



Flap → Elevator Mixer (access via Set-Up Menu)

During slow flight when extending flaps, automatic proportionally correction of elevator is made, thus the pitch attitude of the model becomes independent of the position of the flaps. The mix portion is entered in the code "F-E", the INC and DEC buttons, between 0 and ±125%. Next the mixer neutral point must be specified. The mixer must be informed which position of the input (normally sliding control 6) for the flaps, corresponds to normal flight (flaps neutral). Thus the elevator takes this position to be its neutral, and only when the flaps are moved from this position does the mixer affect the elevator, pressing the CH SEL button to call up the offset screen. Move the control to the required neutral position (e.g. the end position of the flap control) and press the CLEAR button. The offset, the deviation from the control centre position, is indicated in the display. A switch connected to socket 5 of the transmitter board can be used to switch off this function.



► ELEVATOR ➡ FLAP

Elevator → Flap Mixer (access via Set-Up Menu)

To assist the elevator with close turning flight and aerobatics, the flaps can be linked to the elevator and are driven out proportionally to the increase the wing lift. The value in the code "E-F" can be varied using, the **INC** and **DEC** buttons between 0 and $\pm 125\%$. The mixer can be also switched off with an external switch connected to socket 4.







Mixer for Models with V-Tails (access via Set-Up Menu)

For models with a V-tail the functions of elevator and rudder must be mixed so with one another so that during elevator movement both surfaces are moved up or down in the same direction, and during rudder control the surfaces move in opposite directions, i.e. one surface upward and the other downward. The "VTL" Program contains the appropriate mixer, to control surfaces connected to separate servos. The function is activated using the **INC/DEC** buttons. Servos connected to outputs 3 and 4 of the receiver are automatically coupled with one another. The mix relationship is changed using the dual- rate setting, see page 20, where Ch4 changes the rudder effect and Ch3 the elevator effect.





Spoiler ➡ Elevator Mixer (access via Set-Up Menu)

It is usually necessary to adjust the elevator when altering the spoiler setting due to the change in lift created by the wing.

This codes allows the elevator to be adjusted to suit the position of the spoiler stick (control function 1) during the landing approach, within the range of 0 to $\pm 125\%$.

The mix proportion is determined using the code "S-E" and pressing the INC / DEC buttons.

Pressing the **CH SEL** button switches to the offset setting:

The mixer must be programmed, which position of the spoiler control (throttle / spoiler control stick 1) corresponds to normal flight. This would be the position with the spoilers retracted and therefore the neutral position of the elevator. To set this offset, the control is moved to the appropriate position and the **CLEAR** button is pressed. The offset, the deviation from the control centre position, is indicated in the display.

Using a switch connected to socket 7 of the transmitter board this function can be switched off.



CH4 R CH3



40 Fixed Wing Models

For your Notes

F3B/BUTTERFLY Model Type Described

The F3B/BUTTERFLY type is intended for F3B competition models. It can be used, however, for other similar models. Depending on the external switches connected, functions can be switched on and off.

Beside two aileron servos, it is intended that two separate flap servos are used. This allows mixing flap \Rightarrow elevator and/or elevator \Rightarrow flap. Also the combi and differential functions plus flap \Rightarrow flaperon and V-tail mixers with three further finished coupling functions. It is possible to extend the flaps downward and both ailerons upward (Butterfly) and adjust the elevator to re-trim so that when driving the pitch trim does not change from that of normal flight. Additionally, an airbrake can be mixed with the above.

Also, without separate flaps, the ailerons can still be used as spoilers or as flaps (flaperons) and also in connection with the spoiler ➡ aileron and spoiler ➡ elevator mixes.

Block Diagram BUTTERYFLY "Fb"



Allocation of Receiver Connections (ch 1 - 8)

The servos must be connected to the receiver connections as follows:



