SPS-RCS

Remote controlled on-/off switch for the SPS SafetyPowerSwitch

The **SPS-RCS (Remote Control Switch)** is a remote control module for the *SPS SafetyPowerSwitch.* The *SPS SafetyPowerSwitch* can now be turned on and off using a free receiver channel.

Caution: The **SPS-RCS** module is an extension for the EMCOTEC *SPS SafetyPowerSwitch* and is only usable with that.

Safety and warning hints

Please make sure you only turn off the **SPS-RCS** when the motor is stopped. When turned off with motor running, the motor controller can be destroyed under certain circumstances.

Programming of the **SPS-RCS** should only take place with the motor controller disconnected or without any motor at all. This prevents undesired running of the motor.

If deactivation by failsafe is disabled for the **SPS-RCS,** the *SPS SafetyPowerSwitch* can only be turned off by the switch of the radio control, see additional information in *Explaining failsafe deactivation.*

Quick reference

The **SPS-RCS** is a remotely controlled electronic on-/off switch for turning on or off the *SPS SafetyPowerSwitch*. If desired the *SPS SafetyPowerSwitch* can be activated and deactivated by the **SPS-RCS** in addition to the *SPS magnetic switch actuator (item no. A72020)* or the *SPS pin switch actuator (itme no. A72025).*

Mounting instructions

The PCB (Printed Circuit Board) of the **SPS-RCS** can be mounted onto an appropriate surface using hook-and-loop tape or double sided adhesive tape.

Specifications

Dimensions	42 x 14 x 9mm (1.65 x 0.55 x 0.35in)
Weight	6.4g (0.23oz)
Warranty	24 months

Connecting

Connect the *SPS SafetyPowerSwitches* at the socket „*SPS*" of the **SPS-RCS.** Connect socket „*RECEIVER*" to a free receiver channel.

Optionally connect a *SPS magnetic switch actuator* or a *SPS pin switch actuator* at socket „*ext. Switch*", so the *SPS SafetyPowerSwitch* can be activated or deactivated with the magnet or pin (see picture 2 page 2).

Please notice the color code on the top side of the **SPS-RCS** when connecting the *SPS SafetyPowerSwitch* (see *picture 1).*
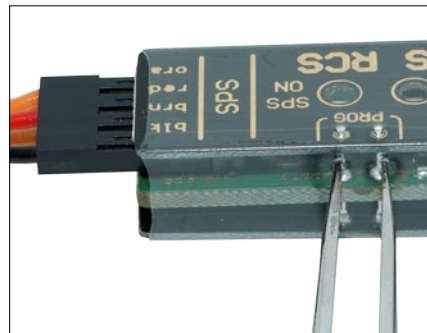
**Picture 1 - Programming contacts (short circuit bridge)**

Programming

Programming is only possible within the first ten seconds after powering on the **SPS-RCS**. Afterwards this function is locked. In case a *SPS magnetic switch actuator* or a *SPS pin switch actuator* is connected, programming only can take place with a removed magnet or pin.

Programming the Power-On position

- Power up **SPS-RCS.**
- Put designated switch in transmitter to desired power on position.
- Short circuit contacts of **SPS-RCS** *(picture 1 page 1)* using e. g. a screwdriver or tweezers. Therefor the shrinking hose must be punctured.
- The LED *„RX STAT"* is on now, the *SPS SafetyPowerSwitch* turns on and the selected switch position is stored.
- Put switch in off position, remove short from contacts of the **SPS-RCS,** the LED *„RX STAT"* turns off after about 1 second. *SPS SafetyPowerSwitch* turns off, the desired off position is stored.
- In order to program deactivation by failsafe, reestablish the short on the contacts again within 5 seconds. For details of failsafe programming see paragraph *Programming failsafe deactivation.*

If **no** programming of failsafe deactivation is desired, the programming mode ends here after **5 seconds** and a reset takes place. After programming mode ends, LED *„RX STAT"* blinks as long as the switch remains in the off position.

Connection Scheme
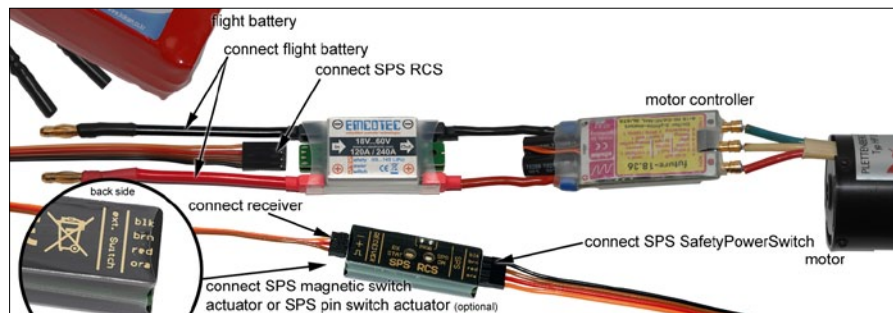
Picture 2 - Connection scheme

Programming failsafe deactivation

If the short was reestablished on the contacts of the **SPS-RCS** within 5 seconds after programming the on-/off-position, failsafe deactivation is active, i. e. the connected *SPS SafetyPowerSwitch* will be turned off if the servo signals from the receiver are missing.

While the contacts are still shorted, the LED *„RX STAT"* is turned on in order to signal programming.

If the contacts remain shorted after finished programming, the LED *„RX STAT"* begins to blink after about 5 seconds (5Hz) until the short is removed again.

After removing the short, programming of the **SPS-RCS** is completed and a reset takes place.

Explaining failsafe deactivation

Missing servo signals from the receiver are a failsafe situation. Please be aware, that only the servo signals from the receiver are suppressed when using a *SPS magnetic switch actuator* or a *SPS pin switch actuator* with an inserted magnet or pin, the power is not removed. An inserted magnet or pin therefore is equal to a failsafe situation.

This means, the *SPS SafetyPowerSwitch* can only be turned off using the magnet or pin, if the failsafe deactivation was programmed for the **SPS-RCS.** If the failsafe deactivation was not programmed, the *SPS SafetyPowerSwitch* can **only** be turned off using the switch of the radio control. Inserting the magnet or pin does not turn the power off in this case.