Multifunction Control Box (MCB-E)

The Freewing Multifunction Control Box ("MCB") enables pilots to efficiently organize the all the control wiring inside their aircraft within a single, centralized location. Control surfaces, wing connections, landing gear, sequenced landing gear doors, and even sequenced LED lights are all consolidated within the MCB. The MCB is suitable for use in foam or balsa aircraft with servos rated at 6.0V or less.

Overview

The MCB-Eversion can accept 12 wired outputs including 7 LED light outputs, and two wing connector ribbon wires. The MCB-E contains 6 input channels, which connect to the receiver. See the diagram for possible input and output configurations, based on the aircraft and specific desired setup.

Output Diagram

Double stage door	1	Landing gear	3	Take-off light	1
Single stage door	1	Rudder	2	Triple Flash	1
AUX	1	Elevator	2	Double Flash	1
Nose steering	1			Strobe light	2
				Light	2

Output Diagram of Wing control board

Aileron	1	Double stage door	1
Flap	2	Light	1
Landing gear	1	Take-off light	1

Input Diagram

Aileron	1	Elevator	1	Landing gear	1
Flap	1	Rudder	1	AUX	1

Use introduction of AUX

-The expansion channel "AUX" can be controlled by the receiver's AUX channel. This channel is useful to remotely control different functions depending on the model. These functions include air-brake, wheel-brake, thrust vectoring, slats, parachute, payload drop, canopy opening mechanism, etc.

-The expansion channel "AUX" can also be used as a second throttle channel, in specific cases where a model aircraft may have either two motors and separate throttle inputs are configured. Please note that when the AUX channel is used as a throttle channel to access the throttle channel on the receiver.

Gear Doors: "Single Stage" and "Dual Stage"

When set to this "Dual Stage" Mode, toggling the landing gear switch will result in this sequence: Door Open—Gear Down—Door Close; and Door Open—Gear Up—Door Close. A common example is the P-51 Mustang.

When set to this "Single Stage" Mode, toggling the landing gear switch will result in this sequence: Door Open –Gear Down; and Gear Up –Door Close. In "Single Stage" Mode, while the gear is down, the door will always also be down.