10-Channel Electronic Switch Module No. 8435

- Miniature electronic module for switching 10 different functions via a single R/C channel.
- Each function can be switched on and off separately.
- Each output can be activated as constant or blinking. That gives 2 functions for each of the 10 channels.
- Blinking occurs in a rhythm of 1 sec., also indicating receiver signal quality and if poor blinking slows down or even stops in case of signal failure.
- Switching voltage is up to 30 V with a max. load of 350 mA per channel.
- Each output switches on ground (negative polarity, as common in R/C).
- Requires no modifications on transmitter or receiver. Simply operated via control stick on your transmitter.
- Supply voltage can range 3.0 to 7.5 V corresponding to 4 to 5 cell NiMH pack (fully charged) or BEC (via speed controller).

Connection (see wiring diagram)
- Connect wire lead RX to corresponding channel on receiver. The unit is designed to be operated by a control stick.
- The 10 outputs on the switch are designated to the 10 functions. Connect to negative polarity of the respective power consumer (lamp etc.).
- Connect positive pole of power consumer directly to positive polarity of battery.
- Connect pin marked with "-" to negative polarity of battery. If power consumers to be switched run on receiver battery power this connection is redundant as this connection already exists internally on board of the switch module.
- If inductive loads (motors, relais or similar) are to be switched a free-running diode must be included (see wiring scheme).
- The “eleventh” contact pin is idle and offers no function.

Operation
- As soon as receiver power is switched ON neutral stick position is calibrated. During this measurement all outputs are activated shortly. This short blink indicates that the unit is ready for operation.
- By tipping the control stick in one direction (e.g. upwards) actuates the “lights on” function. Tipping the control stick in the opposite direction (e.g. downwards) actuates the “blinking” function.
- Each activated channel is switched off by the same procedure.
- After activation of a channel the switch will start to "count" again at channel 1. After pausing in neutral position the switch will also start to "count" at channel 1.
- NOTE: If stick is actuated in one direction to channel "11" all active channels will be switched OFF. If all of these channels are set to OFF setting to channel "11" will switch all of these channels to ON.

Example
- Channel 3 is OFF and is to be set to ON:
  Push control stick shorty TWICE to upwards (depending on your setup) and hold THIRD time for about a second in upper position until channel 3 is active.
- Channel 3 is ON and is to be set to OFF:
  Push control stick shorty TWICE upwards and hold THIRD time for about a second in upper position until channel 3 is inactive.

Possible Failures
- All outputs remain active after switching receiver ON.
  Signal received is faulty. Check R/C.

- *Blinking frequency is slower/faster.*
  Indicates signal failure or worsening signal pick-up.

- Certain channels cannot be activated.
  Turn receiver OFF. If this is no cure it is likely that one of the drivers on board of the switch has been damaged.
  Pay attention to free-running diode and maximum load!

- All channels are suddenly OFF but can be reactivated. *Reset due to low voltage.*
  Pay attention to stable power supply!