

## Lipo-Saver LS70/MC 2S – 4S release 6

### Protect your Lipo rechargeable batteries against damages through lower voltage.

Thanks to most modern digital technology with microprocessor, the LS70/MC recognizes the correct cell number itself. If the Lipo rechargeable battery reaches its critical least voltage, the consumer automatically is uncoupled. A pulsating is prevented. The consumer remains turned off, also if the rechargeable battery voltage increases again. The working conditions are evident through LEDs. With slightest dimensions and only 5 grams, the Lipo Saver can be incorporated also in small models. Reference: The Lipo Saver is conceived for not security-related current consumers.

### Ideally suited for the following scopes:

- Video cameras
- Immersion flight
- Variometer
- Data logger
- Illumination systems
- etc.

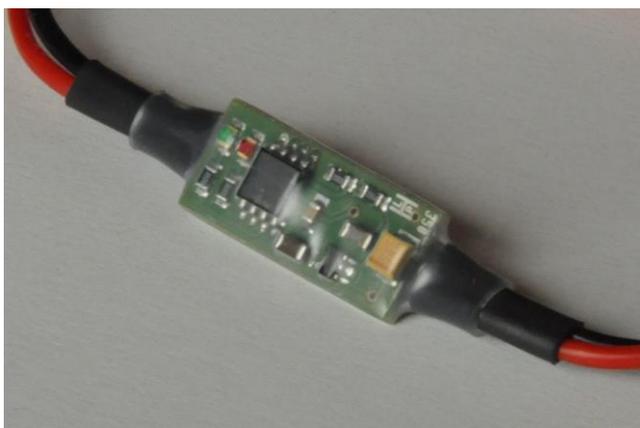


Image 1

### Description

The LS70/MC recognizes self the correct cell number (2S-4S). Prerequisite is that the Lipo - cell are loaded correctly and completely. In the turning on, the cell number is indicated through blinking of the green LED. Example for a rechargeable battery with cells turned 3 in series (3S) : Turn Lipo Saver (between rechargeable battery and consumer), green LED illuminates 2 seconds, then 3 times blinking (notice of the cell number), subsequently is engaged the consumer and illuminates the LED continually. In reaching of the lower voltage, the green LED turns off and the red LED blinks 20 times in the distance of 2 seconds. If a too high voltage, for example 5S more largely are connected; an error is released and is indicated with duration lamps of the red LED.

### Technical data:

Typ	LS70/MC release 6
Cell numbers (area)	2 up to 4 (Only lithium –polymer accumulators)
Turn off voltage	6.0 V at 2S 9.0 V at 3S 12.0 V at 4S
Max. Voltage	20 Volt
Max. Current (permanent)	10.0 A (5.0 A)
Weight (with cable)	5 g
Dimensions	11x25x7 mm
Short circuit neutralizing	No
Heat-resisting	No
Own consumption with turned on consumer	<8 mA
Own consumption with turned off consumer	< 0,8mA
Green LED	Blink: Notices of the cell number Duration lamps: Consumers turned on
Red LED	Blink (20 times): Consumers turned off: After that LED from Duration lamps: Incorrect cell number

**Connections:**

The Lipo Saver LS70/MC is finished with JST connector. Image 2: shows the connections of the LS70/MC. The connector in the yellow arrow is shows the rechargeable battery connection and the green arrow the connection of the consumer. The red arrow shows on the two LED`s, that show the different working conditions and the cell number on.

Absolutely pay attention to the correct polarity! **Plus = RED** **Minus = Black**  
The Lipo Saver is not protected from voltage reversal!

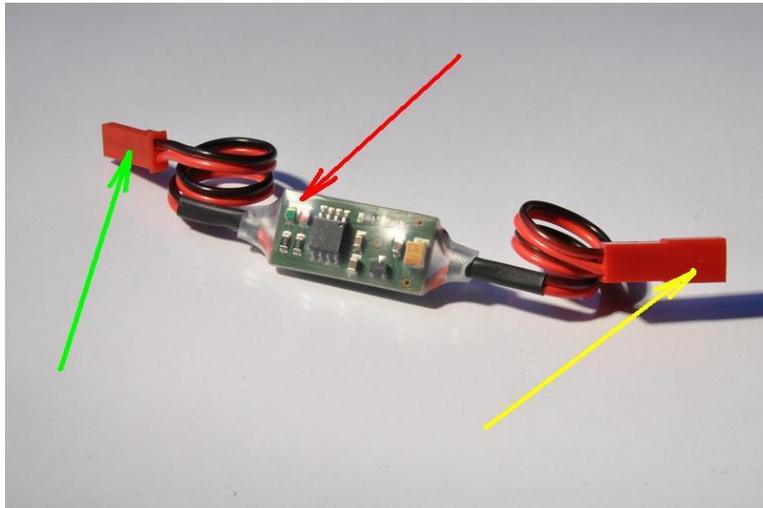


Image 2

**Information:**

The **new software release 5** prevents rapid activate of the Lipo-Saver at very short load of the batteries. (Start a engine, charge a capacitor etc.)

Keep in mind that the Lipo-Saver not for permanent connection to the battery is intended. After switching off of the consumer flows only a small current of less than 0.8 mA. This was the battery in a long lasting connection and leads to a further burden on under-voltage (damage) of the Lipo- battery .

For operation and use of the Lipo Savers LS70/MC, each liability is rejected. FE-Flighttech is not present in the utilization of the device. Improper use cannot review through FE-Flighttech and become not disabled. Manipulation at the device (e.g. opening or voltage reversal) lead automatically to the loss of each claim under guarantee. Read our restrictions for use, retrievably on our web page.

**Manufacturer:** **FE-Flighttech;** [www.fe-flighttech.ch](http://www.fe-flighttech.ch)