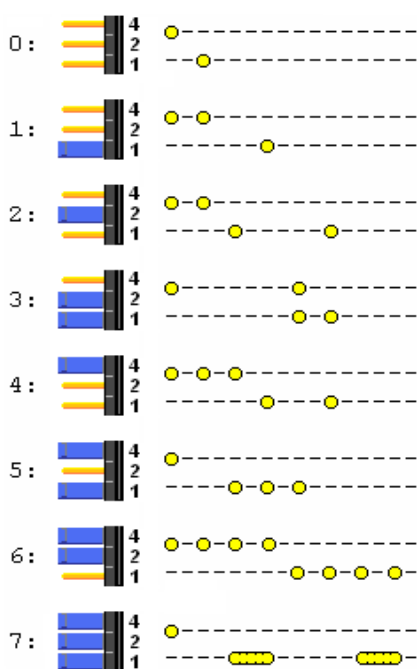


Lights switch NF39

NF39 is quadruple switch controlled by receiver, designed specifically for UAV (multicopters, drones) lights switching on and off. Output **P** is for position lights, outputs **F1** and **F2** for flashing lights and output **L** for landing lights..



Both outputs of the anti-collision lights flash every one second. One of 8 combinations of flashes can be selected by blue jumpers (1, 2, 4). The sum of numbers of the connected jumpers represents the number of the selected combination (see Fig. 1).1

By setting two-position (2P) or three-position (3P) control mode you will personalize the switch to your needs. Figure 2 shows the active lights output according to the position of the lever on the transmitter. Below the levers there are listed the outputs that are in the position on (see Fig. 2).

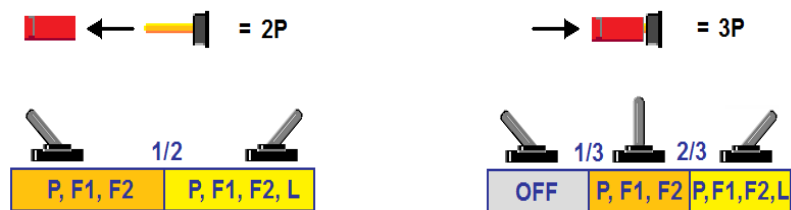


Fig. 2

Fig. 1

Installation and connection procedure

Before installing lights and switch, verify for what voltage are the installed lights (LED strips) determined. Accordingly, it is necessary to select the appropriate battery pack. LED strips are usually designed for 12 V, it corresponds to 3S LiPo battery. In the case, that the UAV is equipped with the higher voltage battery, you can take the appropriate voltage from the balancing connector.

It is also necessary to verify that the selected battery has sufficient power capacity to supply the installed lights for the entire expected duration of the flight. Before you install the switch, connect the lights to a selected battery and verify proper operation.

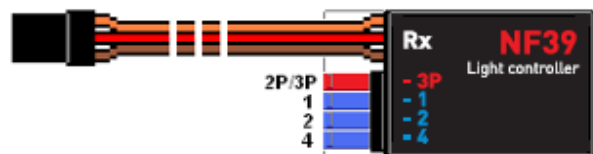


Fig. 3 – front side

On the back side there are 5 pairs of connectors for **P** position lights, **F1** first flashing light, **U** battery, **F2** second flashing light and **L** reflector or landing lights (see Fig. 4).

Connect the power supply with the correct polarity to the middle connector U on the back side .Plus (+) pole is located in the center of the board, negative (-) is on outer side (closer to sign U) – see Fig.4.



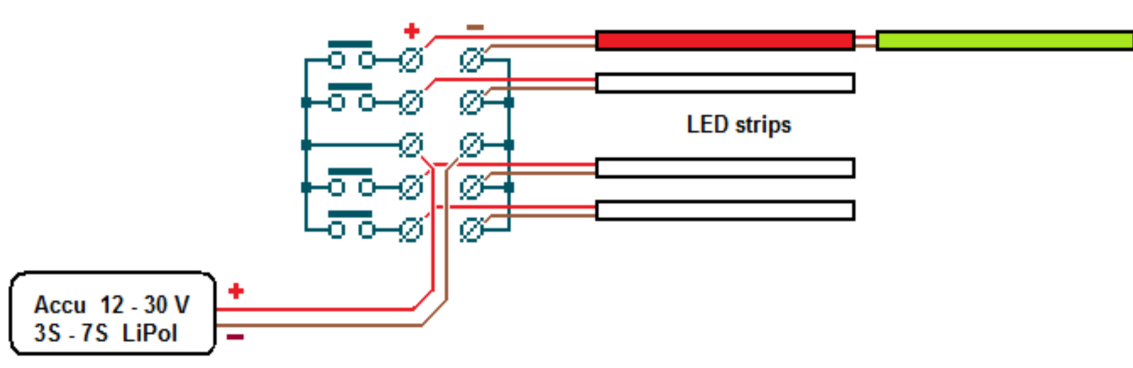
Fig. 4 – back side

Connect the lights according to the desired function and with the right polarity to connectors **P**, **F1**, **F2** and **L** on the back side. Conventional LEDs are used for the flashing lights, flashes are created by the switch. Use the supplied connectors. In case you want to connect more lights per one output, use the supplied adapter. Others can be ordered.

In the next step connect the switch to the UAV receiver and test the lights control. Unless the switch is connected to a powered receiver, the lights are off. The receiver is electrically separated from the output by the optocoupler. After switching on the RC set move the circuit control lever between the extreme positions and verify that the system responds.

The typical connections are shown on Fig. 5.

Fig. 5



WARNING: Each switch output can be loaded with a maximum current of 2 A. Total current consumption of the switch must not exceed 4 A.

The manufacturer is not liable for damages caused by the operation of the unit beyond the technical parameters and the above recommendations. Instructions for the implementation of socket adapters, cabling and more information about diodes can be found on the website.

Technical parameters NF39

	min	typ.	max.
Operational Voltage [V]:	5	12	17
Input Voltage[V]:	3.3	5	
Consumption [5 V]:		12 mA	
Consumption [12 V]:		32 mA	
Circuits F [flash 1 Hz]:		pulses 33 ms	
Temperature:	0 – 60 °C		
Dimensions [mm]	36 x 20 x 11		
Weight [g]:	8,7		

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