Jet Afterburner Simulator NF-Jet2

The **NF-Jet2** module serves to simulate flame on the output of the jet engine using red and yellow ultra bright LEDs 3 or 5 mm. The input of the module has to be connected in parallel with the engine controller. Then intensity of the flame follows the power of the engine. First color starts to light at the beginning of "gas" range. The second color starts on the middle of the range. To increase the reality of the flame the light intensity changes in pseudo-random period. The frequency of changes speeds up when increasing the engine power.

The module has two sets of outputs and can power lights for one or two engines. The outputs can be also connected in parallel (Red1 to Red2 and Yellow1 to Yellow2) to power one engine with doubled light intensity.

The module is connected to receiver by a Graupner, Hitech type connector. There is an "Y" cable diverging build in the module to simplify connection of two engine controllers. Connectors are under the light ring connectors. The module can also be connected as an uncontrolled unit when disconnecting the cable to a receiver. In this case the light intensity is 100% (full gas).

The module has two outputs for light rings. Each output drives two colors. Usually the first color is red and the second one is yellow. The wires use the same color system. The brown wire in the middle is ground. This is a common negative pole of LEDs (cathodes) for both colors. The total current of one color ranges from 0 to 40 mA depending up the input signal and up the number of LEDs (see Fig.1).
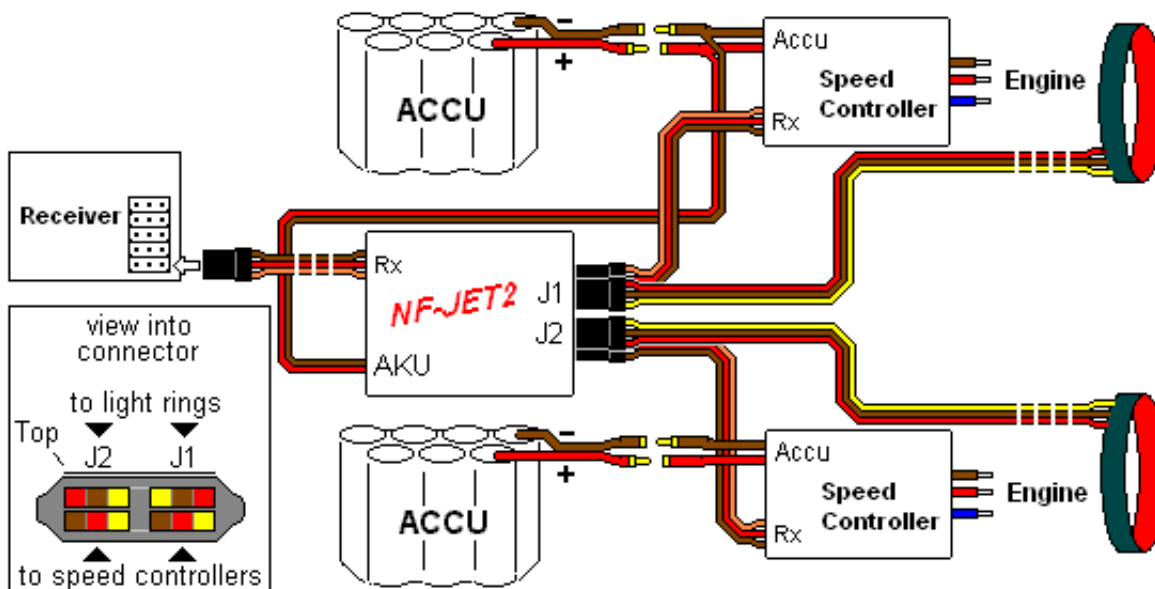

Fig. 1

ATTENTION: the output connector has not a direction lock against change of polarity. If you turn the connector only the order of colors will change.

If the module is sensitive to touch, the likely cause is a bad connection of the servo-cable to the module connector. Connection can be fixed by bending down the middle contact by a half, or at most its entire size. Bend it with small pliers, holding the module in your fingers as close as possible to the connector to reduce the risk of the breaking of the contact (see Fig. 2).

Fig. 2

The module NF-Jet2 is optimized to work with LED belts NF-Jet5 (eventually NF-Jet1) having one range of LEDs 3 or 5mm. NF-Jet5 belts are produced in three variants. The mini-version contains one range of LEDs 3 mm. The middle version contains two ranges of LEDs 3 mm and the big version contains two ranges of LEDs (internal range has LED 3mm and the external one 5mm). The mini belts are up to 258 mm long. NF-Jet5 belts are produced on demand. The

NF-Jet1 belts can be modified by user. If the belt is turned so that the last segment is placed on the first free segment (without LEDs) You will have a circle with diameter 75 mm (3 inches). See the picture below. The circle can be fixed either by screws in holes **A** or by soldering of **B** points together. If You need a smaller circle you can shorten the belt by cutting of one or more segments along the line **C**. Each segment represents 5 mm of circle diameter. Diameter marks (in mili-meters **D** and in inches) are placed beside the hole A. You obtain the circle of a required diameter when the mark (and the hole) of the segment with the requested diameter is placed onto "zero" mark (and the hole) on a first free segment (see Fig. 3).
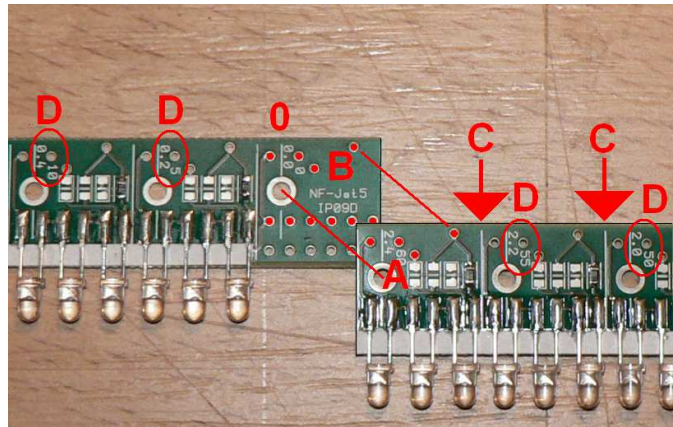

Fig. 3

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 NF-Jet2

	min	typ.	max.
Operational Voltag [V]:	6.0	8.0	14.0
Consumption [mA]:		< 1.7	
Output Current R [mA]:			80
Output Current Y [mA]:			80
Input pulse width [mA]:		0,95 – 2,05	
Temperature:		0 – 70 °C	
Dimensions [mm]:		56 x 24 x 6	
Weight [g]:		10.5	

Production:
K Roztokům 65
Ivan Pavelka
165 00 Praha 6 – Suchdol
Czech Republic

tel:+420 605 404 499
E-mail: info@nightfly.cz
www.nightfly.cz