max: 100.0 GV

Inverted: Curve: ch2

PPM Center: 1500 Subtrim mode: Δ (center only)

CH1-CH2 for V-tail

OUTPUTS CH01 Vt_L 1500us

Name: Vt_L Subtrim: 0.0 GV

Min: -100.0 GV Max: 100.0 GV

Inverted: Curve: ch1

PPM Center: 1500 Subtrim mode: Δ (center only)

OUTPUTS CH02 Vt_R 1500us

Name: Vt_R Subtrim: 0.0 GV

Min: -100.0 GV Max: 100.0 GV

Inverted: Curve: ch2

PPM Center: 1500 Subtrim mode: Δ (center only)

CH3-CH4 for Aileron

OUTPUTS
Ail_L

CH03 Ail_L 1500us

0%	
0%	

Name: Ail_L Subtrim: 0.0 GV

Min: -100.0 GV Max: 100.0 GV

Inverted: Curve: ch3

PPM Center: 1500 Subtrim mode: Δ (center only)

OUTPUTS
Ail_R

CH04 Ail_R 1500us

0%	
0%	

Name: Ail_R Subtrim: 0.0 GV

Min: -100.0 GV Max: 100.0 GV

Inverted: Curve: ch4

PPM Center: 1500 Subtrim mode: Δ (center only)

CH5 for armed (used in ExpressLRS system) (Not used as Rx output)

OUTPUTS
armed

CH05 armed 2012us

100%	
100%	

Name: armed Subtrim: 0.0 GV

Min: -100.0 GV Max: 100.0 GV

Inverted: Curve: ch5

PPM Center: 1500 Subtrim mode: Δ (center only)

CH6 for Motor

OUTPUTS
Motor

CH06 Motor 988us

-100%	
-100%	

Name: Motor Subtrim: 0.0 GV

Min: -100.0 GV Max: 100.0 GV

Inverted: Curve: ch6

PPM Center: 1500 Subtrim mode: Δ (center only)

CH7-CH8 for Flap

OUTPUTS
Flp_L

CH07 Flp_L 1193us

-60%	
-60%	

Name: Flp_L Subtrim: 0.0 GV

Min: -100.0 GV Max: 100.0 GV

Inverted: Curve: ch7

PPM Center: 1500 Subtrim mode: Δ (center only)

OUTPUTS
Flp_R

CH08 Flp_R 1807us

60%	
60%	

Name: Flp_R Subtrim: 0.0 GV

Min: -100.0 GV Max: 100.0 GV

Inverted: Curve: ch8

PPM Center: 1500 Subtrim mode: Δ (center only)

CH9 (Spare) (Used as Rx Output 5)

OUTPUTS
CH9

CH09 CH9 1500us

0%	
0%	

Name: CH9 Subtrim: 0.0 GV

Min: -100.0 GV Max: 100.0 GV

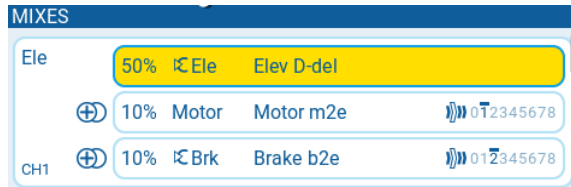
Inverted: Curve: ch9

PPM Center: 1500 Subtrim mode: Δ (center only)

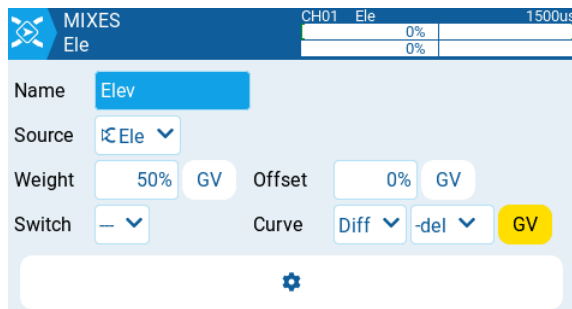
MIXES

CH1-CH2 for X-tail

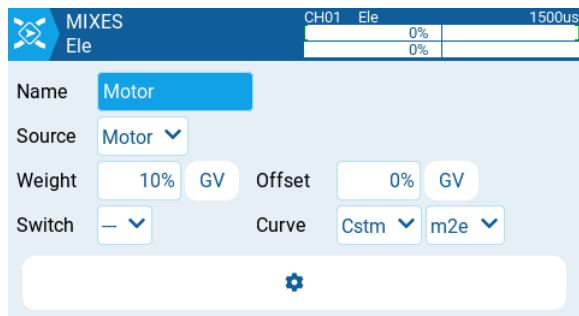
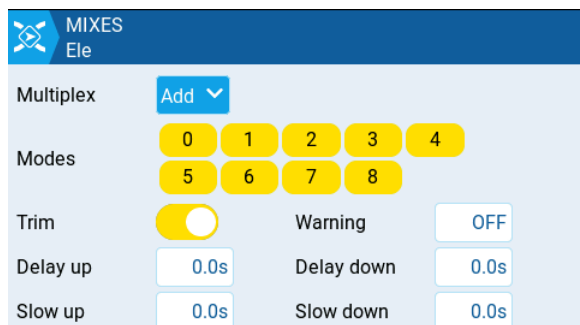
```
CH1:Ele      I2:Ele Weight(+50%) Diff(-GV7:del) [Elev]
             += CH6:Motor Weight(+10%) Flight mode(FM1:MOTOR ON) NoTrim Custom(CV13:m2e) [Motor]
             += I3:Brk Weight(+10%) Flight mode(FM2:LANDING) NoTrim Custom(CV14:b2e) [Brake]
CH2:Rud      I4:Rud Weight(+50%) [Rudder]
             += I1:Ail Weight(+GV6:a2r) NoTrim [Ai2Ru]
```



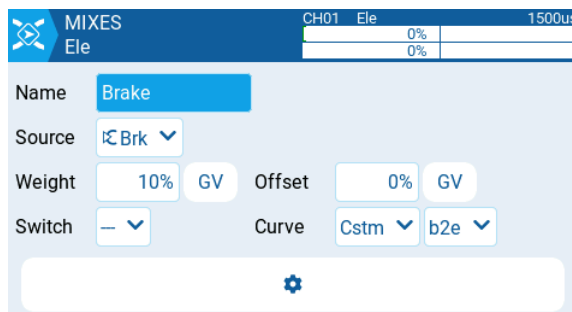
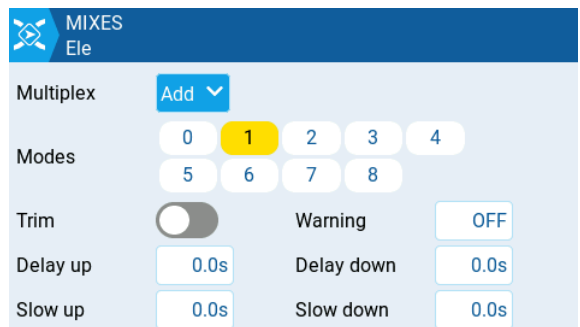
Elevator mixes



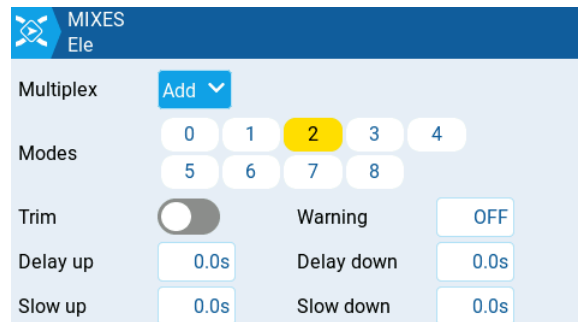
Elevator



Motor to elevator



Break (Butterfly) to elevator



MIXES

Rud 50% Rud Rudder

CH2 \oplus a2r Ail Ai2Ru

Rudder mixes

MIXES CH02 Rud 1500us

Rud 0% 0%

Name Rudder

Source Rud

Weight 50% GV Offset 0% GV

Switch $-$ Curve Diff 0% GV

Rudder

MIXES Rud

Multiplex Add

Modes 0 1 2 3 4 5 6 7 8

Trim Warning OFF

Delay up 0.0s Delay down 0.0s

Slow up 0.0s Slow down 0.0s

MIXES CH02 Rud 1500us

Rud 0% 0%

Name Ai2Ru

Source Ail

Weight a2r GV Offset 0% GV

Switch $-$ Curve Diff 0% GV

Aileron to rudder

MIXES Rud

Multiplex Add

Modes 0 1 2 3 4 5 6 7 8

Trim Warning OFF

Delay up 0.0s Delay down 0.0s

Slow up 0.0s Slow down 0.0s

CH1-CH2 for V-tail

```

CH1:Vt_L      I2:Ele Weight(+40%) Diff(-GV7:del) [Elev]
              += I4:Rud Weight(-40%) Diff(-GV8:dru) [Rudder]
              += I1:Ail Weight(-GV6:a2r) NoTrim Diff(-GV8:dru) [Ai2Rud]
              += CH6:Motor Weight(+10%) Flight mode(FM1:MOTOR ON) NoTrim Custom(CV13:m2e) [Motor]
              += I3:Brk Weight(+10%) Flight mode(FM2:LANDING) NoTrim Custom(CV14:b2e) [Brake]

CH2:Vt_R      I2:Ele Weight(+40%) Diff(-GV7:del) [Elev]
              += I4:Rud Weight(+40%) Diff(-GV8:dru) [Rudder]
              += I1:Ail Weight(+GV6:a2r) NoTrim Diff(-GV8:dru) [Ai2Ru]
              += CH6:Motor Weight(+10%) Flight mode(FM1:MOTOR ON) NoTrim Custom(CV13:m2e) [Motor]
              += I3:Brk Weight(+10%) Flight mode(FM2:LANDING) NoTrim Custom(CV14:b2e) [Brake]
  
```

MIXES

Vt_L 40% Ele Elev D-del

\oplus -40% Rud Rudder D-dru

\oplus -a2r Ail Ai2Rud D-dru

\oplus 10% Motor Motor m2e 0T2345678

CH1 \oplus 10% Brk Brake b2e 0T2345678

V-tail Left mixes

MIXES CH01 Vt_L 1500us

Vt_L 0% 0%

Name Elev

Source Ele

Weight 40% GV Offset 0% GV

Switch $-$ Curve Diff -del GV

Elevator

MIXES Vt_L

Multiplex Add

Modes 0 1 2 3 4 5 6 7 8

Trim Warning OFF

Delay up 0.0s Delay down 0.0s

Slow up 0.0s Slow down 0.0s

MIXES Vt_L CH01 Vt_L 1500us

Name: Rudder

Source: Rud

Weight: -40% GV Offset: 0% GV

Switch: -- Curve: Diff -dru GV

Rudder

MIXES Vt_L

Multiplex: Add

Modes: 0 1 2 3 4 5 6 7 8

Trim: Warning: OFF

Delay up: 0.0s Delay down: 0.0s

Slow up: 0.0s Slow down: 0.0s

MIXES Vt_L CH01 Vt_L 1500us

Name: Ai2Rud

Source: Ail

Weight: -a2r GV Offset: 0% GV

Switch: -- Curve: Diff -dru GV

Aileron to rudder

MIXES Vt_L

Multiplex: Add

Modes: 0 1 2 3 4 5 6 7 8

Trim: Warning: OFF

Delay up: 0.0s Delay down: 0.0s

Slow up: 0.0s Slow down: 0.0s

MIXES Vt_L CH01 Vt_L 1500us

Name: Motor

Source: Motor

Weight: 10% GV Offset: 0% GV

Switch: -- Curve: Cstm m2e

Motor to elevator

MIXES Vt_L

Multiplex: Add

Modes: 0 1 2 3 4 5 6 7 8

Trim: Warning: OFF

Delay up: 0.0s Delay down: 0.0s

Slow up: 0.0s Slow down: 0.0s

MIXES Vt_L CH01 Vt_L 1500us

Name: Brake

Source: Brk

Weight: 10% GV Offset: 0% GV

Switch: -- Curve: Cstm b2e

Brake (Butterfly) to elevator

MIXES Vt_L

Multiplex: Add

Modes: 0 1 2 3 4 5 6 7 8

Trim: Warning: OFF

Delay up: 0.0s Delay down: 0.0s

Slow up: 0.0s Slow down: 0.0s

MIXES

Vt_R

- 40% Ele Elev D-del
- 40% Rud Rudder D-dru
- a2r Ail Ai2Ru D-dru
- 10% Motor Motor m2e
- 10% Brk Brake b2e

CH2

V-tail Right mixes

MIXES Vt_R

CH02 Vt_R 1500us

Name Elev

Source Ele

Weight 40% GV Offset 0% GV

Switch - Curve Diff -del GV

Elevator

MIXES Vt_R

Multiplex Add

Modes 0 1 2 3 4 5 6 7 8

Trim Warning OFF

Delay up 0.0s Delay down 0.0s

Slow up 0.0s Slow down 0.0s

MIXES Vt_R

CH02 Vt_R 1500us

Name Ai2Ru

Source Ail

Weight a2r GV Offset 0% GV

Switch - Curve Diff -dru GV

Aileron to rudder

MIXES Vt_R

Multiplex Add

Modes 0 1 2 3 4 5 6 7 8

Trim Warning OFF

Delay up 0.0s Delay down 0.0s

Slow up 0.0s Slow down 0.0s

MIXES Vt_R

CH02 Vt_R 1500us

Name Motor

Source Motor

Weight 10% GV Offset 0% GV

Switch - Curve Cstm m2e

Motor to elevator

MIXES Vt_R

Multiplex Add

Modes 0 1 2 3 4 5 6 7 8

Trim Warning OFF

Delay up 0.0s Delay down 0.0s

Slow up 0.0s Slow down 0.0s

MIXES Vt_R

CH02 Vt_R 1500us

Name Brake

Source Brk

Weight 10% GV Offset 0% GV

Switch - Curve Cstm b2e

Break (Butterfly) to elevator

MIXES Vt_R

Multiplex Add

Modes 0 1 2 3 4 5 6 7 8

Trim Warning OFF

Delay up 0.0s Delay down 0.0s

Slow up 0.0s Slow down 0.0s

CH3-CH4 for Aileron

```

CH3:Ail_L      I1:Ail Weight(+50%) NoTrim Diff(-GV1:dif) [Ailer]
               += TrmA Weight(+15%) [Trim]
               += I3:Brk Weight(+30%) Flight mode(FM2:LANDING) NoTrim [Brake]
               += MAX Weight(+GV2:cal) NoTrim [CmbSet]

CH4:Ail_R      I1:Ail Weight(+50%) NoTrim Diff(GV1:dif) [Ailer]
               += TrmA Weight(+15%) [Trim]
               += I3:Brk Weight(-30%) Flight mode(FM2:LANDING) NoTrim [Brake]
               += MAX Weight(-GV3:car) NoTrim [CmbSet]
    
```

Aileron Left mixes

Aileron

Trim (For info, see: [Clinic-diff](#))

Brake (Butterfly)

Camber setting

MIXES

Ail_R 50% Ail Ailer Ddif

15% Ail Trim

-30% Brk Brake 012345678

CH4 -car MAX CmbSet

Aileron Right mixes

MIXES Ail_R CH04 Ail_R 1500us

Name Ailer

Source Ail

Weight 50% GV Offset 0% GV

Switch -- Curve Diff dif GV

MIXES Ail_R

Multiplex Add

Modes 0 1 2 3 4 5 6 7 8

Trim Warning OFF

Delay up 0.0s Delay down 0.0s

Slow up 0.0s Slow down 0.0s

Aileron

MIXES Ail_R CH04 Ail_R 1500us

Name Trim

Source Ail

Weight 15% GV Offset 0% GV

Switch -- Curve Diff 0% GV

MIXES Ail_R

Multiplex Add

Modes 0 1 2 3 4 5 6 7 8

Trim Warning OFF

Delay up 0.0s Delay down 0.0s

Slow up 0.0s Slow down 0.0s

Trim (For info, see: [Clinic-diff](#))

MIXES Ail_R CH04 Ail_R 1500us

Name Brake

Source Brk

Weight -30% GV Offset 0% GV

Switch -- Curve Diff 0% GV

MIXES Ail_R

Multiplex Add

Modes 0 1 2 3 4 5 6 7 8

Trim Warning OFF

Delay up 0.0s Delay down 0.0s

Slow up 0.0s Slow down 0.0s

Brake (Butterfly)

MIXES Ail_R CH04 Ail_R 1500us

Name CmbSet

Source MAX

Weight -car GV Offset 0% GV

Switch -- Curve Diff 0% GV

MIXES Ail_R

Multiplex Add

Modes 0 1 2 3 4 5 6 7 8

Trim Warning OFF

Delay up 0.0s Delay down 0.0s

Slow up 0.0s Slow down 0.0s

Camber setting

CH5 for armed (used in ExpressLRS system) (Not used as Rx output)

CH5:armed MAX Weight(+100%) NoTrim [ch5]

MIXES

armed
CH5 100% MAX ch5

ExpressLRS armed

MIXES armed CH05 armed 2012us

100%	
100%	

Name: ch5

Source: MAX

Weight: 100% GV Offset: 0% GV

Switch: -- Curve: Diff 0% GV

MIXES armed

Multiplex: Add

Modes: 0 1 2 3 4
5 6 7 8

Trim: Warning: OFF

Delay up: 0.0s Delay down: 0.0s

Slow up: 0.0s Slow down: 0.0s

ch5

CH6 for Motor

MIXES

Motor -100%MAX Off 0T2345678

CH6 100% SB On mot 0T2345678

Motor mixes

MIXES Motor CH06 Motor 988us

-100%	
-100%	

Name: Off

Source: MAX

Weight: -100% GV Offset: 0% GV

Switch: -- Curve: Diff 0% GV

MIXES Motor

Multiplex: Add

Modes: 0 1 2 3 4
5 6 7 8

Trim: Warning: OFF

Delay up: 0.0s Delay down: 0.0s

Slow up: 0.0s Slow down: 0.0s

Motor off

MIXES Motor CH06 Motor 988us

-100%	
-100%	

Name: On

Source: SB

Weight: 100% GV Offset: 0% GV

Switch: -- Curve: Cstm mot

MIXES Motor

Multiplex: Replace

Modes: 0 1 2 3 4
5 6 7 8

Trim: Warning: OFF

Delay up: 0.0s Delay down: 0.0s

Slow up: 0.0s Slow down: 0.0s

Motor on

CH7-CH8 for Flap

```

CH7:Flp_L      I1:Ail Weight(+50%) Flight modes(FM0:CRUISE, FM1:MOTOR ON, FM3, FM4:DISTANCE, FM5, FM6:THERMAL, FM7, FM8) NoTrim Diff(-GV1:dif) [Flap]
* = I1:Ail Weight(+100%) NoTrim Custom(CV10:fpL) [End]
+= MAX Weight(-60%) NoTrim [Offset]
+= I3:Brk Weight(+120%) Flight mode(FM2:LANDING) NoTrim [Brake]
+= MAX Weight(+GV4:cfl) NoTrim [CmbSet]

CH8:Flp_R      I1:Ail Weight(+50%) Flight modes(FM0:CRUISE, FM1:MOTOR ON, FM3, FM4:DISTANCE, FM5, FM6:THERMAL, FM7, FM8) NoTrim Diff(GV1:dif) [Flap]
* = I1:Ail Weight(+100%) NoTrim Custom(CV11:fpR) [End]
+= MAX Weight(+60%) NoTrim [Offset]
+= I3:Brk Weight(-120%) Flight mode(FM2:LANDING) NoTrim [Brake]
+= MAX Weight(-GV5:cfr) NoTrim [CmbSet]
    
```

MIXES

Flp_L

- 50% Ail Flap D-dif
- 100% Ail End fpL
- 60% MAX Offset
- 120% Brk Brake
- cfl MAX CmbSet

Flap Left mixes

MIXES Flp_L

Name: Flap

Source: Ail

Weight: 50% GV Offset: 0% GV

Switch: - Curve: Diff -dif GV

Aileron to flap

MIXES Flp_L

Multiplex: Add

Modes: 0 1 2 3 4 5 6 7 8

Trim: Warning OFF

Delay up: 0.0s Delay down: 0.0s

Slow up: 0.0s Slow down: 0.0s

MIXES Flp_L

Name: End

Source: Ail

Weight: 100% GV Offset: 0% GV

Switch: - Curve: Cstm fpL

Flap end

MIXES Flp_L

Multiplex: Multiply

Modes: 0 1 2 3 4 5 6 7 8

Trim: Warning OFF

Delay up: 0.0s Delay down: 0.0s

Slow up: 0.0s Slow down: 0.0s

MIXES Flp_L

Name: Offset

Source: MAX

Weight: -60% GV Offset: 0% GV

Switch: - Curve: Diff 0% GV

Flap offset

MIXES Flp_L

Multiplex: Add

Modes: 0 1 2 3 4 5 6 7 8

Trim: Warning OFF

Delay up: 0.0s Delay down: 0.0s

Slow up: 0.0s Slow down: 0.0s

MIXES Flp_L

Name: Brake

Source: Brk

Weight: 120% GV Offset: 0% GV

Switch: - Curve: Diff 0% GV

Brake (Butterfly)

MIXES Flp_L

Multiplex: Add

Modes: 0 1 2 3 4 5 6 7 8

Trim: Warning OFF

Delay up: 0.0s Delay down: 0.0s

Slow up: 0.0s Slow down: 0.0s

MIXES Flp_L

CH07 Flp_L 1193us

Name: CmbSet

Source: MAX

Weight: cfl GV Offset: 0% GV

Switch: - Curve: Diff 0% GV

Camber setting

MIXES Flp_L

Multiplex: Add

Modes: 0 1 2 3 4 5 6 7 8

Trim: Warning OFF

Delay up: 0.0s Delay down: 0.0s

Slow up: 0.0s Slow down: 0.0s

MIXES

Flp_R

50% Ail Flap Ddif 012345678

100% Ail End fpR

60% MAX Offset

-120% Brk Brake 012345678

-cfr MAX CmbSet

CH8

Flap Right mixes

MIXES Flp_R

CH08 Flp_R 1807us

Name: Flap

Source: Ail

Weight: 50% GV Offset: 0% GV

Switch: - Curve: Diff dif GV

Aileron to flap

MIXES Flp_R

Multiplex: Add

Modes: 0 1 2 3 4 5 6 7 8

Trim: Warning OFF

Delay up: 0.0s Delay down: 0.0s

Slow up: 0.0s Slow down: 0.0s

MIXES Flp_R

CH08 Flp_R 1807us

Name: End

Source: Ail

Weight: 100% GV Offset: 0% GV

Switch: - Curve: Cstm fpR

Flap end

MIXES Flp_R

Multiplex: Multiply

Modes: 0 1 2 3 4 5 6 7 8

Trim: Warning OFF

Delay up: 0.0s Delay down: 0.0s

Slow up: 0.0s Slow down: 0.0s

MIXES Flp_R

CH08 Flp_R 1807us

Name: Offset

Source: MAX

Weight: 60% GV Offset: 0% GV

Switch: - Curve: Diff 0% GV

Flap offset

MIXES Flp_R

Multiplex: Add

Modes: 0 1 2 3 4 5 6 7 8

Trim: Warning OFF

Delay up: 0.0s Delay down: 0.0s

Slow up: 0.0s Slow down: 0.0s

MIXES Flp_R

CH08 Flp_R 1807us

Name: Brake

Source: Brk

Weight: -120% GV Offset: 0% GV

Switch: - Curve: Diff 0% GV

Brake (Butterfly)

MIXES Flp_R

Multiplex: Add

Modes: 0 1 2 3 4 5 6 7 8

Trim: Warning OFF

Delay up: 0.0s Delay down: 0.0s

Slow up: 0.0s Slow down: 0.0s

MIXES Flp_R CH08 Flp_R 1807us

60%	
60%	

Name: CmbSet

Source: MAX

Weight: -cfr **GV** Offset: 0% GV

Switch: - Curve: Diff 0% GV

Camber setting

MIXES Flp_R

Multiplex: Add

Modes: 0 1 2 3 4
5 6 7 8

Trim: Warning: OFF

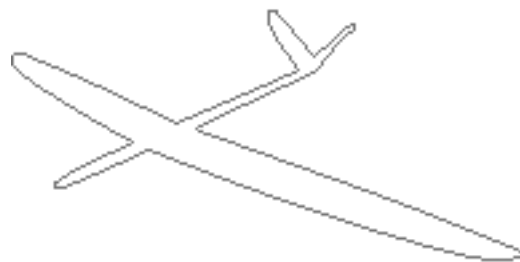
Delay up: 0.0s Delay down: 0.0s

Slow up: 0.0s Slow down: 0.0s

SPECIAL FUNCTIONS

SPECIAL FUNCTIONS

None



=====

Basic Configuration Template [Download](#):

[Glider-X Basic](#)

[Glider-V Basic](#)

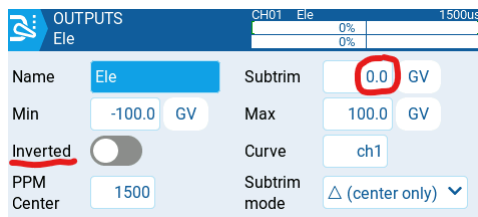
=====

Setup (Basic Configuration)

NEUTRAL

Elevator for X-tail

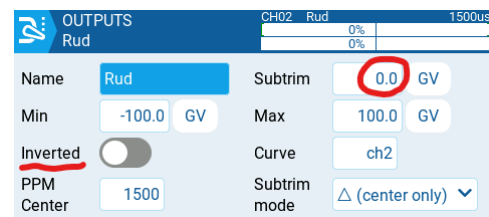
- 1) Check for direction (use Inverted).
- 2) Setup neutral with Subtrim.



OUTPUTS – Ele

Rudder for X-tail

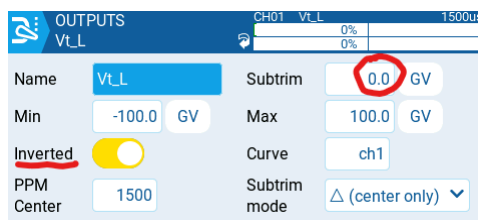
- 3) Check for direction (use Inverted).
- 4) Setup neutral with Subtrim.



OUTPUTS – Rud

Elevator Vtail Left for V-tail

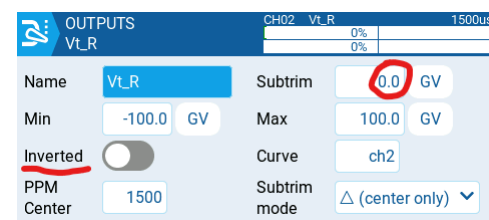
- 1) Check for direction (use Inverted).
- 2) Setup neutral with Subtrim.



OUTPUTS – Vt_L

Elevator Vtail Right for V-tail

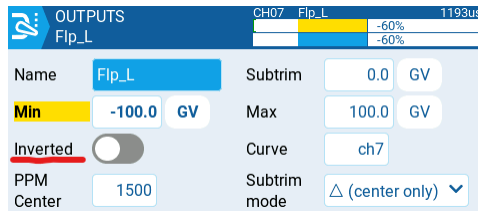
- 3) Check for direction (use Inverted).
- 4) Setup neutral with Subtrim.



OUTPUTS – Vt_R

Flap Left

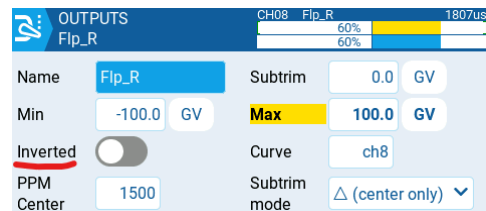
- 5) Check for direction (use Inverted).



OUTPUTS – Flp_L

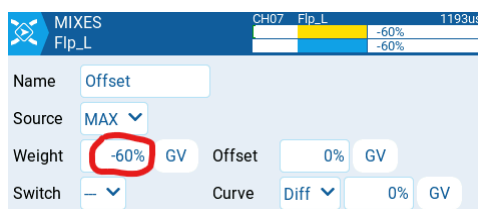
Flap Right

- 7) Check for direction (use Inverted).



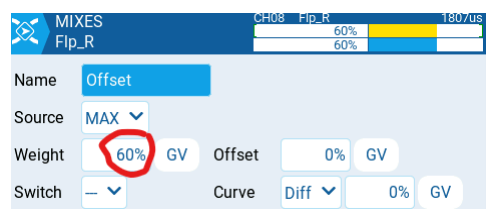
OUTPUTS – Flp_R

- 6) Setup neutral with Weight.



MIXES – Flp_L

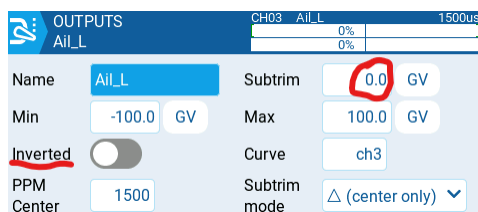
- 8) Setup neutral with Weight.



MIXES – Flp_R

Aileron Left

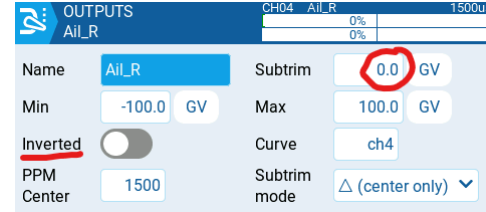
- 9) Check for direction (use Inverted).
- 10) Setup neutral with Subtrim.



OUTPUTS – Ail_L

Aileron Right

- 11) Check for direction (use Inverted).
- 12) Setup neutral with Subtrim.



OUTPUTS – Ail_R

ENDPOINT

Elevator for X-tail

- 13) Setup same endpoint for up and down with Min or Max. Example: 20 up, 20 dn [mm]

OUTPUTS – Ele

OUTPUTS – Ele

Rudder for X-tail

- 14) Setup same endpoint for left and right with Min or Max. Example: 60 left, 60 right [mm]

OUTPUTS – Rud

OUTPUTS – Rud

Elevator Vtail Left for V-tail

- 13) Setup same endpoint for up and down with Min or Max. Example: 20 up, 20 dn [mm]

OUTPUTS – Vt_L

OUTPUTS – Vt_L

Elevator Vtail Right for V-tail

- 14) Setup same endpoint for up and down with Min or Max. Example: 20 up, 20 dn [mm]

OUTPUTS – Vt_R

OUTPUTS – Vt_R

Aileron Left

- 15) Setup same endpoint for up and down with Min or Max. Example: 25 up, 25 dn [mm]

OUTPUTS – Ail_L

OUTPUTS – Ail_L

Aileron Right

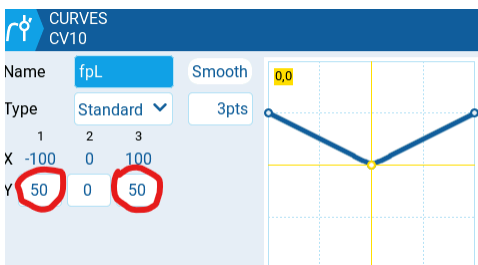
- 16) Setup same endpoint for up and down with Min or Max. Example: 25 up, 25 dn [mm]

OUTPUTS – Ail_R

OUTPUTS – Ail_R

Flap Left

- 17) Setup same endpoint for up and down by using curve CV10:fpL.

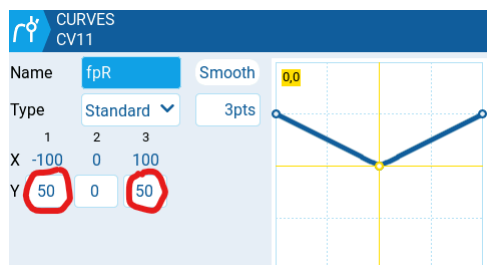


CURVES – CV10:fpL

Change one of the values to achieve the same endpoint. Example: 10 up, 10 dn [mm]

Flap Right

- 18) Setup same endpoint for up and down by using curve CV11:fpR.



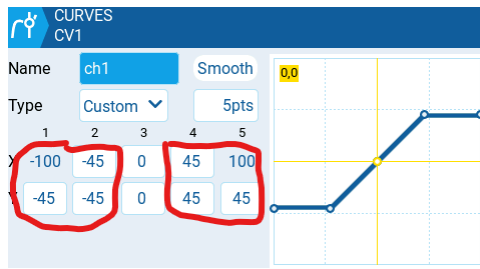
CURVES – CV11:fpR

Change one of the values to achieve the same endpoint. Example: 10 up, 10 dn [mm]

LIMIT

If there is a need for setting a channel output limit, i.e. like a “mechanical stop”, the channel output curve can be used.

Example, setting a limit for channel 1 to 45% output (both directions):



CURVES – CV1:ch1

TRAVEL (For use in flight)

Elevator for X-tail

19) Setup same travel for up and down with Weight. *Example: 12 up, 12 dn [mm]*

MIXES Ele CH01 Ele 1500us
0%
0%

Name Elev
Source Ele
Weight 50% GV Offset 0% GV
Switch -- Curve Diff -del GV

MIXES – Ele

20) Setup different travel for up and down with Diff – del. *Example: 12 up, 10 dn [mm]*

MIXES Ele CH01 Ele 1500us
0%
0%

Name Elev
Source Ele
Weight 50% GV Offset 0% GV
Switch -- Curve Diff -del GV

MIXES – Ele

GLOBAL VARIABLES									
car	FM0 0%	FM1 FM0	FM2 FM0	FM3 -10%	FM4 -5%	FM5 FM6	FM6 10%	FM7 FM0	FM8 FM0
cfi	FM0 0%	FM1 FM0	FM2 FM0	FM3 -10%	FM4 -5%	FM5 FM6	FM6 10%	FM7 FM0	FM8 FM0
cfr	FM0 0%	FM1 FM0	FM2 FM0	FM3 -10%	FM4 -5%	FM5 FM6	FM6 10%	FM7 FM0	FM8 FM0
a2r	FM0 0%	FM1 FM0	FM2 FM0	FM3 FM0	FM4 FM0	FM5 FM0	FM6 FM0	FM7 FM0	FM8 FM0
del	FM0 0%	FM1 FM0	FM2 FM0	FM3 FM0	FM4 FM0	FM5 FM0	FM6 FM0	FM7 FM0	FM8 FM0

GLOBAL VARIABLES - del

Rudder for X-tail

21) Setup same travel for left and right with Weight. *Example: 45 left, 45 right [mm]*

MIXES Rud CH02 Rud 1500us
0%
0%

Name Rudder
Source Rud
Weight 50% GV Offset 0% GV
Switch -- Curve Diff 0% GV

MIXES – Rud

22) – 23) 'None'

Elevator Vtail Left for V-tail

19) Setup same travel for up and down with Weight. *Example: 12 up, 12 dn [mm]*

MIXES Vt_L CH01 Vt_L 1500us
0%
0%

Name Elev
Source Ele
Weight 40% GV Offset 0% GV
Switch -- Curve Diff -del GV

MIXES – Vt_L

20) Setup different travel for up and down with Diff – del. *Example: 12 up, 10 dn [mm]*

MIXES – Vt_L

GLOBAL VARIABLES									
car	FMD 0%	FM1 FMD	FM2 FMD	FM3 -10%	FM4 -5%	FM5 FM6	FM6 10%	FM7 FMD	FM8 FMD
cfi	FMD 0%	FM1 FMD	FM2 FMD	FM3 -10%	FM4 -5%	FM5 FM6	FM6 10%	FM7 FMD	FM8 FMD
cfr	FMD 0%	FM1 FMD	FM2 FMD	FM3 -10%	FM4 -5%	FM5 FM6	FM6 10%	FM7 FMD	FM8 FMD
a2r	FMD 0%	FM1 FMD	FM2 FMD	FM3 FMD	FM4 FMD	FM5 FMD	FM6 FMD	FM7 FMD	FM8 FMD
del	FMD 0%	FM1 FMD	FM2 FMD	FM3 FMD	FM4 FMD	FM5 FMD	FM6 FMD	FM7 FMD	FM8 FMD

GLOBAL VARIABLES - del

Elevator Vtail Right for V-tail

21) Setup travel for up and down with Weight. *Example: 12 up, 10 dn [mm]*

MIXES – Vt_R

Rudder Vtail Left for V-tail

22) Setup same travel for left and right with Weight. *Example: 15 up, 14 dn [mm]*

MIXES – Vt_L

Rudder Vtail Right for V-tail

23) Setup travel for left and right with Weight. *Example: 15 up, 14 dn [mm]*

MIXES – Vt_R

Aileron Left

24) Setup same travel for up and down with Weight. *Example: 20 up, 20 dn [mm]*

MIXES	CH03	Ail_L	1500us
Ail_L		0%	
		0%	

Name: Ailer
Source: Ai_L
Weight: 50% GV Offset: 0% GV
Switch: -- Curve: Diff -dif GV

MIXES – Ai_L_L

25) Setup different travel for up and down with Diff – dif. *Example: 20 up, 15 dn [mm]*

MIXES	CH03	Ail_L	1500us
Ail_L		0%	
		0%	

Name: Ailer
Source: Ai_L
Weight: 50% GV Offset: 0% GV
Switch: -- Curve: Diff dif GV

MIXES – Ai_L_L

GLOBAL VARIABLES									
dif	FMD	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
0%	FMD	FMD	FMD	0%	FMD	0%	FMD	FMD	FMD

GLOBAL VARIABLES – dif

Aileron Right

26) Setup travel up and down with Weight. *Example: 20 up, 15 dn [mm]*

MIXES	CH04	Ail_R	1500us
Ail_R		0%	
		0%	

Name: Ailer
Source: Ai_L
Weight: 50% GV Offset: 0% GV
Switch: -- Curve: Diff dif GV

MIXES – Ai_R_R

Flap Left

27) Setup travel for up with Weight. *Example: 8 up [mm]*
(Down travel is set by aileron diff.)

MIXES	CH07	Flp_L	1193us
Flp_L		-60%	
		-60%	

Name: Flap
Source: Ai_L
Weight: 50% GV Offset: 0% GV
Switch: -- Curve: Diff -dif GV

MIXES – Flp_L

Flap Right

28) Setup travel for up with Weight. *Example: 8 up [mm]*
(Down travel is set by aileron diff.)

MIXES	CH08	Flp_R	1807us
Flp_R		60%	
		60%	

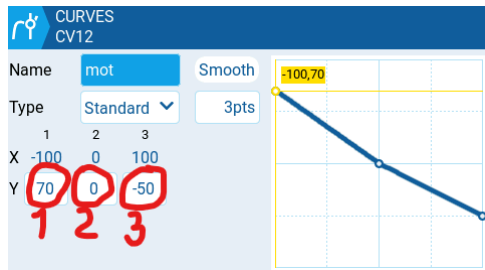
Name: Flap
Source: Ai_L
Weight: 50% GV Offset: 0% GV
Switch: -- Curve: Diff dif GV

MIXES – Flp_R

Motor

29) Setup motor speed by using curve CV12: mot.

1. High speed Example: 70% (or 100%)
2. Mid speed Example: 0%
3. Low speed Example: -50% (above -55% is mandatory due to F5J height meter.)

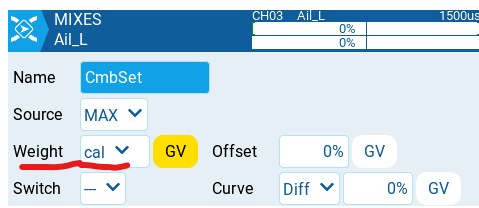


CURVES – CV12: mot

CAMBER

Aileron Left

30) Setup camber for left aileron using Weight cal (Flight Modes).



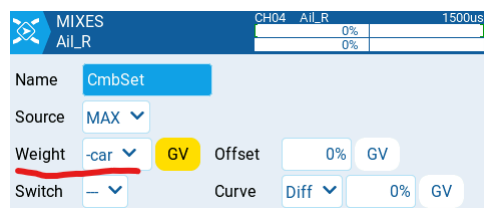
MIXES – Ail_L

GLOBAL VARIABLES									
cal	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0
car	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0
cfl	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0
cfr	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0

GLOBAL VARIABLES – cal

Aileron Right

31) Setup camber for right aileron using Weight car (Flight Modes).



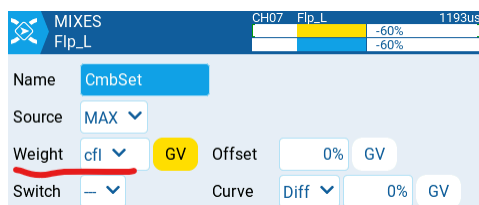
MIXES – Ail_R

GLOBAL VARIABLES									
cal	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0
car	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0
cfl	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0
cfr	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0

GLOBAL VARIABLES - car

Flap Left

32) Setup camber for left flap using Weight cfl (Flight Modes).



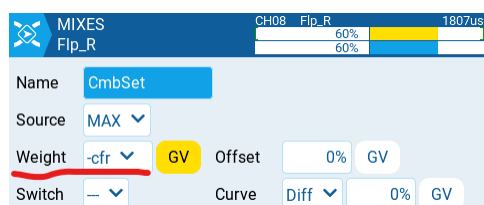
MIXES – Flp_L

GLOBAL VARIABLES									
dif	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	FM4	0%	FM6	0%	FM0	FM0
cal	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0
car	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0
cfl	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0
cfr	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0

GLOBAL VARIABLES – cfl

Flap Right

33) Setup camber for right flap using Weight cfr (Flight Modes).



MIXES – Flp_R

GLOBAL VARIABLES									
dif	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	FM4	0%	FM6	0%	FM0	FM0
cal	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0
car	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0
cfl	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0
cfr	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0

GLOBAL VARIABLES - cfr

BREAK (Butterfly)

Aileron Left

34) Setup break position with Weight.

MIXES – Ail_L

Flap Left

36) Setup break position with Weight.

MIXES – Flp_L

Aileron Right

35) Setup break position with Weight.

MIXES – Ail_R

Flap Right

37) Setup break position with Weight.

MIXES – Flp_R

AILERON to RUDDER

Ail2Rud for X-tail

38) Setup Aileron to rudder with Weight - a2r.

MIXES – Rud

MIXES – Rud

GLOBAL VARIABLES									
cfr	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0
a2r	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	FM0	FM0	FM0	FM0	FM0	FM0

GLOBAL VARIABLES – a2r

Ail2Rud for V-tail

38) Setup Aileron to Vtail with Weight – a2r.

MIXES – Vt_L

MIXES – Vt_L

MIXES – Vt_R

MIXES – Vt_R

GLOBAL VARIABLES									
cfr	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0
a2r	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	FM0	FM0	FM0	FM0	FM0	FM0

GLOBAL VARIABLES – a2r

Setup after flight (Basic Configuration)

MOTOR to ELEVATOR

Elevator

- A. Setup motor speed to elevator mix by using motor mix and curve CV13:m2e.

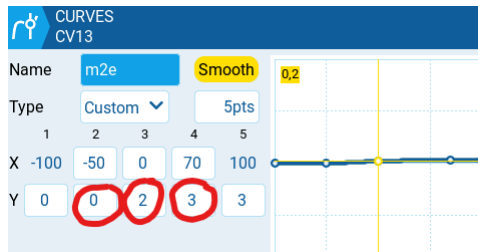
These values equal the motor speed,

- 1: High
- 2: Mid
- 3: Low



CURVES – CV13:m2e

Elevator mix values:



CURVES – CV13:m2e

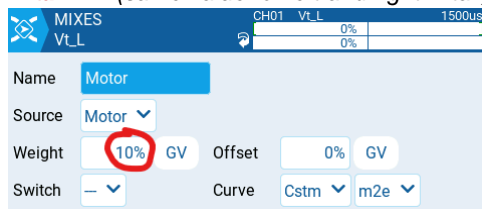
X-tail: Elevator mix Weight value:



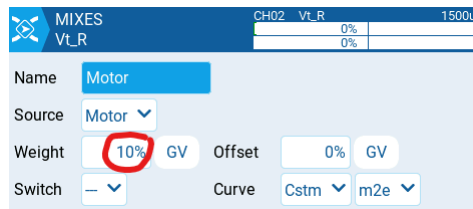
sets the total "gain".

MIXES – Ele

V-tail: (same value for left and right V-tail)



MIXES – Vt_L



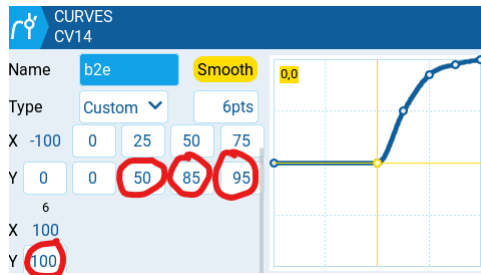
MIXES – Vt_R

BREAK (Butterfly) to ELEVATOR

Elevator

- B. Setup break to elevator mix by using elevator mix and curve CV14:b2e.

Elevator mix values:



CURVES – CV14:b2e

X-tail: Elevator mix Weight value:

MIXES	Ele	1500us
Ele	0%	0%

Name Brake
Source Brk
Weight 10% GV Offset 0% GV
Switch - Curve Cstm b2e

sets the total "gain".

MIXES – Ele

V-tail: (same value for left and right V-tail)

MIXES	Vt_L	1500us
Vt_L	0%	0%

Name Brake
Source Brk
Weight 10% GV Offset 0% GV
Switch - Curve Cstm b2e

MIXES – Vt_L

MIXES	Vt_R	1500us
Vt_R	0%	0%

Name Brake
Source Brk
Weight 10% GV Offset 0% GV
Switch - Curve Cstm b2e

MIXES – Vt_R

EXTENDED CONFIGURATION (added)

Preparation – FM3: SPEED and FM5: THERMAL V

INPUTS

I1:Ail	Ail Weight (+100%)
I2:Ele	Ele Weight (+100%)
I3:Brk	Thr Weight (-50%) No Trim Offset (50%)
I4:Rud	Rud Weight (+100%)
I5:Cmb	LS Weight (+100%) OFF

For variable camber:

The screenshot shows the configuration for the 'Cmb' input. On the left, the 'INPUTS' panel for 'Cmb' includes fields for 'Input name' (Cmb), 'Line name' (empty), 'Source' (LS), 'Weight' (100% GV), 'Offset' (0% GV), 'Switch' (empty), and 'Curve' (Expo 0% GV). Two graphs show a linear relationship. On the right, the 'INPUTS' panel for 'Cmb' shows 'Side' (empty), 'Trim' (OFF), and 'Modes' (0-8 buttons).

CURVES

CV15 (Camber to elevator curve):

The CV15 curve configuration panel shows a graph with a pink curve. The name is 'c2e', the type is 'Standard', it has 3 points with coordinates [-10, 0, 5], and 'Smooth' is set to 'Yes'.

The screenshot shows the configuration for the 'CV15' curve. The 'CURVES' panel for 'CV15' includes fields for 'Name' (c2e), 'Type' (Standard), 'Smooth' (Smooth), and '3pts'. The points are defined as: X [-100, 0, 100] and Y [-10, 0, 5]. A graph shows the resulting curve.

LOGICAL SWITCHES

#	Function	V1	V2	AND Switch	Duration	Delay
L01	AND	SA↓	----	----	0.0	0.0
L02	a<x	Thr	92	----	0.0	0.0
L03	AND	SC↑	SD↑	----	0.0	0.0
L04	AND	SC↑	----	----	0.0	0.0
L05	AND	SC↓	SF↓	----	0.0	0.0
L06	AND	SC↓	----	----	0.0	0.0

LOGICAL SWITCHES

L01 AND	SA↓	--	--
L02 a<x	Thr	92	--
L03 AND	SC↑	SD↑	--
L04 AND	SC↑	--	--
L05 AND	SC↓	SF↓	--
L06 AND	SC↓	--	--

LOGICAL SWITCHES L03

Function: AND

V1: SC↑

V2: SD↑

AND switch: --

Duration: 0.0s

Delay: --

Used for FM3 (SPEED)

LOGICAL SWITCHES L05

Function: AND

V1: SC↓

V2: SF↓

AND switch: --

Duration: 0.0s

Delay: --

Used for FM5 (THERMAL V)

FLIGHT MODES

FLIGHT MODES									
FM0 CRUISE		=0	=0	=0	=0	=0	=0	0.0s	0.0s
FM1 MOTOR ON	L01	=0	=1	=0	=0	=0	=0	0.0s	0.0s
FM2 LANDING	L02	=0	=2	=0	=0	=0	=0	0.4s	0.4s
FM3 SPEED	L03	=0	=3	=0	=0	=0	=0	0.0s	0.0s
FM4 DISTANCE	L04	=0	=4	=0	=0	=0	=0	0.0s	0.0s
FM5 THERMAL V	L05	=0	=6	=0	=0	=0	=0	0.0s	0.0s
FM6 THERMAL	L06	=0	=6	=0	=0	=0	=0	0.0s	0.0s
FM7		=0	=0	=0	=0	=0	=0	0.0s	0.0s
FM8		=0	=0	=0	=0	=0	=0	0.0s	0.0s

Note: FM7, FM8 = Not used

FLIGHT MODES FM3

Name: SPEED

Switch: L03

Fade in: 0.0

Fade out: 0.0

Trims:

Rud = 0, Ele = 3, Thr = 0, Ail = 0, T5 = 0, T6 = 0

FLIGHT MODES FM5

Name: THERMAL V

Switch: L05

Fade in: 0.0

Fade out: 0.0

Trims:

Rud = 0, Ele = 6, Thr = 0, Ail = 0, T5 = 0, T6 = 0

MIXES

CH1-CH2 for X-tail

```
CH1:Ele      I2:Ele Weight(+50%) Diff(-GV7:del) [Elev]
             += CH6:Motor Weight(+10%) Flight mode(FM1:MOTOR ON) NoTrim Custom(CV13:m2e) [Motor]
             += I3:Brk Weight(+10%) Flight mode(FM2:LANDING) NoTrim Custom(CV14:b2e) [Brake]
             += I5:Cmb Weight(-10%) Flight mode(FM5:THERMAL V) NoTrim Custom(CV15:c2e) [Cmb]
CH2:Rud      I4:Rud Weight(+50%) [Rudder]
             += I1:Ail Weight(+GV6:a2r) NoTrim [Ai2Ru]
```

MIXES

Ele 50% Ele Elev D-del

⊕ 10% Motor Motor m2e

⊕ 10% Brk Brake b2e

CH1 ⊕ -10% Cmb Cmb c2e

Elevator mixes

MIXES CH01 Ele 1500us

Ele 0% 0%

Name Cmb

Source Cmb

Weight -10% GV Offset 0% GV

Switch - Curve Cstm c2e

MIXES CH01 Ele 1500us

Ele 0% 0%

Multiplex Add

Modes 0 1 2 3 4 5 6 7 8

Trim Warning OFF

Delay up 0.0s Delay down 0.0s

Slow up 0.0s Slow down 0.0s

Variable camber

CH1-CH2 for V-tail

```
CH1:Vt_L     I2:Ele Weight(+40%) Diff(-GV7:del) [Elev]
             += I4:Rud Weight(-40%) Diff(-GV8:dru) [Rudder]
             += I1:Ail Weight(-GV6:a2r) NoTrim Diff(-GV8:dru) [Ai2Rud]
             += CH6:Motor Weight(+10%) Flight mode(FM1:MOTOR ON) NoTrim Custom(CV13:m2e) [Motor]
             += I3:Brk Weight(+10%) Flight mode(FM2:LANDING) NoTrim Custom(CV14:b2e) [Brake]
             += I5:Cmb Weight(-10%) Flight mode(FM5:THERMAL V) NoTrim Custom(CV15:c2e) [Cmb]
CH2:Vt_R     I2:Ele Weight(+40%) Diff(-GV7:del) [Elev]
             += I4:Rud Weight(+40%) Diff(-GV8:dru) [Rudder]
             += I1:Ail Weight(+GV6:a2r) NoTrim Diff(-GV8:dru) [Ai2Ru]
             += CH6:Motor Weight(+10%) Flight mode(FM1:MOTOR ON) NoTrim Custom(CV13:m2e) [Motor]
             += I3:Brk Weight(+10%) Flight mode(FM2:LANDING) NoTrim Custom(CV14:b2e) [Brake]
             += I5:Cmb Weight(-10%) Flight mode(FM5:THERMAL V) NoTrim Custom(CV15:c2e) [Cmb]
```

MIXES

Vt_L 40% Ele Elev D-del

⊕ -40% Rud Rudder D-dru

⊕ -a2r Ail Ai2Rud D-dru

⊕ 10% Motor Motor m2e

⊕ 10% Brk Brake b2e

CH1 ⊕ -10% Cmb Cmb c2e

V-tail Left mixes

MIXES CH01 Vt_L 1500us

Vt_L 0% 0%

Name Cmb

Source Cmb

Weight -10% GV Offset 0% GV

Switch - Curve Cstm c2e

MIXES CH01 Vt_L 1500us

Vt_L 0% 0%

Multiplex Add

Modes 0 1 2 3 4 5 6 7 8

Trim Warning OFF

Delay up 0.0s Delay down 0.0s

Slow up 0.0s Slow down 0.0s

Variable camber

MIXES

Vt_R

- 40% Ele Elev D-del
- 40% Rud Rudder D-dru
- a2r Ail Ai2Ru D-dru
- 10% Motor Motor m2e
- 10% Brk Brake b2e
- 10% Cmb Cmb c2e

CH2

V-tail Right mixes

MIXES

Vt_R

CH02 Vt_R 1500us

Name Cmb

Source Cmb

Weight -10% GV Offset 0% GV

Switch - Curve Cstm c2e

MIXES

Vt_R

Multiplex Add

Modes 0 1 2 3 4 5 6 7 8

Trim Warning OFF

Delay up 0.0s Delay down 0.0s

Slow up 0.0s Slow down 0.0s

Variable camber

CH3-CH4 for Aileron

```

CH3:Ail_L      I1:Ail Weight(+50%) NoTrim Diff(-GV1:dif) [Ailer]
               += TrmA Weight(+15%) [Trim]
               += I3:Brk Weight(+30%) Flight mode(FM2:LANDING) NoTrim [Brake]
               += MAX Weight(+GV2:cal) NoTrim [CmbSet]
               += I5:Cmb Weight(-10%) Flight mode(FM5:THERMAL V) NoTrim Diff(10%) [CmbVar]

CH4:Ail_R      I1:Ail Weight(+50%) NoTrim Diff(GV1:dif) [Ailer]
               += TrmA Weight(+15%) [Trim]
               += I3:Brk Weight(-30%) Flight mode(FM2:LANDING) NoTrim [Brake]
               += MAX Weight(-GV3:car) NoTrim [CmbSet]
               += I5:Cmb Weight(+10%) Flight mode(FM5:THERMAL V) NoTrim Diff(-10%) [CmbVar]
  
```

MIXES

Ail_L

- 50% Ail Ailer D-dif
- 15% Trim
- 30% Brk Brake
- cal MAX CmbSet
- 10% Cmb CmbVar D10%

Aileron Left mixes

MIXES

Ail_L

CH03 Ail_L 1500us

Name CmbVar

Source Cmb

Weight -10% GV Offset 0% GV

Switch - Curve Diff 10% GV

MIXES

Ail_L

Multiplex Add

Modes 0 1 2 3 4 5 6 7 8

Trim Warning OFF

Delay up 0.0s Delay down 0.0s

Slow up 0.0s Slow down 0.0s

Variable camber

MIXES

Ail_R

- 50% Ail Ailer Ddif
- 15% Trim
- 30% Brk Brake
- car MAX CmbSet
- 10% Cmb CmbVar D-10%

Aileron Right mixes

MIXES
Ail_R

CH04 Ail_R 1500us

0%	
0%	

Name: CmbVar

Source: Cmb

Weight: 10% GV Offset: 0% GV

Switch: - Curve: Diff -10% GV

Variable camber

MIXES
Ail_R

Multiplex: Add

Modes: 0 1 2 3 4
5 6 7 8

Trim: Warning: OFF

Delay up: 0.0s Delay down: 0.0s

Slow up: 0.0s Slow down: 0.0s

CH7-CH8 for Flap

```

CH7:Flp_L      I1:Ail Weight(+50%) Flight modes(FM0:CRUISE, FM1:MOTOR ON, FM3:SPEED, FM
*= I1:Ail Weight(+100%) NoTrim Custom(CV10:fpL) [End]
+= MAX Weight(-60%) NoTrim [Offset]
+= I3:Brk Weight(+120%) Flight mode(FM2:LANDING) NoTrim [Brake]
+= MAX Weight(+GV4:cfl) NoTrim [CmbSet]
+= I5:Cmb Weight(-10%) Flight mode(FM5:THERMAL V) NoTrim Diff(50%) [CmbVar]

CH8:Flp_R      I1:Ail Weight(+50%) Flight modes(FM0:CRUISE, FM1:MOTOR ON, FM3:SPEED, FM4
*= I1:Ail Weight(+100%) NoTrim Custom(CV11:fpR) [End]
+= MAX Weight(+60%) NoTrim [Offset]
+= I3:Brk Weight(-120%) Flight mode(FM2:LANDING) NoTrim [Brake]
+= MAX Weight(-GV5:cfr) NoTrim [CmbSet]
+= I5:Cmb Weight(+10%) Flight mode(FM5:THERMAL V) NoTrim Diff(-50%) [CmbVar]

```

MIXES

Flp_L

50% Cmb Flap D-dif 012345678

100% Cmb End fpL

-60% MAX Offset

120% Cmb Brk Brake 012345678

cfl MAX CmbSet

-10% Cmb CmbVar D50% 012345678

Flap Left mixes

MIXES
Flp_L

CH07 Flp_L 1193us

-60%	
-60%	

Name: CmbVar

Source: Cmb

Weight: -10% GV Offset: 0% GV

Switch: - Curve: Diff 50% GV

Variable camber

MIXES
Flp_L

Multiplex: Add

Modes: 0 1 2 3 4
5 6 7 8

Trim: Warning: OFF

Delay up: 0.0s Delay down: 0.0s

Slow up: 0.0s Slow down: 0.0s

MIXES

Flp_R

50% Cmb Flap Ddif 012345678

100% Cmb End fpR

60% MAX Offset

-120% Cmb Brk Brake 012345678

-cfr MAX CmbSet

10% Cmb CmbVar D-50% 012345678

Flap Right mixes

MIXES
Flp_R

CH08 Flp_R 1807us

60%	
60%	

Name: CmbVar

Source: Cmb

Weight: 10% GV Offset: 0% GV

Switch: - Curve: Diff -50% GV

Variable camber

MIXES
Flp_R

Multiplex: Add

Modes: 0 1 2 3 4
5 6 7 8

Trim: Warning: OFF

Delay up: 0.0s Delay down: 0.0s

Slow up: 0.0s Slow down: 0.0s

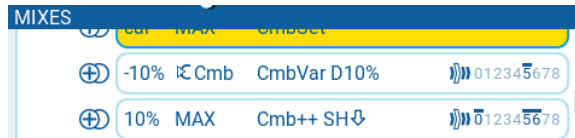
Preparation – Camber++

MIXES

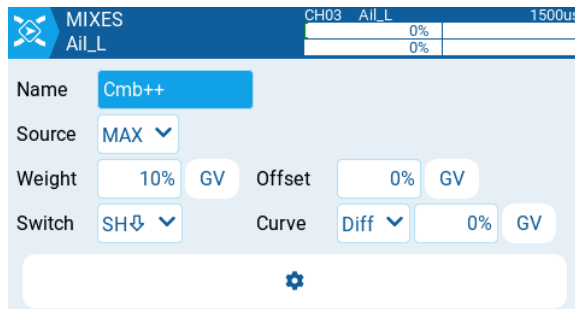
CH3-CH4 for Aileron

```
CH3:Ail_L      I1:Ail Weight(+50%) NoTrim Diff(-GV1:dif) [Ailer]
               += TrmA Weight(+15%) [Trim]
               += I3:Brk Weight(+30%) Flight mode(FM2:LANDING) NoTrim [Brake]
               += MAX Weight(+GV2:cal) NoTrim [CmbSet]
               += I5:Cmb Weight(-10%) Flight mode(FM5:THERMAL V) NoTrim Diff(10%) [CmbVar]
               += MAX Weight(+10%) Flight modes(FM0:CRUISE, FM5:THERMAL V, FM6:THERMAL) Switch(SH,) NoTrim [Cmb++]

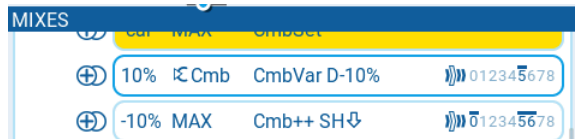
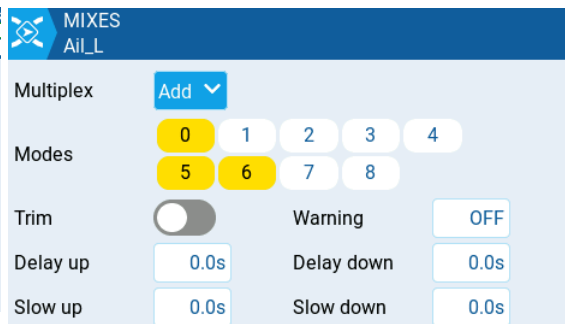
CH4:Ail_R      I1:Ail Weight(+50%) NoTrim Diff(GV1:dif) [Ailer]
               += TrmA Weight(+15%) [Trim]
               += I3:Brk Weight(-30%) Flight mode(FM2:LANDING) NoTrim [Brake]
               += MAX Weight(-GV3:car) NoTrim [CmbSet]
               += I5:Cmb Weight(+10%) Flight mode(FM5:THERMAL V) NoTrim Diff(-10%) [CmbVar]
               += MAX Weight(-10%) Flight modes(FM0:CRUISE, FM5:THERMAL V, FM6:THERMAL) Switch(SH,) NoTrim [Cmb++]
```



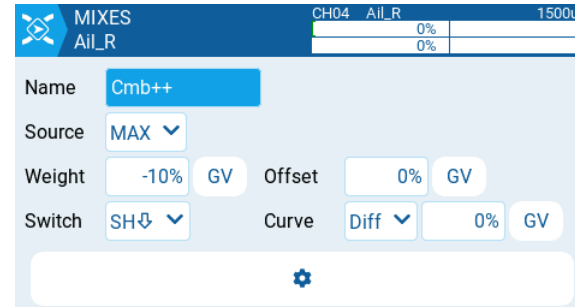
Aileron Left mixes



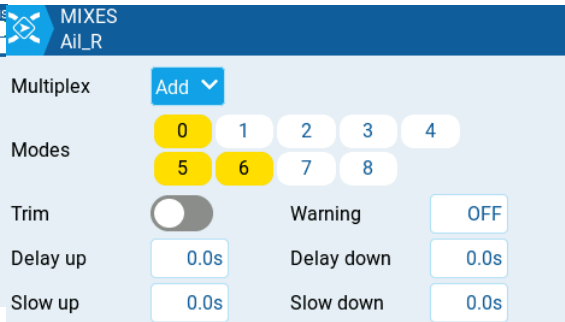
Camber++



Aileron Right mixes



Camber++



CH7-CH8 for Flap

```

CH7:Flp_L      I1:Ail Weight(+50%) Flight modes(FM0:CRUISE, FM1:MOTOR ON, FM3:SPEED, FM4:DISTANCE, FM5:THERMAL
*= I1:Ail Weight(+100%) NoTrim Custom(CV10:fpL) [End]
+= MAX Weight(-60%) NoTrim [Offset]
+= I3:Brk Weight(+120%) Flight mode(FM2:LANDING) NoTrim [Brake]
+= MAX Weight(+GV4:cfl) NoTrim [CmbSet]
+= I5:Cmb Weight(-10%) Flight mode(FM5:THERMAL V) NoTrim Diff(50%) [CmbVar]
+= MAX Weight(+10%) Flight modes(FM0:CRUISE, FM5:THERMAL V, FM6:THERMAL) Switch(SH4) NoTrim [Cmb++]

CH8:Flp_R      I1:Ail Weight(+50%) Flight modes(FM0:CRUISE, FM1:MOTOR ON, FM3:SPEED, FM4:DISTANCE, FM5:THERMAL
*= I1:Ail Weight(+100%) NoTrim Custom(CV11:fpR) [End]
+= MAX Weight(+60%) NoTrim [Offset]
+= I3:Brk Weight(-120%) Flight mode(FM2:LANDING) NoTrim [Brake]
+= MAX Weight(-GV5:cfr) NoTrim [CmbSet]
+= I5:Cmb Weight(+10%) Flight mode(FM5:THERMAL V) NoTrim Diff(-50%) [CmbVar]
+= MAX Weight(-10%) Flight modes(FM0:CRUISE, FM5:THERMAL V, FM6:THERMAL) Switch(SH4) NoTrim [Cmb++]
  
```

Flap Left mixes

Camber++

Flap Right mixes

Camber++

Preparation – SnapFlap

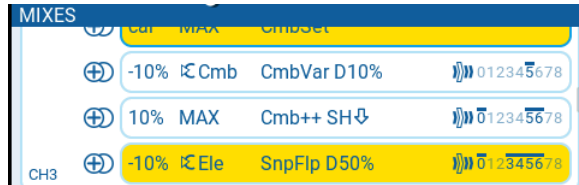
MIXES

CH3-CH4 for Aileron

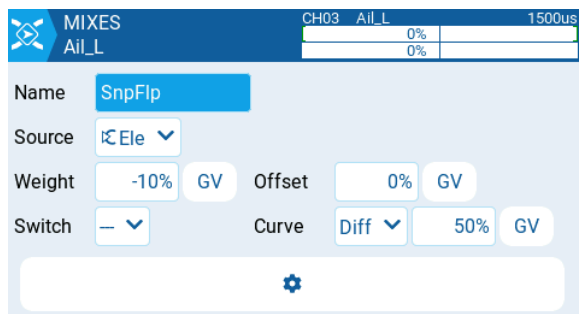
```

CH3:Ail_L      I1:Ail Weight(+50%) NoTrim Diff(-GV1:dif) [Ailer]
              += TrmA Weight(+15%) [Trim]
              += I3:Brk Weight(+30%) Flight mode(FM2:LANDING) NoTrim [Brake]
              += MAX Weight(+GV2:cal) NoTrim [CmbSet]
              += I5:Cmb Weight(-10%) Flight mode(FM5:THERMAL V) NoTrim Diff(10%) [CmbVar]
              += MAX Weight(+10%) Flight modes(FM0:CRUISE, FM5:THERMAL V, FM6:THERMAL) Switch(SH;) NoTrim [Cmb++]
              += I2:Ele Weight(-10%) Flight modes(FM0:CRUISE, FM3:SPEED, FM4:DISTANCE, FM5:THERMAL V, FM6:THERMAL) NoTrim Diff(50%) [SnapFlp]

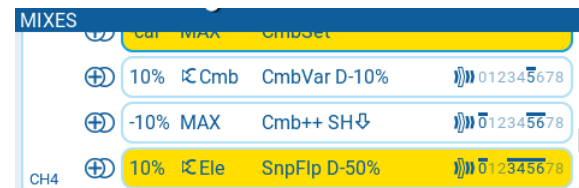
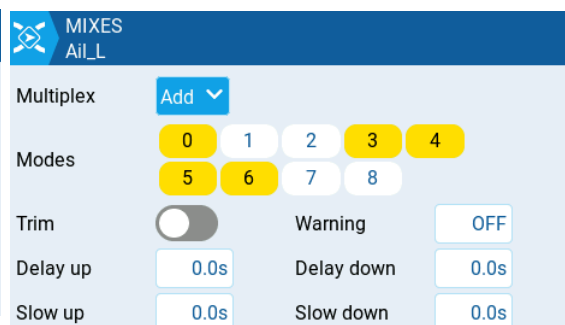
CH4:Ail_R      I1:Ail Weight(+50%) NoTrim Diff(GV1:dif) [Ailer]
              += TrmA Weight(+15%) [Trim]
              += I3:Brk Weight(-30%) Flight mode(FM2:LANDING) NoTrim [Brake]
              += MAX Weight(-GV3:car) NoTrim [CmbSet]
              += I5:Cmb Weight(+10%) Flight mode(FM5:THERMAL V) NoTrim Diff(-10%) [CmbVar]
              += MAX Weight(-10%) Flight modes(FM0:CRUISE, FM5:THERMAL V, FM6:THERMAL) Switch(SH;) NoTrim [Cmb++]
              += I2:Ele Weight(+10%) Flight modes(FM0:CRUISE, FM3:SPEED, FM4:DISTANCE, FM5:THERMAL V, FM6:THERMAL) NoTrim Diff(-50%) [SnapFlp]
    
```



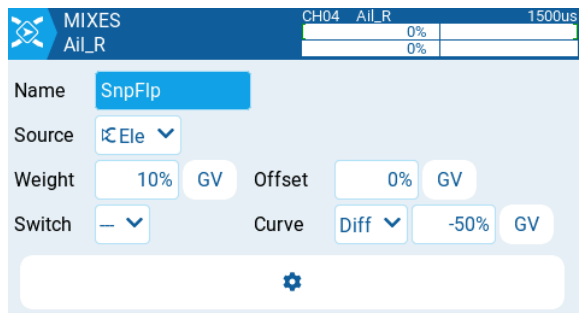
Aileron Left mixes



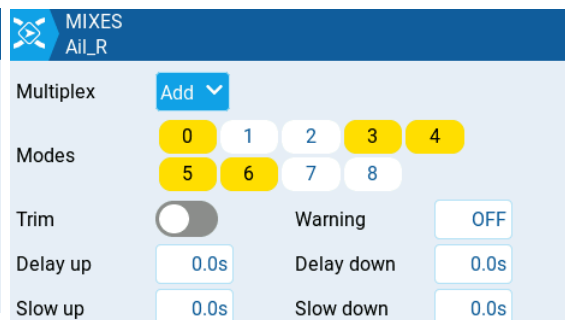
SnapFlap



Aileron Right mixes



SnapFlap



CH7-CH8 for Flap

```

CH7:Flp_L      I1:Ail Weight(+50%) Flight modes(FM0:CRUISE, FM1:MOTOR ON, FM3:SPEED, FM4:DISTANCE, FM5:THERMAL V, FM6:THERMAL, FM7, FM8) No
               *= I1:Ail Weight(+100%) NoTrim Custom(CV10:fpL) [End]
               += MAX Weight(-60%) NoTrim [Offset]
               += I3:Brk Weight(+120%) Flight mode(FM2:LANDING) NoTrim [Brake]
               += MAX Weight(+GV4:cfl) NoTrim [CmbSet]
               += I5:Cmb Weight(-10%) Flight mode(FM5:THERMAL V) NoTrim Diff(50%) [CmbVar]
               += MAX Weight(+10%) Flight modes(FM0:CRUISE, FM5:THERMAL V, FM6:THERMAL) Switch(SH;) NoTrim [Cmb++]
               += I2:Ele Weight(-10%) Flight modes(FM0:CRUISE, FM3:SPEED, FM4:DISTANCE, FM5:THERMAL V, FM6:THERMAL) NoTrim Diff(50%) [SnapFlp]

CH8:Flp_R      I1:Ail Weight(+50%) Flight modes(FM0:CRUISE, FM1:MOTOR ON, FM3:SPEED, FM4:DISTANCE, FM5:THERMAL V, FM6:THERMAL, FM7, FM8) No
               *= I1:Ail Weight(+100%) NoTrim Custom(CV11:fpR) [End]
               += MAX Weight(+60%) NoTrim [Offset]
               += I3:Brk Weight(-120%) Flight mode(FM2:LANDING) NoTrim [Brake]
               += MAX Weight(-GV5:cfr) NoTrim [CmbSet]
               += I5:Cmb Weight(+10%) Flight mode(FM5:THERMAL V) NoTrim Diff(-50%) [CmbVar]
               += MAX Weight(-10%) Flight modes(FM0:CRUISE, FM5:THERMAL V, FM6:THERMAL) Switch(SH;) NoTrim [Cmb++]
               += I2:Ele Weight(+10%) Flight modes(FM0:CRUISE, FM3:SPEED, FM4:DISTANCE, FM5:THERMAL V, FM6:THERMAL) NoTrim Diff(-50%) [SnapFlp]
    
```

Flap Left mixes

SnapFlap

Flap Right mixes

SnapFlap

Preparation – Motor Turbo

MIXES

CH6 for Motor

```
CH6:Motor      MAX Weight(-100%) Flight modes(FM0:CRUISE, FM2:LANDING, FM3:SPEED, FM4:
:= SB Weight(+100%) Flight mode(FM1:MOTOR ON) NoTrim Custom(CV12:mot) [On]
:= MAX Weight(+100%) Flight mode(FM1:MOTOR ON) Switch(SH↓) NoTrim [Turbo]
```

MIXES

Motor	-100%MAX	Off	2345678
100% SB	100%	On mot	2345678
CH6	100% MAX	Turbo SH↓	2345678

Motor mixes

MIXES Motor

Name: Turbo

Source: MAX

Weight: 100% GV Offset: 0% GV

Switch: SH↓ Curve: Diff 0% GV

Multiplex: Replace

Modes: 0 1 2 3 4 5 6 7 8

Trim: [Toggle]

Warning: OFF

Delay up: 0.0s Delay down: 0.0s

Slow up: 0.0s Slow down: 0.0s

Turbo



=====
Extended Configuration Template [Download:](#)
[Glider-X Extend](#)
[Glider-V Extend](#)

(Including: F5J Time, Chronograph

Setup (Extended Configuration)

CAMBER SPEED

Aileron Left

39) Setup camber for left aileron using Weight cal (Flight Modes).

MIXES - Ail_L

GLOBAL VARIABLES									
cal	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0
car	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0
cfl	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0
cfr	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0

GLOBAL VARIABLES - cal

Aileron Right

40) Setup camber for right aileron using Weight car (Flight Modes).

MIXES - Ail_R

GLOBAL VARIABLES									
cal	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0
car	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0
cfl	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0
cfr	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0

GLOBAL VARIABLES - car

Flap Left

41) Setup camber for left flap using Weight cfl (Flight Modes).

MIXES - Flp_L

GLOBAL VARIABLES									
dif	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	FM4	0%	FM6	0%	FM0	FM0
cal	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0
car	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0
cfl	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0
cfr	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0

GLOBAL VARIABLES - cfl

42) Setup camber for right flap using Weight cfr (Flight Modes).

MIXES - Flp_R

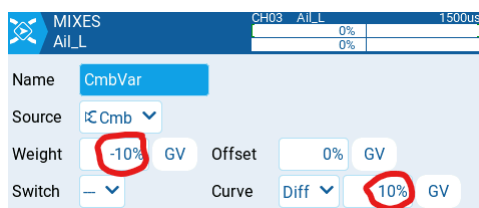
GLOBAL VARIABLES									
dif	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	FM4	0%	FM6	0%	FM0	FM0
cal	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0
car	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0
cfl	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0
cfr	FM0	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8
	0%	FM0	FM0	-10%	-5%	FM6	10%	FM0	FM0

GLOBAL VARIABLES - cfr

VARIABLE CAMBER

Aileron Left

- 43) Adjust the camber up and down with Weight and Diff.



MIXES - Ai_L_L

CH03 Ai_L_L 0% 1500us

Name: CmbVar

Source: Cmb

Weight: -10% GV

Offset: 0% GV

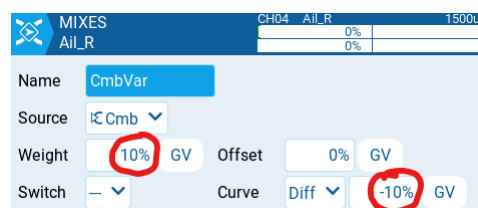
Switch: -

Curve: Diff 10% GV

MIXES - Ai_L_L

Aileron Right

- 44) Adjust the camber up and down with Weight and Diff.



MIXES - Ai_R_R

CH04 Ai_R_R 0% 1500us

Name: CmbVar

Source: Cmb

Weight: 10% GV

Offset: 0% GV

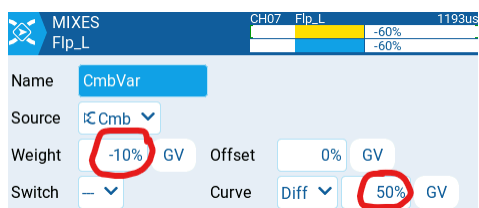
Switch: -

Curve: Diff -10% GV

MIXES - Ai_R_R

Flap Left

- 45) Adjust the camber up and down with Weight and Diff.



MIXES - Flp_L_L

CH07 Flp_L_L -60% 1193us

Name: CmbVar

Source: Cmb

Weight: -10% GV

Offset: 0% GV

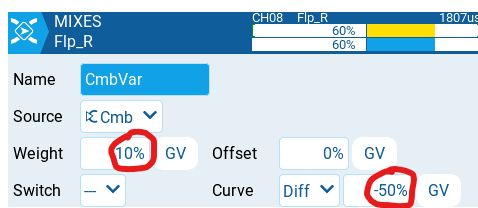
Switch: -

Curve: Diff 50% GV

MIXES - Flp_L_L

Flap Right

- 46) Adjust the camber up and down with Weight and Diff.



MIXES - Flp_R_R

CH08 Flp_R_R 60% 1807us

Name: CmbVar

Source: Cmb

Weight: 10% GV

Offset: 0% GV

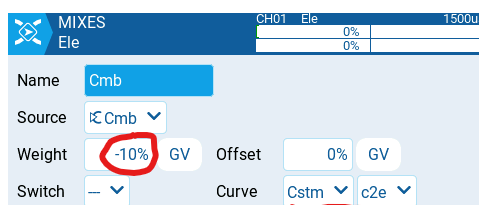
Switch: -

Curve: Diff -50% GV

MIXES - Flp_R_R

Elevator for X-tail

- 47) Setup camber to elevator mix with Weight and curve CV15:c2e.



MIXES - Ele

CH01 Ele 0% 1500us

Name: Cmb

Source: Cmb

Weight: -10% GV

Offset: 0% GV

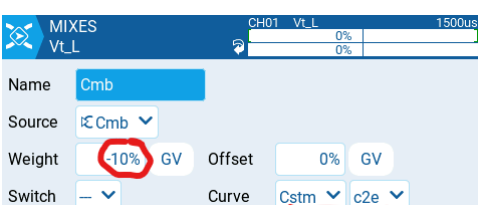
Switch: -

Curve: Cstm c2e

MIXES - Ele

Elevator for V-tail

- 47) Setup camber to elevator mix with Weight and curve CV15:c2e.



MIXES - Vt_L_L

CH01 Vt_L_L 0% 1500us

Name: Cmb

Source: Cmb

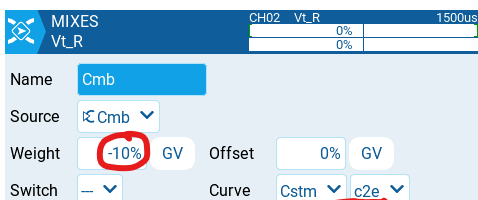
Weight: -10% GV

Offset: 0% GV

Switch: -

Curve: Cstm c2e

MIXES - Vt_L_L



MIXES - Vt_R_R

CH02 Vt_R_R 0% 1500us

Name: Cmb

Source: Cmb

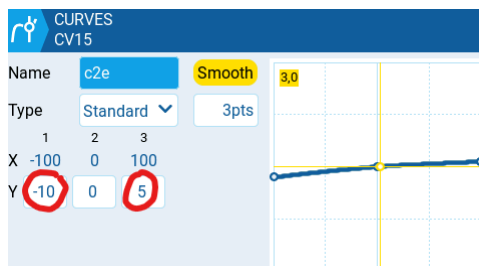
Weight: -10% GV

Offset: 0% GV

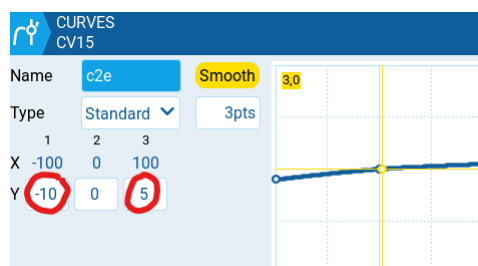
Switch: -

Curve: Cstm c2e

MIXES - Vt_R_R



CURVES - CV15:c2e



CURVES - CV15:c2e

CAMBER++

Aileron Left

- 48) Setup extra camber for left aileron using Weight.

MIXES - Ail_L

MIXES - Ail_L

Aileron Right

- 49) Setup extra camber for right aileron using Weight.

MIXES - Ail_R

MIXES - Ail_R

Flap Left

- 50) Setup extra camber for left aileron using Weight.

MIXES - Flp_L

MIXES - Flp_L

Flap Left

- 51) Setup extra camber for left aileron using Weight.

MIXES - Flp_R

MIXES - Flp_R

SNAPFLAP

Aileron Left

- 52) Adjust the camber up and down with Weight and Diff.

MIXES - Ail_L

MIXES - Ail_L

Aileron Right

- 53) Adjust the camber up and down with Weight and Diff.

MIXES - Ail_R

MIXES - Ail_R

Flap Left

- 54) Adjust the camber up and down with Weight and Diff.

MIXES - Flp_L

MIXES - Flp_L

Flap Right

- 55) Adjust the camber up and down with Weight and Diff.

MIXES - Flp_R

MIXES - Flp_R

Setup after flight (Extended Configuration)

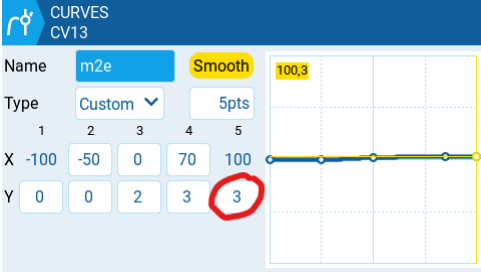
MOTOR to ELEVATOR

Elevator

- C. Setup motor speed to elevator mix by using curve CV13:m2e.

Max (Turbo) speed = 100%.

Elevator mix value:



CURVES – CV13:m2e

Global Elevator Trim

Use trim T6 as global elevator trim.

Trim T2 is used "as usual" for elevator trim, i.e. it sets elevator trim separate for every flight condition. Trim T6 is used, at the same time, and adjusts the elevator trim for all (wanted) flight conditions. This trim T6 is useful to set the elevator neutral position (when flying) for all flight conditions at the same time. It is still possible to adjust every flight condition individually with trim T2.

$$\text{Elevator Trim} = \text{T2} + \text{T6}$$

If Global elevator trim is needed, then add a new mixer line.

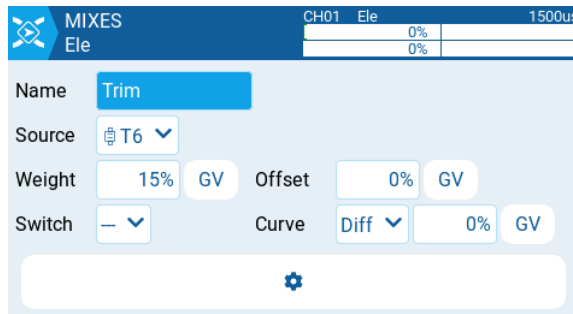
MIXES

CH1 for X-tail

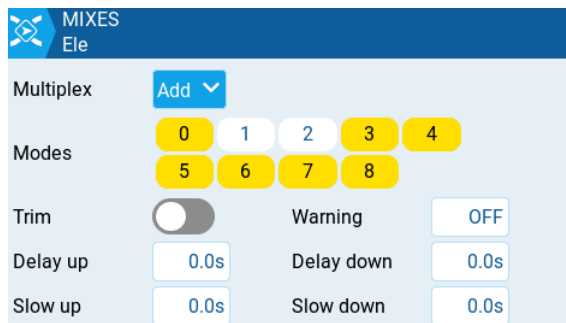
```
CH1:Ele      I2:Ele Weight(+50%) Diff(-GV7:del) [Elev]
             += Trm6 Weight(+15%) Flight modes(FM0:CRUISE, FM3:SPEED, FM4:DISTANCE, FM5:THERMAL V, FM6:THERMAL, FM7, FM8) NoTrim [Trim]
```



Elevator mixes



Global Trim



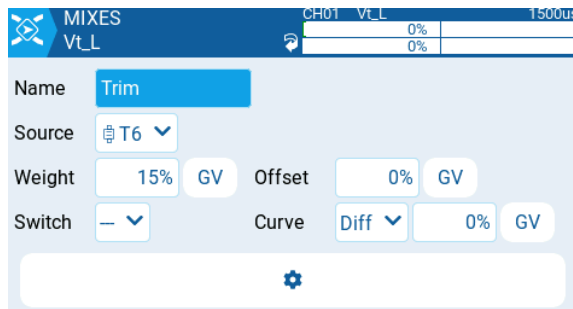
CH1-CH2 for V-tail

```
CH1:Vt_L     I2:Ele Weight(+40%) Diff(-GV7:del) [Elev]
             += Trm6 Weight(+15%) Flight modes(FM0:CRUISE, FM3:SPEED, FM4:DISTANCE, FM5:THERMAL V, FM6:THERMAL, FM7, FM8) NoTrim [Trim]
             -= Trm4 Weight(+40%) Diff(-GV7:del) [Budder]

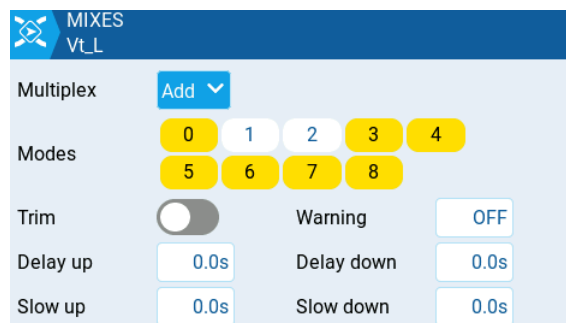
CH2:Vt_R     I2:Ele Weight(+40%) Diff(-GV7:del) [Elev]
             += Trm6 Weight(+15%) Flight modes(FM0:CRUISE, FM3:SPEED, FM4:DISTANCE, FM5:THERMAL V, FM6:THERMAL, FM7, FM8) NoTrim [Trim]
             -= Trm4 Weight(+40%) Diff(-GV7:del) [Budder]
```



V-tail Left mixes



Global Trim



MIXES

Vt_R 40% Ele Elev D-del

15% T6 Trim 012345678

40% Bud Rudder D-del

V-tail Right mixes

MIXES Vt_R

CH02	Vt_R	1500us
	0%	
	0%	

Name Trim

Source T6

Weight 15% GV Offset 0% GV

Switch -- Curve Diff 0% GV

Global Trim

MIXES Vt_R

Multiplex Add

Modes 0 1 2 3 4 5 6 7 8

Trim Warning OFF

Delay up 0.0s Delay down 0.0s

Slow up 0.0s Slow down 0.0s

Dual Rate

If Dual Rate is needed, then add a new mixer line.

For example Dual Rate for Ailerons and Flaps, when button 6P6 is activated:

MIXES

CH3-CH4 for Aileron

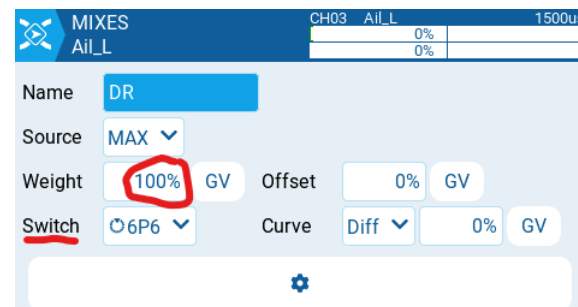
Setup the Dual Rate for left- and right-aileron using Weight.

```
CH3:Ail_L      I1:Ail Weight(+50%) NoTrim Diff(-GV1:dif) [Ailer]
               += TrmA Weight(+15%) [Trim]
               *= MAX Weight(+100%) Switch(6P_6) NoTrim [DR]
               += T3·Brk Weight(+30%) Flight mode(FM2·LANDING) NoTrim [Brake]
```

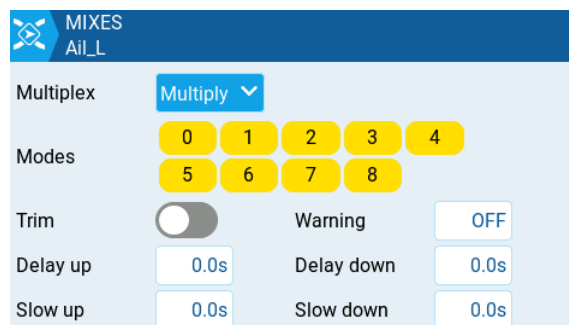
```
CH4:Ail_R      I1:Ail Weight(+50%) NoTrim Diff(GV1:dif) [Ailer]
               += TrmA Weight(+15%) [Trim]
               *= MAX Weight(+100%) Switch(6P_6) NoTrim [DR]
               += T3·Brk Weight(-30%) Flight mode(FM2·LANDING) NoTrim [Brake]
```



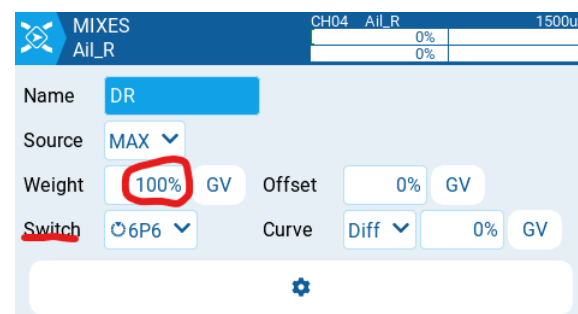
Aileron Left mixes



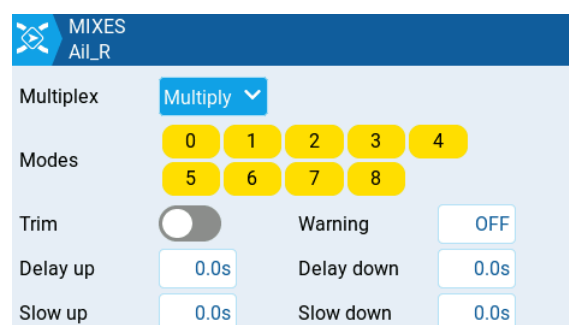
Dual Rate setting



Aileron Right mixes



Dual Rate setting



CH7-CH8 for Flap

Setup the Dual Rate for left- and right-flap using Weight.

```
CH7:Flp_L      I1:Ail Weight(+50%) Flight modes(FM0:CRUISE, FM1:M
*= I1:Ail Weight(+100%) NoTrim Custom(CV10:fpL) [End]
*= MAX Weight(+100%) Switch(6P_6) NoTrim [DR]
+= MAX Weight(-60%) NoTrim [Offset]
```

```
CH8:Flp_R      I1:Ail Weight(+50%) Flight modes(FM0:CRUISE, FM1:M
*= I1:Ail Weight(+100%) NoTrim Custom(CV11:fpR) [End]
*= MAX Weight(+100%) Switch(6P_6) NoTrim [DR]
+= MAX Weight(+60%) NoTrim [Offset]
```

MIXES
Flp_L
50% Ail Flap D-dif
100% Ail End fpL
100% MAX DR 6P6
60% MAX Offset

Flap Left mixes

MIXES
Flp_L
Name: DR
Source: MAX
Weight: 100% GV
Switch: 6P6
Offset: 0% GV
Curve: Diff 0% GV

Dual Rate setting

MIXES
Flp_L
Multiplex: Multiply
Modes: 0, 1, 2, 3, 4, 5, 6, 7, 8
Trim: OFF
Warning: OFF
Delay up: 0.0s
Delay down: 0.0s
Slow up: 0.0s
Slow down: 0.0s

MIXES
Flp_R
50% Ail Flap Ddif
100% Ail End fpR
100% MAX DR 6P6
60% MAX Offset

Flap Right mixes

MIXES
Flp_R
Name: DR
Source: MAX
Weight: 100% GV
Switch: 6P6
Offset: 0% GV
Curve: Diff 0% GV

Dual Rate setting

MIXES
Flp_R
Multiplex: Multiply
Modes: 0, 1, 2, 3, 4, 5, 6, 7, 8
Trim: OFF
Warning: OFF
Delay up: 0.0s
Delay down: 0.0s
Slow up: 0.0s
Slow down: 0.0s

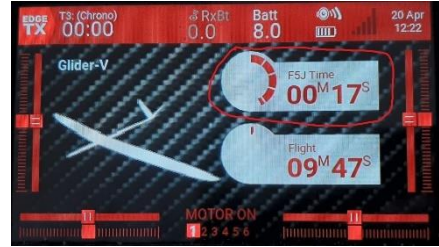
F5J Time

Using SA↕ for start of 'F5J Time' and 'Flight' timers, i.e. going directly from SA↑ (motor off) to SA↕ (motor on).

Then SA- (motor off) to stop the 'F5J Time'.

Then SA↑ (motor off) to stop the 'Flight'.

For a video sequence showing F5J Time: [Link](#)



MODEL SETUP

Timer 1	F5J Time	00:00:30	ON	----	Countdown	Voice	Start	10s	<input type="checkbox"/> Minute Call	Not persistent	Show Remaining	00:00:00
Timer 2	Flight	00:10:00	Start	L21	Countdown	Voice	Start	30s	<input checked="" type="checkbox"/> Minute Call	Not persistent	Show Remaining	00:00:00

MODEL SETUP
Timer 1

Name: F5J Time

Mode: ON

Switch: --

Start: 00:30

Direction: Show Remain

Minute call:

Countdown: Voice 10s

Persistent: OFF

MODEL SETUP – Timer 1

MODEL SETUP
Timer 2

Name: Flight

Mode: Start

Switch: L21

Start: 10:00

Direction: Show Remain

Minute call:

Countdown: Voice 30s

Persistent: OFF

MODEL SETUP – Timer 2

GLOBAL VARIABLES

GVAR9 Tmr 0 0. 0 3

GLOBAL VARIABLES

Tmr FM0 0 FM1 FM0 FM2 FM0 FM3 FM0 FM4 FM0 FM5 FM0 FM6 FM0 FM7 FM0 FM8 FM0

LOGICAL SWITCHES

L20	AND	SA↑	----	----	0.0	0.0
L21	AND	SA↕	----	----	0.0	0.0
L22	a=x	TMR:1:F5J Time	0:00:00 [Promiss]	----	0.0	0.0
L23	OR	!!L21	L22	----	0.0	0.0
L24	a=x	GV9:Tmr	0	----	0.0	0.0
L25	a=x	GV9:Tmr	0	L21	0.0	0.0
L26	a=x	GV9:Tmr	1	L23	0.0	0.0
L27	a=x	GV9:Tmr	2	L20	0.0	0.0
L28	a=x	GV9:Tmr	2	L22	0.0	0.0
L29	a=x	GV9:Tmr	2	L21	0.0	3.0
L30	a=x	GV9:Tmr	3	L21	0.0	3.0
L31	a=x	GV9:Tmr	3	!!L21	0.0	0.0
L32	a=x	TMR:1:F5J Time	0:00:15 [Promiss]	----	0.0	0.0

LOGICAL SWITCHES

L20 AND SA↑ -- --

L21 AND SA↕ -- --

L22 a=x F5J Time 00:00 --

L23 OR !!L21 L22 --

L24 a=x GV9 0 --

L25 a=x GV9 0 L21

L26 a=x GV9 1 L23

L27 a=x GV9 2 L20

L28 a=x GV9 2 L22

L29 a=x GV9 2 L21 3.0s

L30 a=x GV9 3 L21 3.0s

L31 a=x GV9 3 !!L21

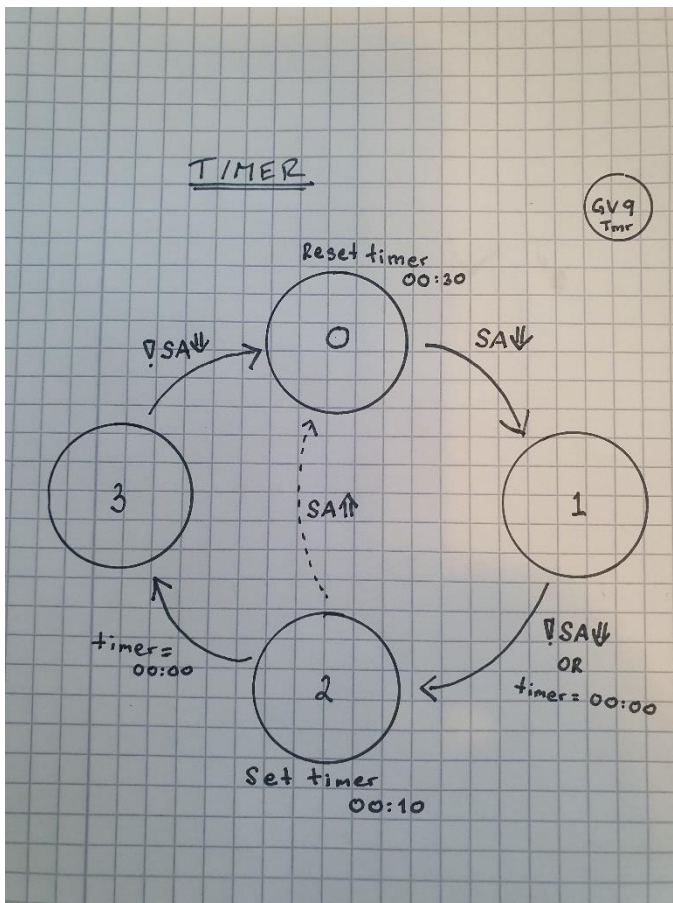
L32 a=x F5J Time 00:15 --

SPECIAL FUNCTIONS

SF20	L25	Adjust GV9:Tmr	Value	1	ON
SF21	L26	Adjust GV9:Tmr	Value	2	ON
SF22	L27	Adjust GV9:Tmr	Value	0	ON
SF23	L28	Adjust GV9:Tmr	Value	3	ON
SF24	L31	Adjust GV9:Tmr	Value	0	ON
SF25	L24	Reset	TMR1:F5J Time		ON
SF26	L26	Set TMR1:F5J Time	0:00:10 [hh:mm:ss]		ON
SF27	L25	Play Track	start		No repeat
SF28	L26	Play Track	engoff		No repeat
SF29	L28	Play Track	off		No repeat
SF30	L29	Play Sound	Beep 1		No repeat
SF31	L30	Play Track	fm-pwr		Repeat 4s
SF32	L32	Play Value	TMR1:F5J Time		No repeat
SF33	L20	Reset	TMR2:Flight		ON

SPECIAL FUNCTIONS			
SF20	L25	Adjust - GV9 = 1	<input type="checkbox"/>
SF21	L26	Adjust - GV9 = 2	<input type="checkbox"/>
SF22	L27	Adjust - GV9 = 0	<input type="checkbox"/>
SF23	L28	Adjust - GV9 = 3	<input type="checkbox"/>
SF24	L31	Adjust - GV9 = 0	<input type="checkbox"/>
SF25	L24	Reset - Timer 1	<input type="checkbox"/>
SF26	L26	Set - Timer 1 = 00:10	<input type="checkbox"/>

SF27	L25	Play Track - start	(1x)
SF28	L26	Play Track - engoff	(1x)
SF29	L28	Play Track - off	(1x)
SF30	L29	Play Sound - Beep1	(1x)
SF31	L30	Play Track - fm-pwr	(4s)
SF32	L32	Play Value - F5J Time	(1x)
SF33	L20	Reset - Timer 2	<input type="checkbox"/>



F5J Time where SA is used for Motor on/off.

'F5J Time' and 'Flight' timers are included in Extended Configuration Templates.

Chronograph (Timer 3)

- Timer 3 used as a Chronograph (Stopwatch).
Switch SG used.

MODEL SETUP

Timer 3 Chrono 00:00:00 ON SG↓ Countdown Silent Start 20s Minute Call

MODEL SETUP Timer 3	
Name	Chrono
Mode	ON
Switch	SG↓
Start	00:00
Minute call	<input checked="" type="checkbox"/>
Countdown	Silent 20s
Persistent	OFF

SPECIAL FUNCTIONS

SF34 SG↑ Reset TMR3:Chrono ON

SPECIAL FUNCTIONS SF34	
Trigger	SG↑
Function	Reset
Reset	Timer 3
Enable	<input checked="" type="checkbox"/>

'Chronograph' is included in Extended Configuration Templates.

Voice - Chronograph or Receiver Quality

- Voice for Chronograph (Timer 3)
Short press on SI switch/button.
- Voice for RQly value (100% = Best Rx quality)
Long press on SI switch/button

LOGICAL SWITCHES

L09	Edge	SI1	0,0	0,9	----	0,0	
L10	Edge	SI1	1,0	1,0 (infinite)	----	0,0	
L11	AND	L10	Telemetry	----	0,0		0,0
L12	AND	L10	!Telemetry	----	0,0		0,0

LOGICAL SWITCHES L09

Function: Edge

V1: SI1

V2: 0.0s (0.9s)

AND switch: --

Duration: 0.0s

Delay: N/A

LOGICAL SWITCHES L10

Function: Edge

V1: SI1

V2: 1.0s (-)

AND switch: --

Duration: 0.0s

Delay: N/A

LOGICAL SWITCHES L11

Function: AND

V1: L10

V2: Tele

AND switch: --

Duration: 0.0s

Delay: --

LOGICAL SWITCHES L12

Function: AND

V1: L10

V2: !Tele

AND switch: --

Duration: 0.0s

Delay: --

SPECIAL FUNCTIONS

SF37	SI1	Play Value	TMR3:Chrono	No repeat
SF38	L11	Play Value	TELE3:RQly	No repeat
SF39	L12	Play Track	warnng	No repeat

SPECIAL FUNCTIONS SF37

Trigger: L09

Function: Play Value

Value: Chrono

Repeat: 1x

SPECIAL FUNCTIONS SF38

Trigger: L11

Function: Play Value

Value: RQly

Repeat: 1x

SPECIAL FUNCTIONS SF39

Trigger: L12

Function: Play Track

Value: warnng

Repeat: 1x

'Chronograph or Receiver Quality' is included in Extended Configuration Templates.

Low Battery

- Voice warning when Receiver/Motor Battery is too low.

3S = 9.3V

4S = 12.4V

LOGICAL SWITCHES

L13 a<x TELE11:RxBt 9,3V --- 0,0

LOGICAL SWITCHES

L13

Function	a<x
V1	RxBt
V2	9.3V
AND switch	--
Duration	0.0s
Delay	--

SPECIAL FUNCTIONS

SF40 L13 Play Track lowbat Repeat 5s

SPECIAL FUNCTIONS

SF40

Trigger	L13
Function	Play Track
Value	lowbat
Repeat	5s

'Low Battery' is included in Extended Configuration Templates.

Widgets

ShowAll

This widget has been updated with the settings in this document and is originated from [EdgeTX Clinic](#).



Widgets - [Link](#) (unzip the file)

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Complete SD-Card Download with EdgeTX 2.9.4.

- [Glider-X Basic](#)
- [Glider-Y-Basic](#)
- [Glider-X Extend](#)
- [Glider-V Extend](#)
- [F5J Time](#)
- [ShowAll](#)

[LINK](#)

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Start Low – Fly High !