## **PowerBox Systems**

World Leaders in RC Power Supply Systems



## Operating instructions

# The SensorSwitch

### for the PowerBox "Competition" and "Champion"



Dear customer,

The purpose of the **SensorSwitch** is to provide external control of the integral electronic switches in our **PowerBox** "**Competition**" and "**Champion**".

The **SensorSwitch** does **not** switch the current for the servos and receiver. The actual switching process is carried out by the two completely independent electronic switches in the backer.

The switch plate houses three push-buttons and three LEDs: two green, one red. The switch is mounted on the model using two retaining screws (supplied). The plate features two countersunk holes through which the retaining screws are fitted.

The push-buttons are marked "SET", "I" and "II".

The **SET** button is slightly recessed, and its purpose is to prepare and carry out a switching process. Holding the **SET** button pressed in "arms" (activates) the switches. After about one second the red LED lights up. This indicates that the electronic switches are armed, and ready to be switched.

Now the two power circuits can be switched using the two other push-buttons "I" and "II". This method of switching enables you to check each power circuit or battery **individually**.

This is done by switching on only one battery (green LED on the switch glows): check by glancing at the corresponding LED chain whether and to what extent the battery voltage collapses when you "stir the sticks". If everything is in order, press the SET button again, switch this first battery off (green LED goes out) and switch on the second battery (second green LED on the switch glows) using the second push-button. If everything is again in order, press the SET button once more and switch on the first battery again (both green LEDs light up). You have now checked both power systems.

To switch off the backer hold the **SET** button pressed in once more to "arm" the sensor. The two batteries can now be switched off by pressing the "I" and "II" buttons.

This **new switch system** provides you with the highest level of security ever offered!

When the unit is switched off, the "**Standby**" circuit of the electronic switches draws an idle current of around  $5\mu$ A. This equates to a fraction of the self-discharge rate of normal batteries.

## **PowerBox Systems**

#### SensorSwitch



The ribbon cable attached to the **SensorSwitch** should be plugged into the red multi-pin socket on the backer. Note that the switched state is not affected if the **SensorSwitch** is accidentally disconnected or comes adrift for any reason!

Please take the trouble to **deploy the ribbon cable** in such a way that it is **not subject to vibration**. Don't just let it dangle in the fuselage, and don't place it under any strain. A small piece of double-sided foam tape between cable and fuselage often does the trick.



Please do not throw away the inner packaging immediately, as it includes a template for marking the switch aperture. Cut or saw **outside the marked line**, as shown in the photo.

Even though our product is very well protected from the effects of vibration, the switch should always be mounted in a part of the model relatively low in vibration.

Please note that the GRP fuselage sides of a large power model are not suitable, as they are always subject to considerable vibration. You can remedy the situation by cutting a ply plate (2 - 3 mm thick) about 3 cm larger than the switch aperture, and gluing it in the appropriate place, as shown in the photo. The plate absorbs much of the vibration, and at the same time provides plenty of "meat" for the switch retaining screws to bite into.

The **SensorSwitch** is available in the colours **black** or **grey**, and one or other version is very likely to blend inconspicuously with the colour scheme of your model.

#### Accessories:

2 retaining screws Installation template

Order-No.: 6500 SensorSwitch black 6505 SensorSwitch grey

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