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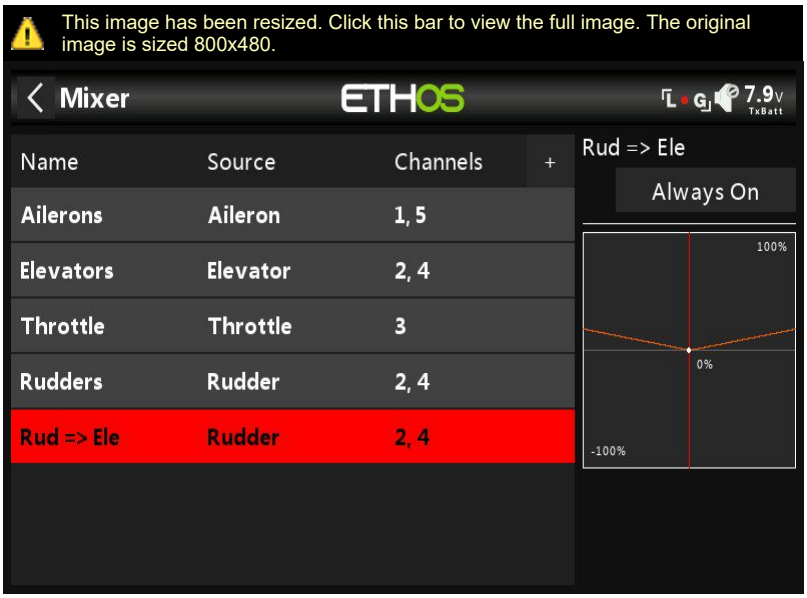
ETHOS - V-Tail Differential w/ Live adjustment

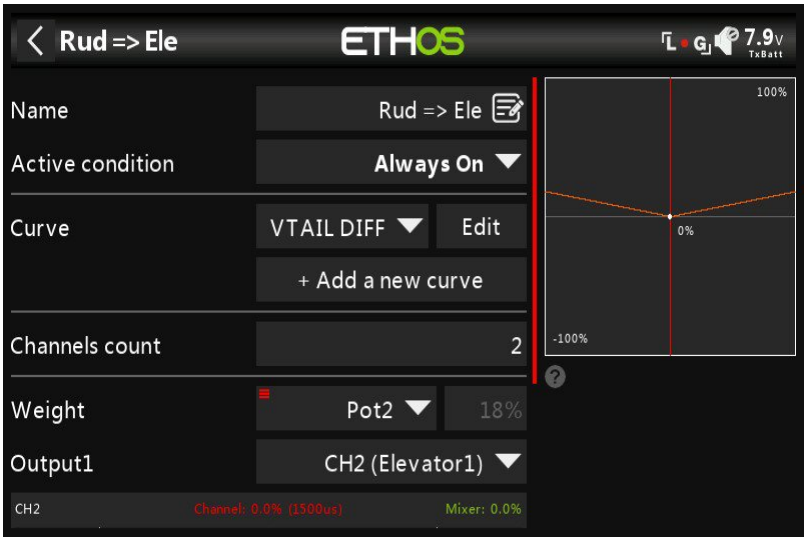
If you fly anything V-tail on ETHOS, you know one of the frustrations is that the rudder mix lacks differential. That lack makes a lot of sense for the normal rudder mixer, but for V-Tail it prevents you from easily dialing out yaw-pitch coupling in the V-tail (ie where you get a pitch excursion with only a rudder input). You need V-tail differential to tune that out.

The good news is there is an easy fix for this. It requires a single mixer addition, the Rud=>Ele mixer and a 3-point custom curve.

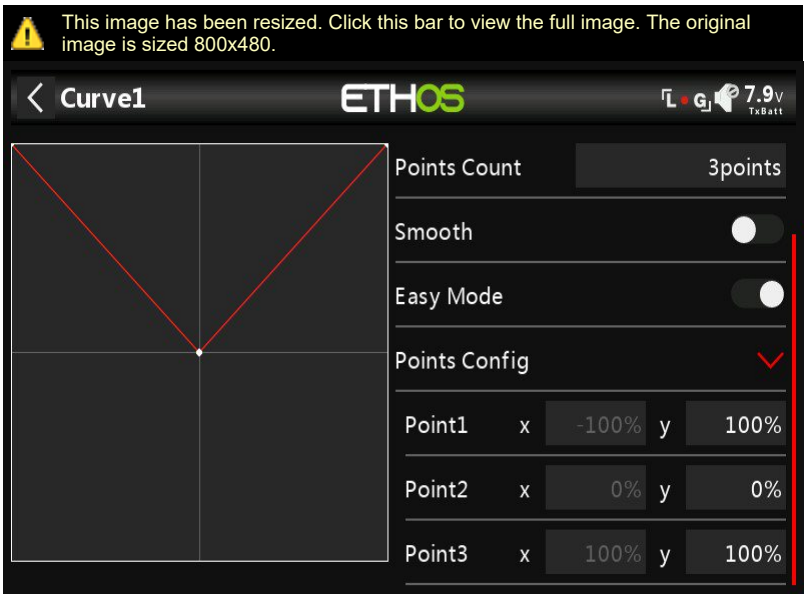
To start off, go and add a Rud => Ele mixer, it will auto-populate with the correct channels



Now in the edit screen for the mixer, add a Custom Curve



The curve is of the Custom type, 3 points and the points will be 100,0,100 so that you get the same input on each side of the rudder.



Then go back to the edit page for the Rud => Ele mixer and either adjust the weights for the two output channels to get the setting you want, or if you need to tune it, long press the Weight box, select use a source, then select the adjuster you want. I've used S2/Pot2 in this case. Make sure you have the same input setup for each channel. Once tuned, you can long-press the source and select 'Convert to Value' to ensure you don't accidentally lose the setting.

Quote

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