

JMP Combo Receiver

The JMP Combo receiver has been developed for the lightest models, powered by a single Li-Ion Polymer cell or 2 to 4 Nickel-Cadmium cells.

The receiver has three outputs : two for magnetic actuators, and one electronic speed control for the main propulsion motor. A mixer function is included in the actuator outputs.

The actuator outputs accept up to 400mA loads and are able to run small electric motors in both directions, for example for a blimp.

The ESC output is rated at 1.5 A (2.5 A peak)

The antenna matching circuitry of the JMP Combo receiver is designed so that a shortening of the antenna in case of a small model or the lengthening of the antenna for increased control range, do not require retuning of the receiver.

An undervoltage detection circuit switches off the motor under 3 Volt, and prevents Lithium battery damage.

Operation

- 1) Switch on the transmitter first, the throttle stick being in the idle position.
- 2) Then switch on the receiver.

After one second, the receiver automatically identifies the throttle channel and its direction. It is programmed to identify four configurations, found in most available transmitters :

Channel No.				
1	Throttle	Aileron*	Aileron*	Aileron*
2	Aileron*	Throttle	Elevator	Elevator
3	Elevator	Elevator	Throttle	X
4	X	X	X	Throttle

* The aileron stick is used for rudder in 3-channel models.

X The 4th channel option outputs channel marked « X »

Once the identification is done, the actuators begin to « sing ».

Warnings :

- 1) Wrong polarity of the battery or a short circuit of one of the outputs is likely to damage the receiver.
- 2) It is advised to keep a minimum distance of 50 mm. between the receiver and electrical noise generators such as motor and battery.
- 3) Keep the antenna away from the rest of the electrical installation and any carbon structure.
- 4) A comparative range test with and without the motor running is recommended before the first flight of your model.

Specifications :

Functions : 1 ESC, 2 actuators, mixer, motor switch-off if < 3V*

Dimensions : 30 x 12,7 x 6 mm.

Weight : 1,72 g. (bare), 2,3 g. (with micro-crystal and 500 mm. antenna)

Selectivity : 10 kHz

Ground range : 100m. minimum.

Battery voltage : 2,0 to 5,5V.

Current drain : 6 mA + actuator drain.

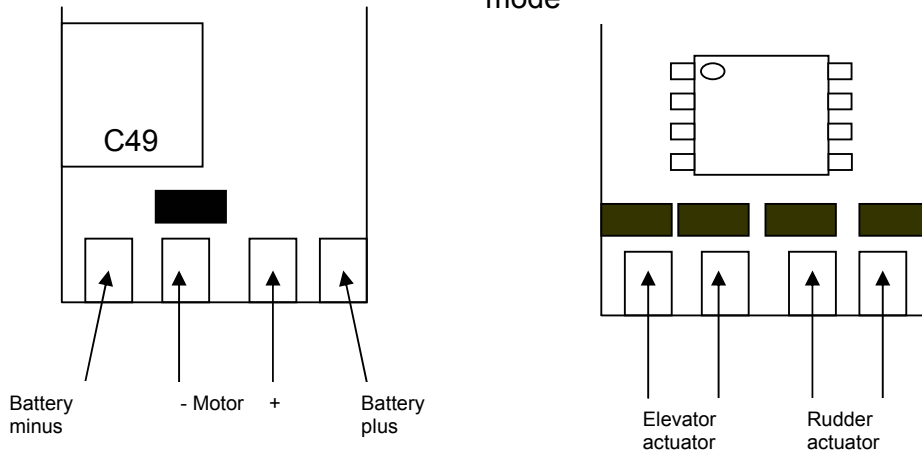
Actuator output (or motor Fwd/Rev) : 400 mA

Motor output : 1,5A (2,5 A peak)

* Contact us for inhibiting the undervoltage detection (For 2 NiCad use)

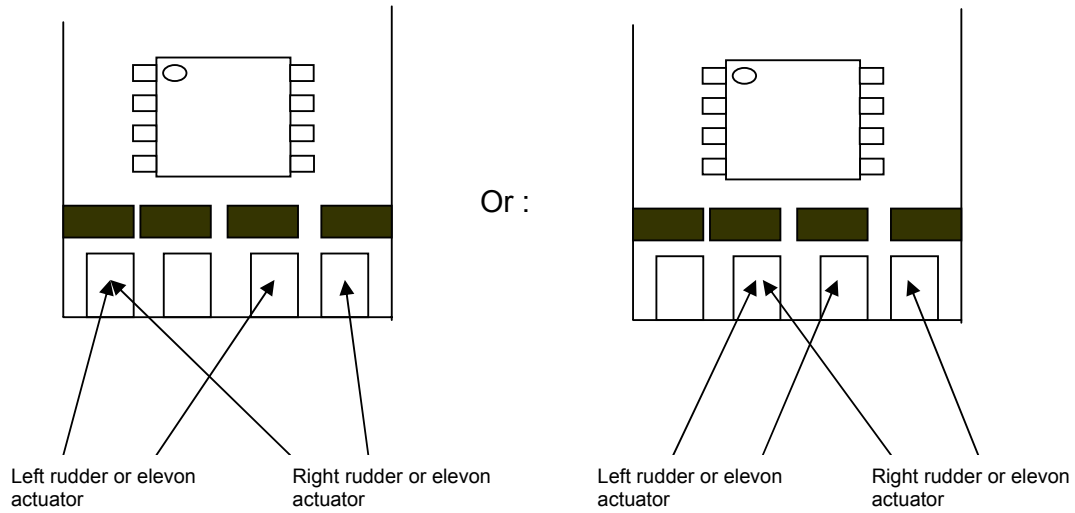
Connecting the outputs :

Normal mode



Note : Actuator direction can be changed by swapping its two wires, or by turning the magnet around.

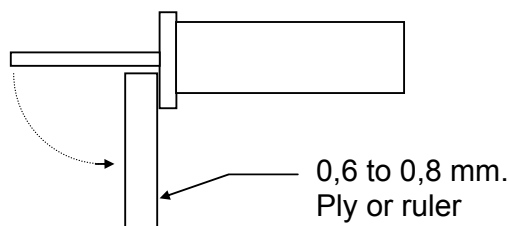
Mixer mode



Note : Changing from the left-hand diagram to the right-hand diagram will reverse elevator direction, without changing rudder direction.

If rudder direction needs to be changed without changing elevator direction, swap the wires from the actuators on the two right-hand solder lands.

Preparing the Crystal



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