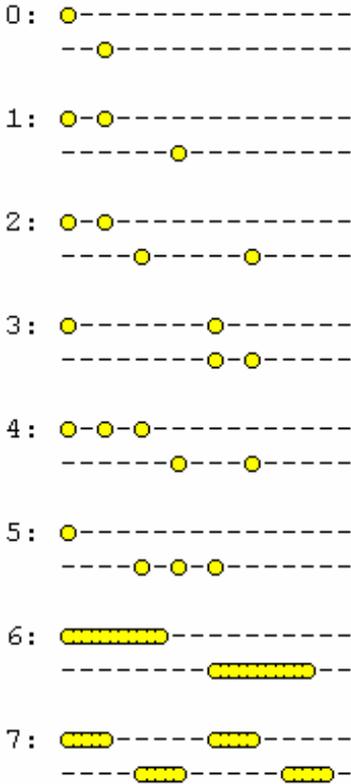


## Illumination Unit Night Fly NF-3m EC

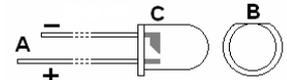
**NF-3m** (mini) unit is a reduced (smaller) version of NF-3RC designed for illumination of small "Indoor" and "ParkFly" models with color ultra bright LEDs (Light-Emitting Diodes) 1.8mm, 3mm or 5mm. It can be used also for illumination of plastic models with SMD LED diodes. **NF-3mEC** is version for small helicopter like **EasyCopter** and has six lights: one green position light **P1**, one red position light **P2**, two flashing lights **F1** and **F2** ( red or white) and two white landing lights **L1** and **L2**.



The unit offers eight different flashing combinations for **F1** and **F2** with one second period. See the diagram on the left side. One of those combinations can be selected by jumpers **1, 2, 4**. The sum of numbers of the connected jumpers represents the number of the selected combination.

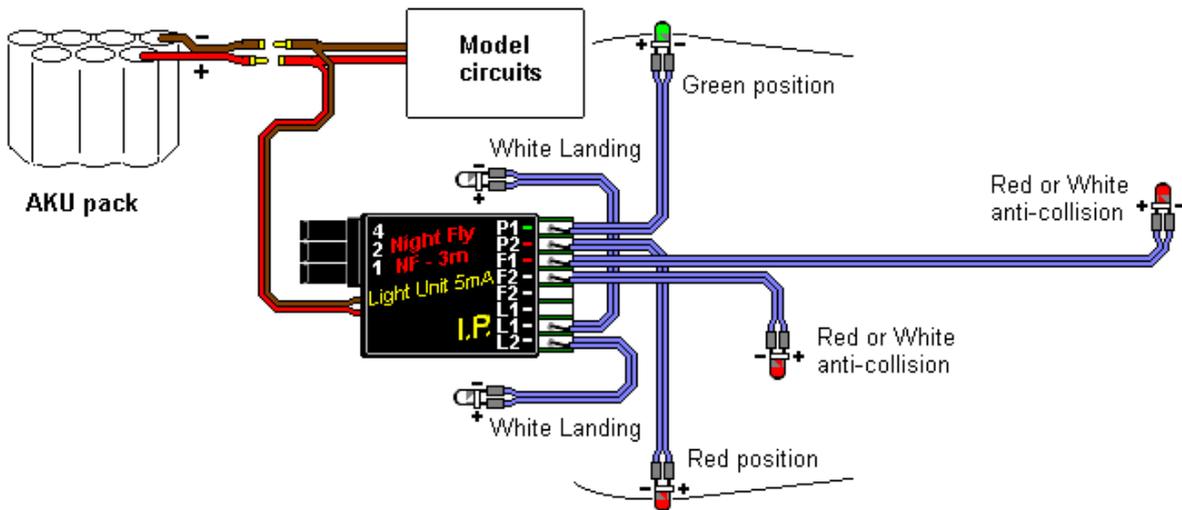
**Installation procedure:** The typical unit connection is shown by the scheme below. Color as well as position of diodes in a specific model may vary. The unit is connected to the accumulator in parallel with the circuits of the model. The red wire of the unit must be connected to the positive pole of the accumulator, the brown wire to the negative pole. Be careful, the reversal of polarity can destruct the unit.

You may check the function of the unit by connecting it to the accumulator and by putting diodes on the unit's contacts. In that way it is possible to check the diode's color as well. When connecting the diodes to the unit one must observe the polarity. The positive pole has a longer outlet (**a**) The negative pole has a trimmed edge (**b**) and usually extends inside the body (**c**) to hold the chip. See the picture. The reversal connection of diodes to the unit is not destructive. **DO NOT TRY** to test the diodes by connecting them directly to the accumulator. Without a compensating resistance you would destroy the diodes.



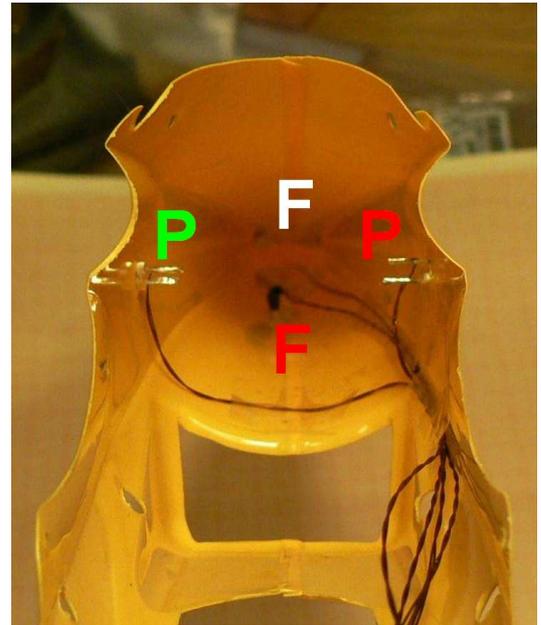
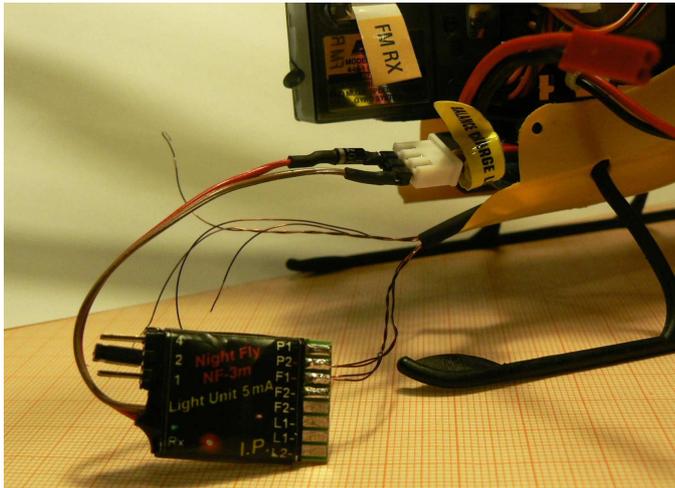
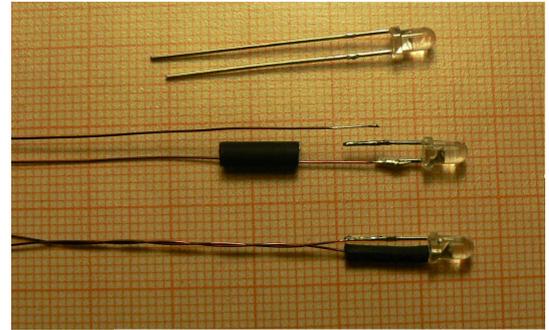
**Making the cabling:** Whether you use the enamel cable or any pair-cable, it is necessary to prepare cables with a sufficient reserve. A few centimeters in excess can be hidden but just one missing centimeter will cause you trouble. The diodes pins can be shorten, but at least 5 mm must stay. Than remove the insulation from 5 mm of the enamel cable and tin the cable than the diode. This will shorten time needed for soldering them together. If you plane to put thermo-shrinkable insulation tube over the connection, prepare 9 mm-long pieces of insulation.

They shall be pulled on the wire beforehand as far as possible from the intended soldered connection – if not, they could shrink in a wrong place. After soldering in both stems and cooling pull the insulation on the connection and heat it gently from all sides with the solder so that it would shrink (you need to try it). It is recommended to heat at a place behind the tip where the solder is clean. Thus the insulation will not be contaminated with remnants of tin and resin.



**Interference :** You have also to keep certain rules to prevent interference with receiver and antenna. When installing lights the wires should not form surface loops. Both wires to diode should go as close as possible to each other to do not produce interference. The twisted pair gives the best result. However, they should not run in parallel with the antenna. This could affect its sensitivity. Therefore we recommend a spatial separation of the lights circuit, the power circuit accumulator-regulator-engine and also the receiver's antenna.

Technical parameters:	min.	typ.	max.
Input voltage :	4,5 V	8 V	12,6 V
Consumption ( 5 V ) :		12 mA	
Consumption ( 12 V ) :		32 mA	
Temperature		0 - 70°C	
Dimensions:		33 x 18 x 5 mm	
Weight:		4,1 g	
Weight of 3 mm LED :	0,13 g	0,15 g	0,17 g



Enjoy the fly.

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