

E-Sailplane Setup with VBar Control, VPlane NEO and Macrocells

With this guide we will support you setting up a sailplane or other planes. One of our goals was to get maximum flexibility into the setup here.

Please select the items you would need and transfer them into your model setup. The rudder isn't named in this document, it will be passed straight through as it is in most cases.

If a macrocell isn't named (e.g. 10/ESC) it is not needed to use a specified cell because no direct output is affected. In this case select one as you like.

The switch assignments in the VBC to the macrocell functions – select as you like. Only the motor switch is always in use for the drivetrain.

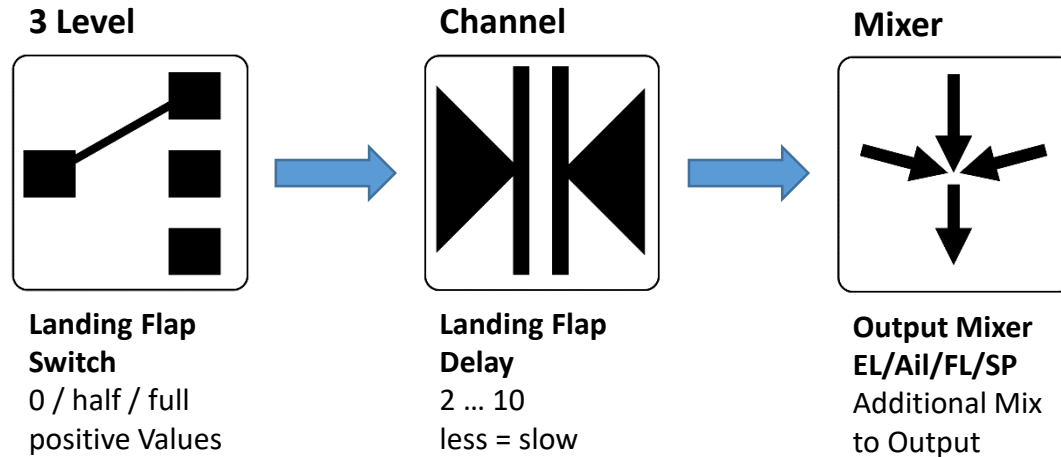
If a NEO does not have enough sockets – add a 2nd or probably 3rd NEO (Vbasic is ok) as servo extender (online Firmware update) through the interbus (see www.vstabi.info – macrocell description and videos) at AUX2 and AUX3. This outputs are named with „E1“ / „E2“ in the macrocell setups. Of course this will give you 2 more receiving antennas for better redundancy.

Have fun – and ask your questions at the forum of vstabi.info ;-)

Regards

RV

Landing Flaps with Switch



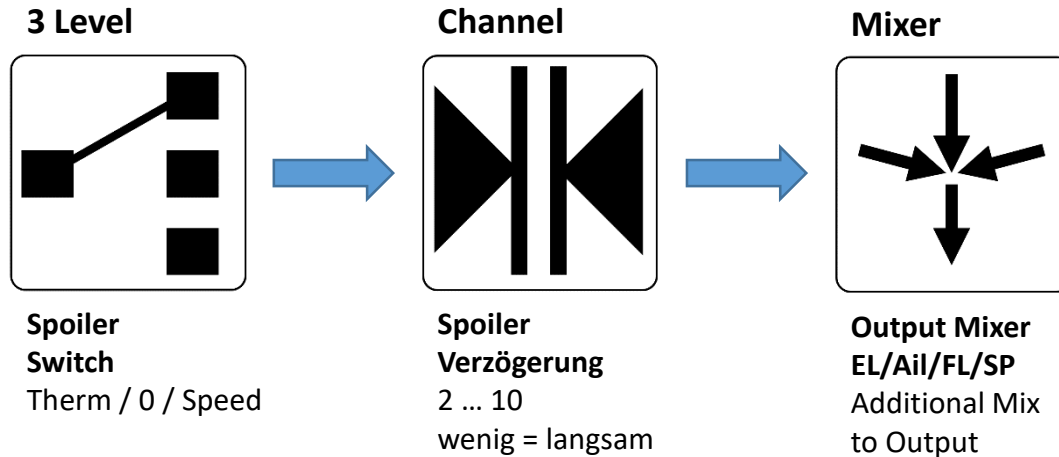
When using the Switch, the Value will be applied to the Surfaces with the delay as adjusted.

The Ratios and Directions can be set up in the Output Mixer of course.

In the 3 Level we will set up the over all values.

Please use only positive values there, otherwise we may have potential conflicts with the directions.

Spoiler by Switch

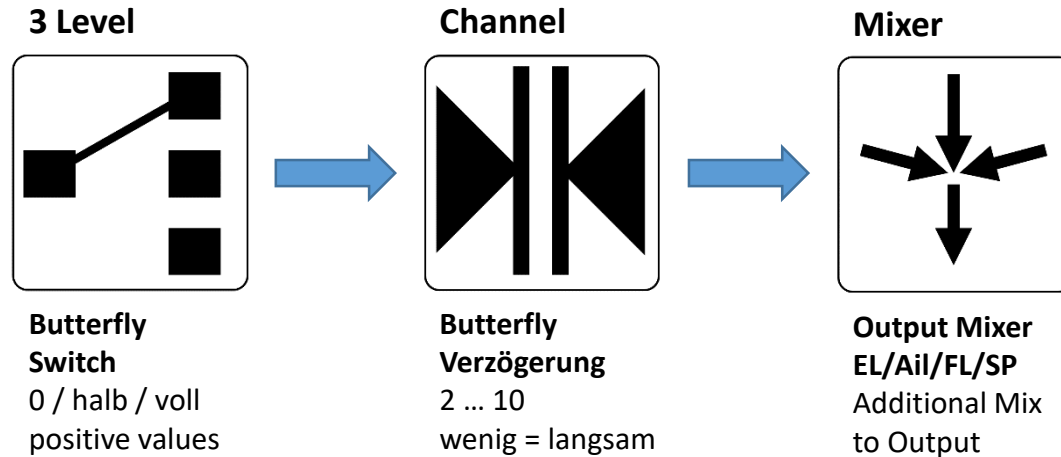


When using the Switch, the Value will be applied to the Surfaces with the delay as adjusted.

The Ratios and Directions can be set up in the Output Mixer of course.

In the 3 Level we will set up the over all values.

Butterfly by Switch



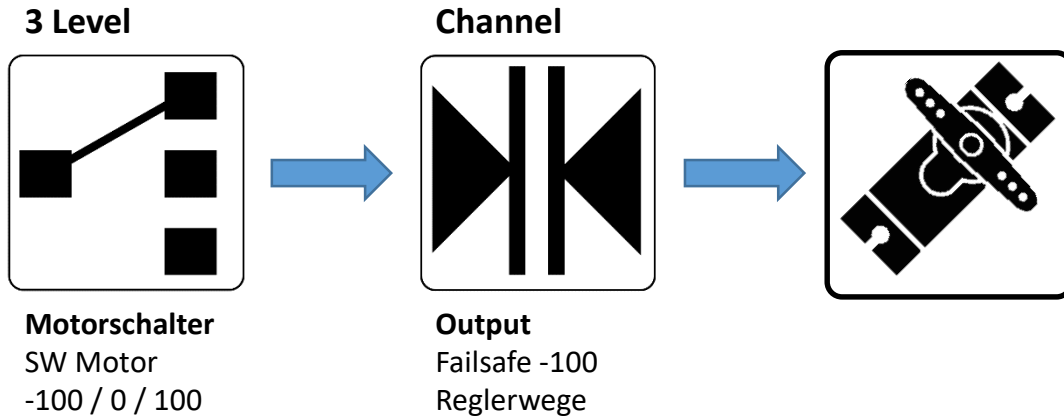
When using the Switch, the Value will be applied to the Surfaces with the delay as adjusted.

The Ratios and Directions can be set up in the Output Mixer of course.

In the 3 Level we will set up the over all values.

Please use only positive values there, otherwise we may have potential conflicts with the directions.

Motor by Switch

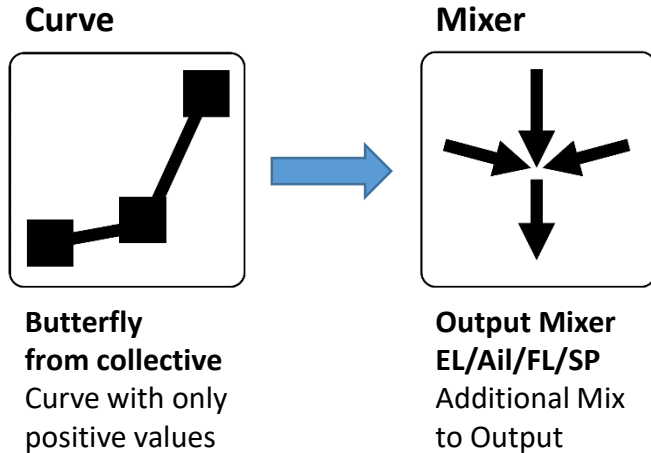


When using the Switch, the Value will be applied to the ESC immediately!

In the Channel cell please adjust directions, output throw and failsafe.

Always unmount prop / disconnect ESC for Setup!

Butterfly by Stick - simple



Moving the collective stick will apply the result from the curve cell directly to the surfaces.

The Ratios and Directions can be set up in the Output Mixer of course.

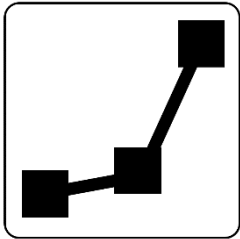
Please use only positive values for curve, otherwise we may have potential conflicts with the directions.

Butterfly by Stick - switchable

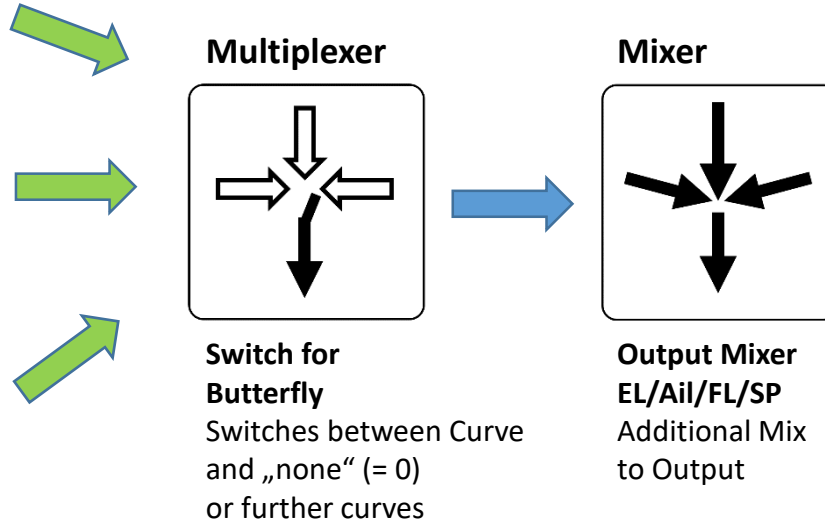
No assignment
(Uses 0 as
input value)
Or another curve

No assignment
(Uses 0 as
input value)
Or another curve

Curve



**Butterfly
from collective**
Curve with only
positive values



Multiplexer

Mixer

**Switch for
Butterfly**
Switches between Curve
and „none“ (= 0)
or further curves

Output Mixer
EL/Ail/FL/SP
Additional Mix
to Output

The butterfly will be enabled by switch.
As input we can also use 2 or 3 curves if needed.

Moving the collective stick will apply the result from the
curve cell directly to the surfaces.

The Ratios and Directions can be set up in the
Output Mixer of course.

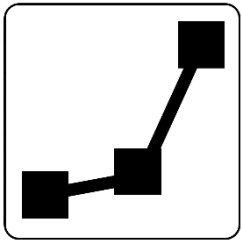
Please use only positive values for curve, otherwise we may have
potential conflicts with the directions.

Butterfly and Throttle by Stick – Part Butterfly

No assignment
(Uses 0 as
input value)
Or another curve

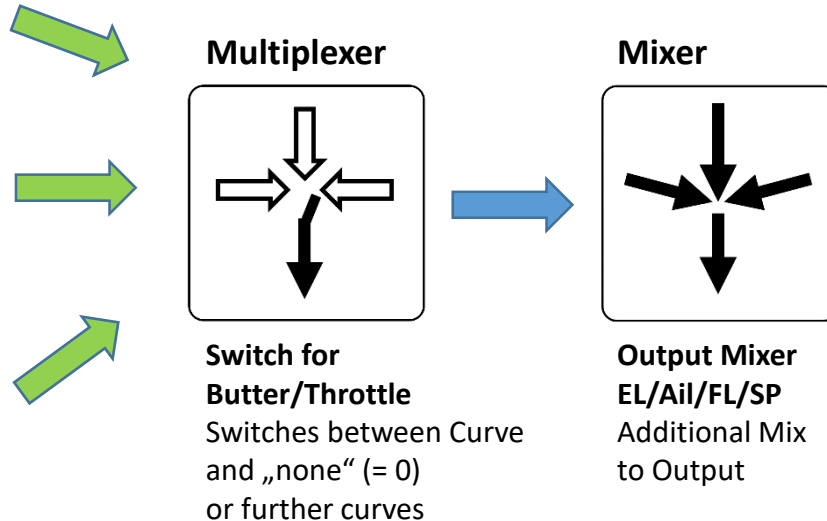
No assignment
(Uses 0 as
input value)
Or another curve

Curve



Butterfly
from collective
Curve with only
positive values.

Adjust the trigger
point with the
throttle curve



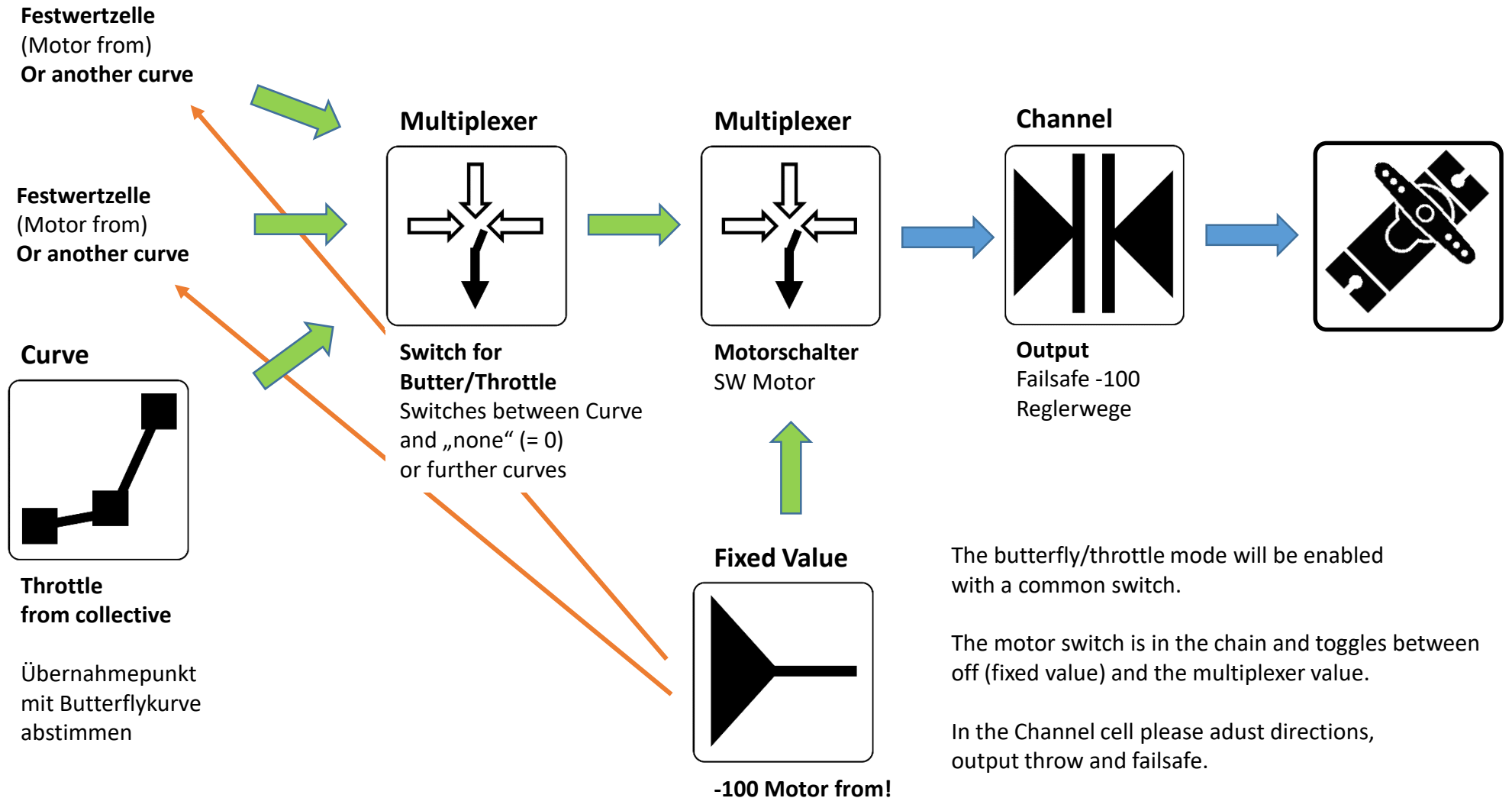
The butterfly/throttle mode will be enabled
with a common switch.

Moving the collective stick will apply the result from the
curve cell directly to the surfaces.

The Ratios and Directions can be set up in the
Output Mixer of course.

Please use only positive values for curve, otherwise we may have
potential conflicts with the directions.

Butterfly and Throttle by Stick – Part Throttle



The butterfly/throttle mode will be enabled with a common switch.

The motor switch is in the chain and toggles between off (fixed value) and the multiplexer value.

In the Channel cell please adjust directions, output throw and failsafe.

Always unmount prop / disconnect ESC for Setup!

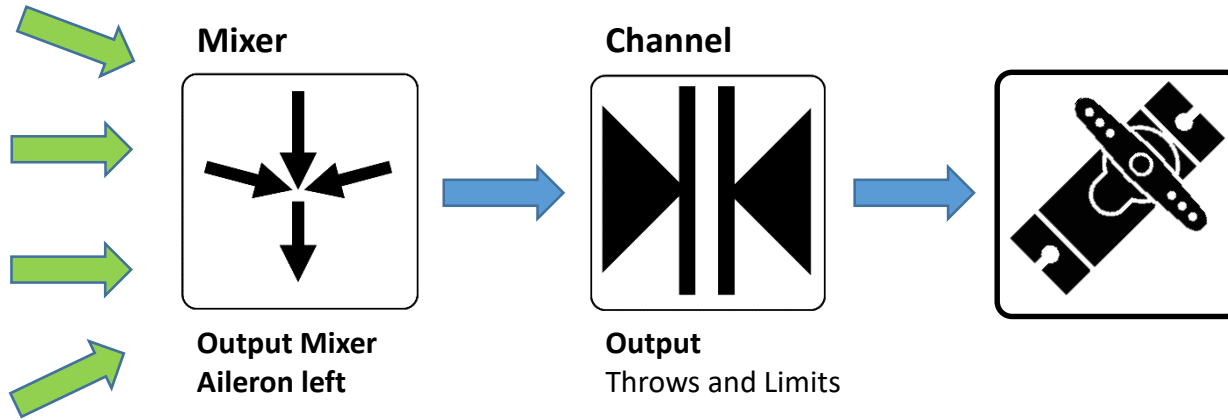
Output Aileron Servo left

CH2 – Ail Function
including Diff.
from Flightcontrol

Spoiler
Function

Flaps
Function

Butterfly
Function



If you don't need a Diff. – one aileron output mixer is enough to drive both servos.

In the wingmixer setup all limits and throws are set to 100. We only use the Ail Diff there.

The ratios and directions of all inputs (Aileron, Spoiler, Flaps, Butterfly) must be set up in the mixer cell.

Check throws in a non-stabilized bank with maximum Agility rate setup!

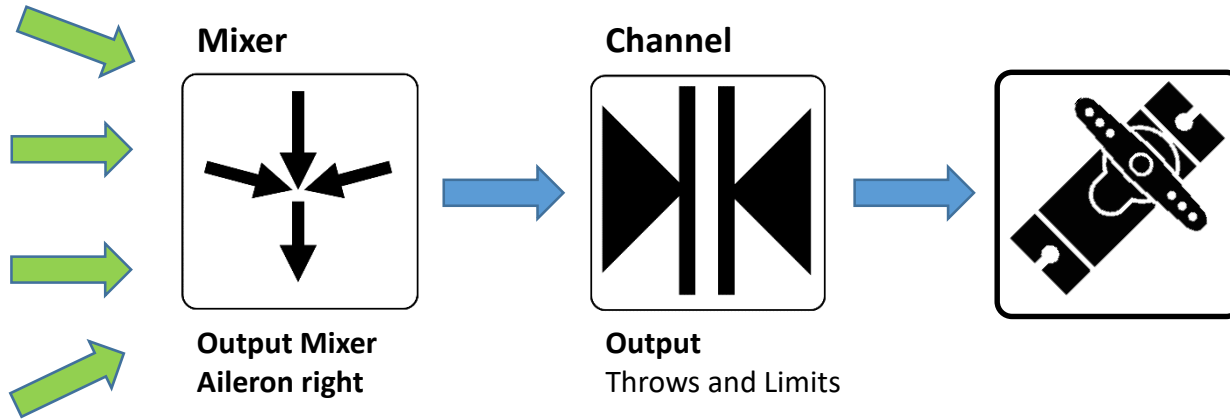
Output Aileron Servo right

CH3 – Ail Function
including Diff.
from Flightcontrol

Spoiler
Function

Flaps
Function

Butterfly
Function



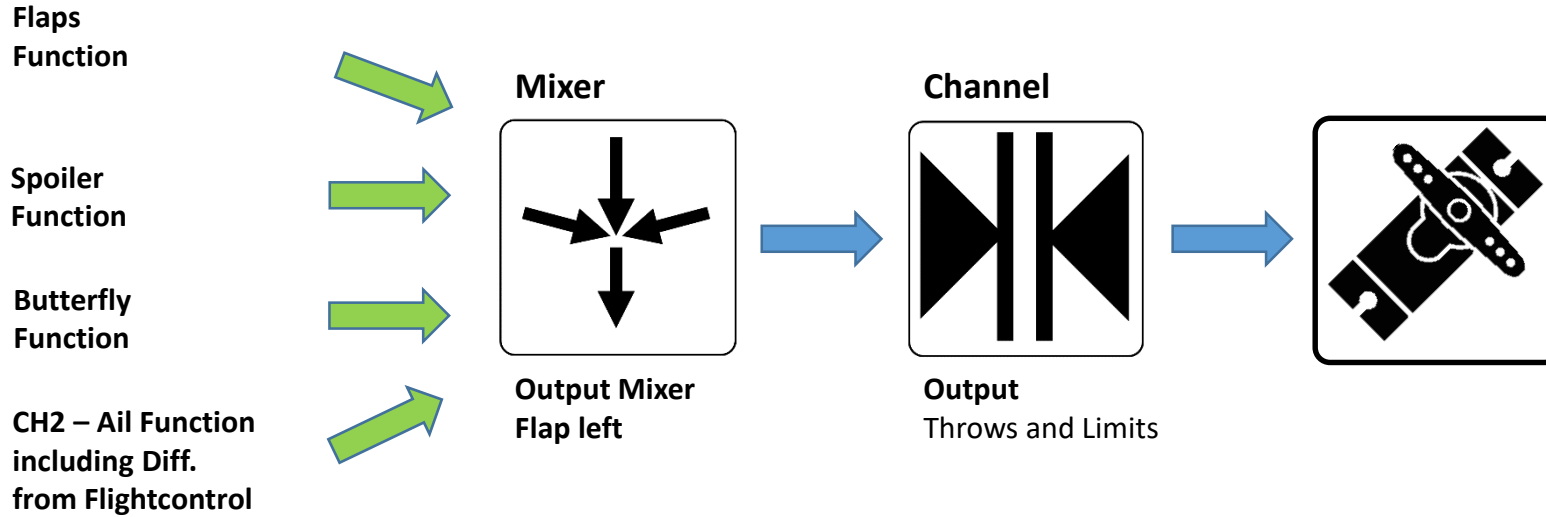
If you don't need a Diff. – one aileron output mixer is enough to drive both servos.

In the wingmixer setup all limits and throws are set to 100. We only use the Ail Diff there.

The ratios and directions of all inputs (Aileron, Spoiler, Flaps, Butterfly) must be set up in the mixer cell.

Check throws in a non-stabilized bank with maximum Agility rate setup!

Output Flaps Servo left



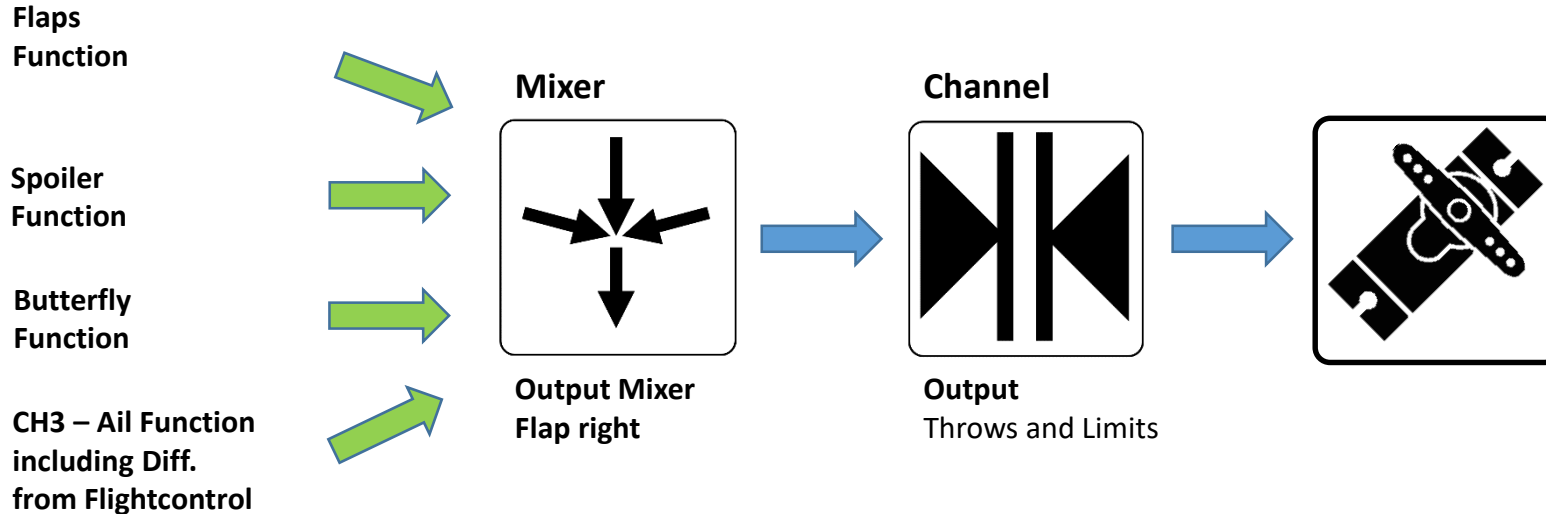
If you don't need a Diff. On aileron or won't use aileron here – one flap output mixer is enough to drive both servos.

In the wingmixer setup all limits and throws are set to 100. We only use the Ail Diff there.

The ratios and directions of all inputs (Aileron, Spoiler, Flaps, Butterfly) must be set up in the mixer cell.

Check throws in a non-stabilized bank with maximum Agility rate setup!

Output Flaps Servo right



If you don't need a Diff. On aileron or won't use aileron here – one flap output mixer is enough to drive both servos.

In the wingmixer setup all limits and throws are set to 100. We only use the Ail Diff there.

The ratios and directions of all inputs (Aileron, Spoiler, Flaps, Butterfly) must be set up in the mixer cell.

Check throws in a non-stabilized bank with maximum Agility rate setup!

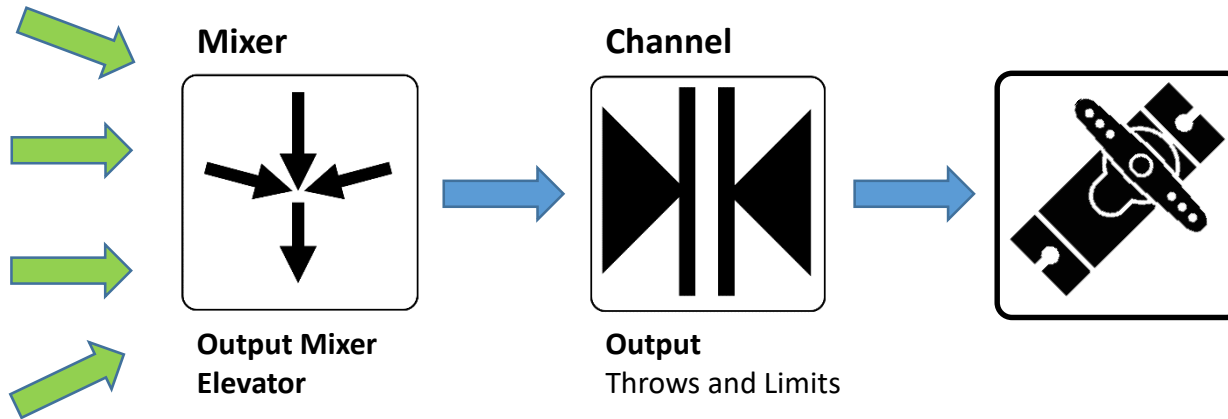
Output Elevator Servo

CH1 – EL Function
from Flightcontrol

Spoiler
Function

Flaps
Function

Butterfly
Function



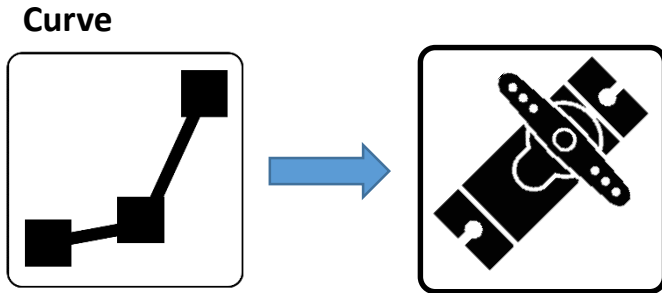
If you don't need the additional from Spoiler, Flaps and Butterfly – the standard wingmixer function will be still enough.

In the wingmixer setup all limits and throws are set to 100. Throws by 100.

The ratios and directions of all inputs (Aileron, Spoiler, Flaps, Butterfly) must be set up in the mixer cell.

Check throws in a non-stabilized bank with maximum Agility rate setup!

Output 2. Servo für eine Steuerfläche



**Eingang vom
Master Servo**

Curve zur Anpassung
des Slave Servos an das
Master Servo (Mitte,
Endpunkte, Synchronität)

Hier wird das Signal from der „Channel“ Zelle des Masterservos als Eingang einer Curve verwendet. Die Curve sitzt direkt by der Position an der das Slave Servo angeschlossen ist.

Check throws in a non-stabilized bank with maximum Agility rate setup!