## UAV Mapper mixer for PX4FMU

This file defines mixers suitable for controlling a delta wing aircraft using PX4FMU. The configuration assumes the elevon servos are connected to PX4FMU servo outputs 0 and 1 and the motor speed control to output 3. Output 2 is assumed to be unused.

Inputs to the mixer come from channel group 0 (vehicle attitude), channels 0 (roll), 1 (pitch) and 3 (thrust).

See the README for more information on the scaler format.

## Elevon mixers

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Three scalers total (output, roll, pitch).

On the assumption that the two elevon servos are physically reversed, the pitch

input is inverted between the two servos.

The scaling factor for roll inputs is adjusted to implement differential travel

for the elevons.

```
M: 2
O: 10000 10000 0 -10000 10000
S: 0 0 -8000 -8000 0 -10000 10000
S: 0 1 6000 6000 0 -10000 10000

M: 2
O: 10000 10000 0 -10000 10000
S: 0 0 -8000 -8000 0 -10000 10000
S: 0 1 -6000 -6000 0 -10000 10000
```

## Output 2

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This mixer is empty.

Z:

Motor speed mixer

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Two scalers total (output, thrust).

This mixer generates a full-range output  $(-1\ \text{to}\ 1)$  from an input in the  $(0\ -1)$ 

range. Inputs below zero are treated as zero.

```
M: 1
o: 10000 10000 0 -10000 10000
s: 0 3 0 20000 -10000 -10000 10000
```