



RJ-3

INFRA-RED REFLECTION PHOTOCELL

The RJ-3 module is an Infra-Red Reflection photocell with relay output. Each time the photocell will detect an object, the output is activated. The maximum distance between photocell and object is 70 mm. It includes protection against polarity inversion as well as connection terminals.

TECHNICAL CHARACTERISTICS.

Voltage.	12 V. DC.
Minimum Consumption.	35 mA.
Maximum Consumption.	70 mA.
Maximum detection reach.	70 mm.
Maximum Output Load admissible.	5 A.
Protection against polarity inversion.	Yes.
Sizes.	77 x 58 x 30 mm.

INSTALLATION & OPERATING.

POWER SUPPLY. The RJ-3 circuit had to be supplied by a 12 VDC power supply correctly filtered. We recommended you the FE-2 power supply which has been developed to perfectly answer to the circuit needs. Install a fuse and a switch has it is indicated on the schedule. Both are necessary for the module's protection as well as for your own safety, as it is required by the "CE" regulations. Connect the positive of the power supply to the positive terminal indicated in the wiring map, then connect the negative of the power supply to the negative terminal indicated in the circuit. **Verify that the assembly is correct.**

INSTALLATION. The RJ-3 is composed by an Infra-red detection photocell. Then its installation is very important to obtain a correct operating mode. The lack or excess of direct lighth could influence the RJ-3 operating mode, mainly if we are speaking about sunlight; then you have to protect the module against it. You have to install the receiver on an dark enclosure, leaving out the probe part and avoiding a direct contact with sunlight. .

NOTE. Do never separe,remove or prolong the probe from the main control board to avoid to damage the module and automatically cancel the warranty..

OPERATING. After the module' installation and connection, you could use it. You have to activate the "power" switch and automatically the module generate a line on "V" shap, between transmitter and receiver placed on the probe itself (Fig.1).

Each time you cross or block this fence, the relay will be connected till you re-activate it again (Fig.2) . Donot forget that the maximum distance to allow the RJ-3 module to detect an object is 70 mm.

Fig. 1. Infra-Red fence composed by the probe. Fence on "Free"state. RJ-3 module is Desactivated.

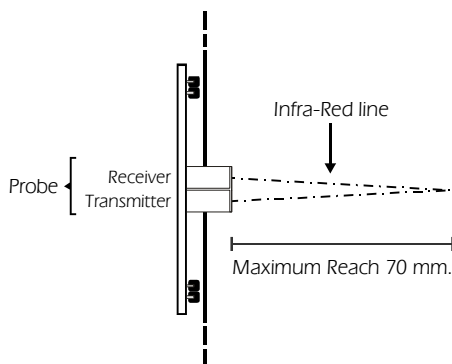
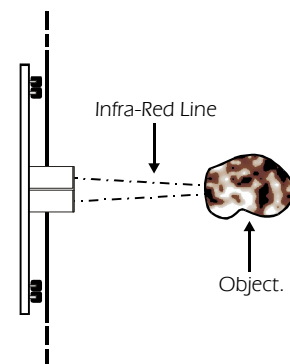
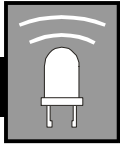


Fig. 2. Infra-Red Fence composed by the Probe Fence on "Exitated" state. RJ-3 module is Activated.



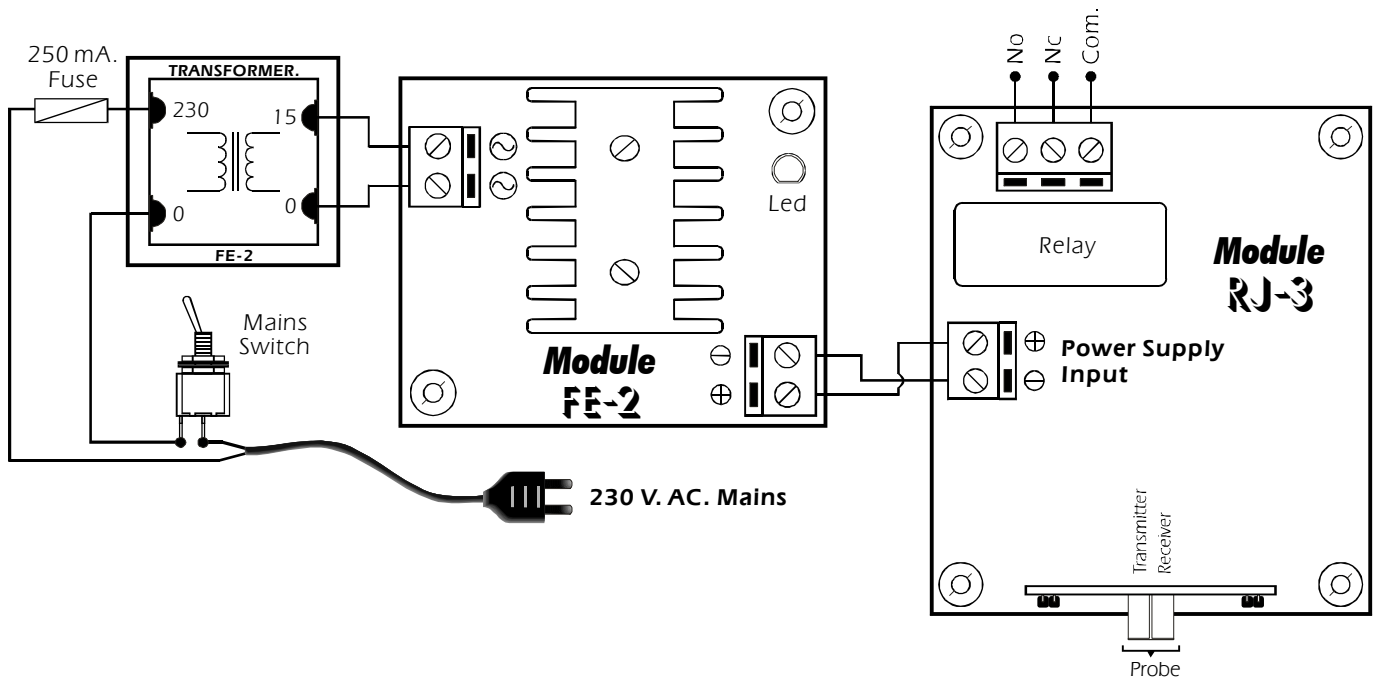


BREAK BEAM SENSORS.

Ref. Full9939

RJ-3

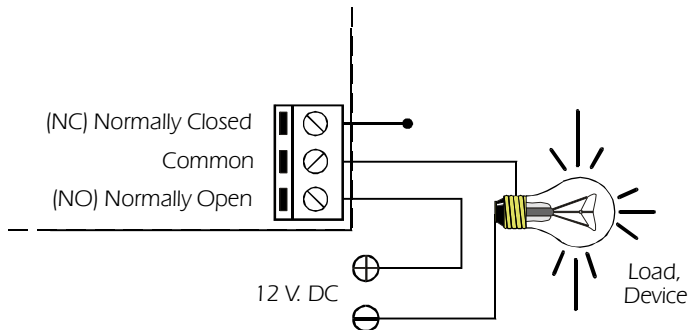
GENERAL WIRING MAP.



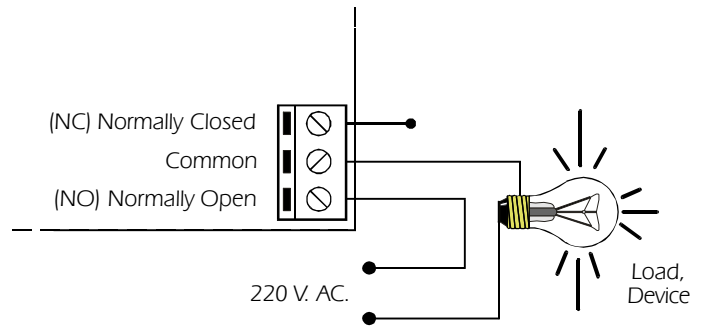
OUTPUT CONNECTION. LOAD.

OUTPUT CONNECTION. The RJ-3 output is controlled by a relay, and accept any device up to 5 A. The relay have three output terminals: The normally open quiescent (NO), the normally closed quiescent (NC) and the common. This mechanism operate like a switch with two terminals NO and Common. For the inverse function you have to use the NC and Common. In the drawing hereafter, you could see a typical connection with a 12 V D.C and 230 V A.C devices.

12 V. DC. CONNECTON



220 V. AC. CONNECTION



TECHNICAL CONSULTATIONS.

If you have any doubt, you could contact your wholesaler or our Technical Department.

- By E-Mail, sat@cebek.com | by mail P.O. Box 23455 - 08080 BARCELONA - SPAIN.

- **Keep the invoice of this module.** For any repair, the corresponding invoice had to be added. If the invoice is not presented together with this module, the module's warranty will be automatically cancelled.

**MORE 300
MODULES.**

All the module's CEBEK have **3 years of total warranty** in technical repairing, and spares from the date of buy.

CEBEK is trade make of FADISEL S.L. more than 300 module's are available in stock for any purpose **request our CATALOGUE**, or visit our Web.

[Http://www.cebek.com](http://www.cebek.com)

WARRANTY

**3
YEARS**