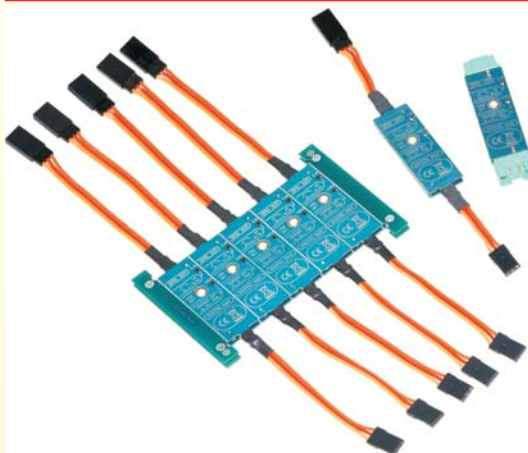


RC Electronic by EMCOTEC®

DPSI systems ○ LONGGO batteries ○ RC electronics ○ www.rc-electronic.com

More safety for your RC model with products from EMCOTEC!

DPSI OCP



EMCOTEC presents a world wide first: The DPSI OCP (OverCurrentProtector)

The DPSI OCP is an electronic overload fuse with integrated protection from the "Dynamo Effect" of power servos and is simply put in between a current source (e.g. receiver) and a consumer (e.g. servo).

Electronic fuse:

For the first time, blocking or defective servos do not lead to short circuits, discharging of batteries or damaging cables or connectors (e.g. cable fire). The DPSI OCP "Over Current Protector" interrupts the current flow if a certain threshold is exceeded, and therefore protects the whole system.

Especially for LiPo voltage regulators, which only provide limited current due to their thermal loading capacity, the DPSI OCP can be a life-saver.

Blocking landing gear doors, defective servos, shorts in input leads, blocking drives in pumps: the maximum allowable current in the system is never exceeded.

Even malfunctions in weakly dimensioned heat sinks of so called Power-Battery-Switches are not to be expected due to this current limiting. Current measurement takes place through a modern micro controller. For monitoring maximum current, current is displayed by blink codes using an LED. The system is self learning, i.e. the highest current of the consumer is automatically remembered. Hence, even small servos with low currents can be reliably monitored.

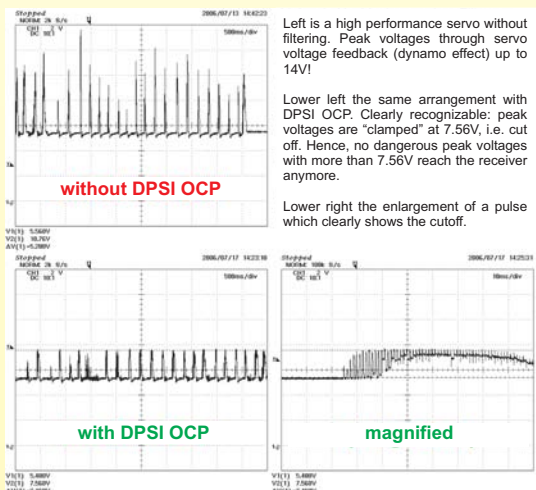
Protection from "Dynamo Effect":

The DPSI OCP filters, besides others, peak voltage occurrences caused by the dynamo effect (feedback voltage of the servo voltage) of high performance servos and inhibits, that dangerous disturbances reach the receiver or other components. Here, no voltage drop arises, i.e. the servo is still supplied with the full voltage.

Short circuit proof and available in different versions:

The DPSI OCP is short circuit proof and handles load of up to 8A continuous current. Two versions cover every application: a JR version for servos up to 7V supply voltage and an MPX version for consumers with up to 12.6V (3S LiPo batteries). The JR version is also available as reasonably priced quintet system, i.e. 5 complete systems on a single circuit board.

Dimensions: approx. 0.7" x 2.75" (JR)
 approx. 0.7" x 2.90" (MPX)
 approx. 4.0" x 2.75" (JR quintet)
 Weight: approx. 0.315 oz. (JR, MPX)
 approx. 1.760 oz. (JR quintet)



Left is a high performance servo without filtering. Peak voltages through servo voltage feedback (dynamo effect) up to 14V!

Lower left the same arrangement with DPSI OCP. Clearly recognizable: peak voltages are "clamped" at 7.56V, i.e. cut off. Hence, no dangerous peak voltages with more than 7.56V reach the receiver anymore.

Lower right the enlargement of a pulse which clearly shows the cutoff.