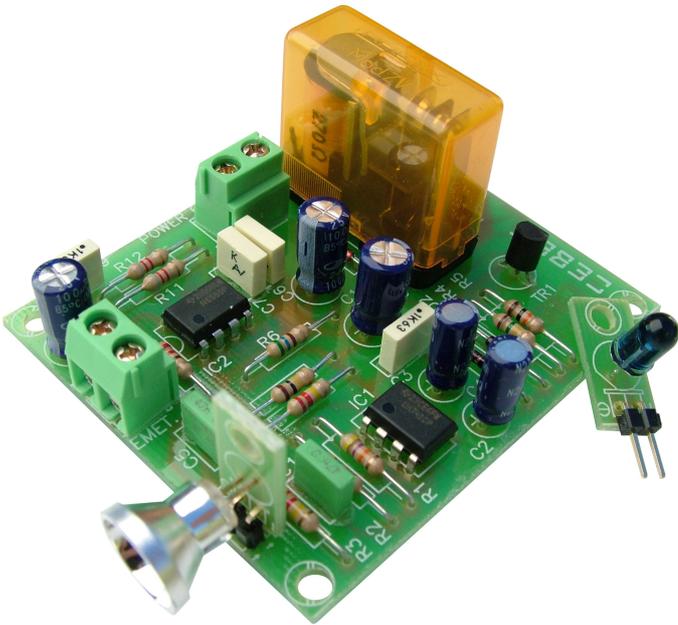




INFRA-RED PHOTOCELL FENCE RJ-1



TECHNICAL CHARACTERISTICS

Voltage.....	12 V. DC.
Minimum Consumption.....	30 mA.
Maximum Consumption.....	70 mA.
Maximumr each between Transmitter & Receiver.....	3 m.
Maximum Output Load.....	5 A.
Protection against polarity inversion.....	Yes.
Sizes.....	77 x 58 x 30 mm.

The RJ-1 module is an Infra-red photocell fence with a reach of 3 m as maximum and a relay output allowing to any load. Each time you cross the infra-red line composed by the transmitter and the receiver the output will be activated. It includes a protection against polarity inversion as well as connection terminals.

INSTALLATION & OPERATING

POWER SUPPLY : The RJ-1 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 owns afety, 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 inthe circuit. **Verify that the assembly is correct.**

INSTALLATION : The RJ-1 is basically composed by 2 PBC or circuits; the main board where the receiver is installed and the board with the transmitter. Seeing the General Wiring Map, connect the transmitter board with the indicated terminal on the receiver board. Terminals of correspodning boards have to coincide Connect the negative terminal of the transmitter to the negative treminal on the main board. Do the same operation with the terminal indicated with an arrow.

Connect and verify the assembly to avoid a wrong operating mode.

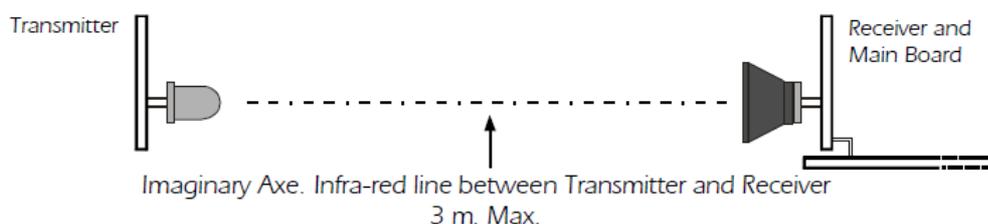
If the required cabling length is superior than 50 cm. you have to use shielded cable connecting the shield with negative terminals and main wire to the arrow terminals. Do never exceed 8 m for your installation.

Then, you have to install on a right line transmitter and receiver (see fig. 1). Be sure that the installation of transmitter and receiver are basic to obtain a perfect operating mode. The maximum length between both board is 3m.

Avoid the direct sunlight on the receiver. The lack or exceeds of direct ligh could influence the RJ-1 operating mode, mainly if we are speaking about sun light; then you have to protect the module against it. You have to install the receiver on an dark enclosure, leaving out the part corresponding silvered part of the receiver.

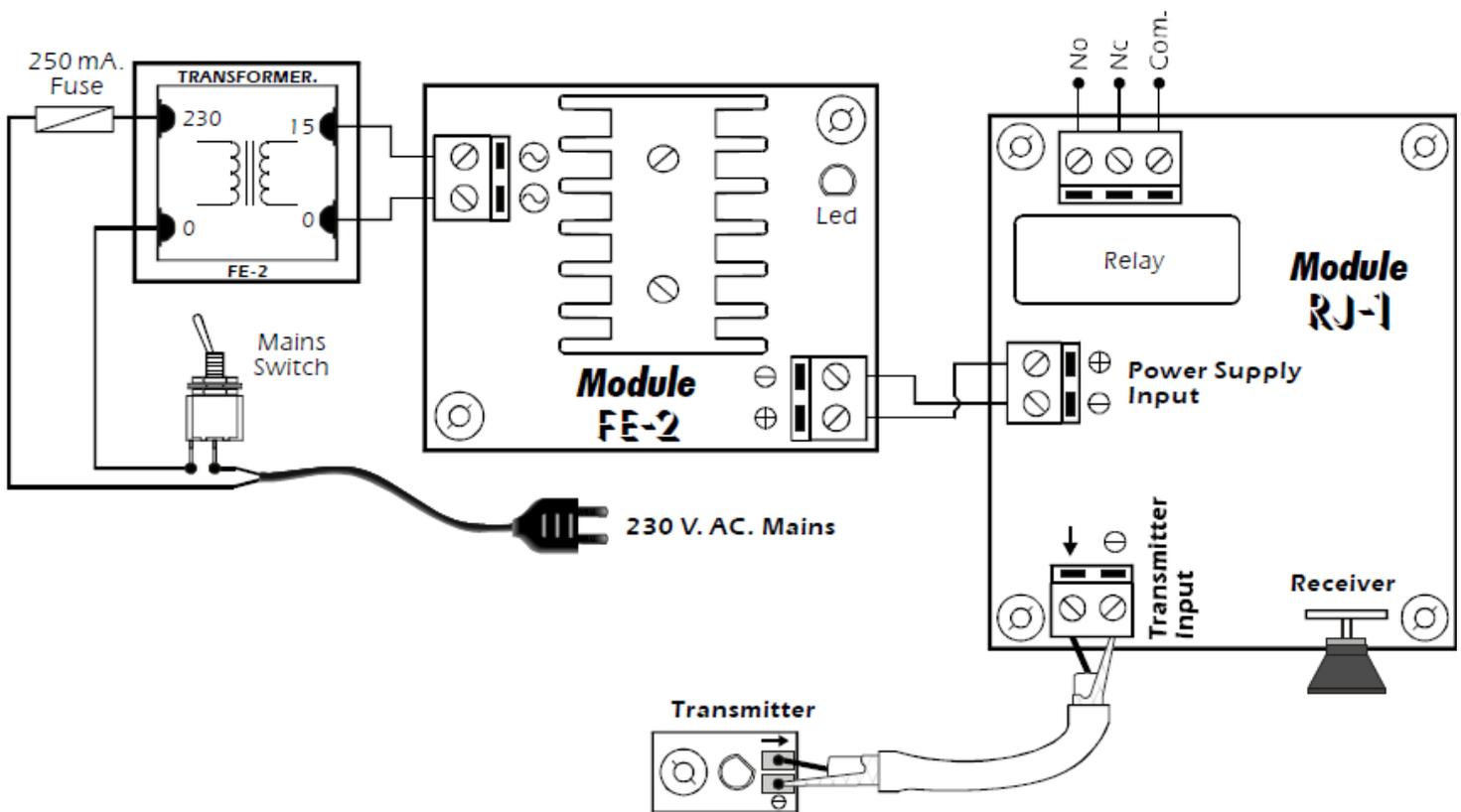
NOTE. Do never separe or remove the receiver from the main board to avoid to damage the module

Fig. 1. How to correctly install the Transmitter and the Receiver



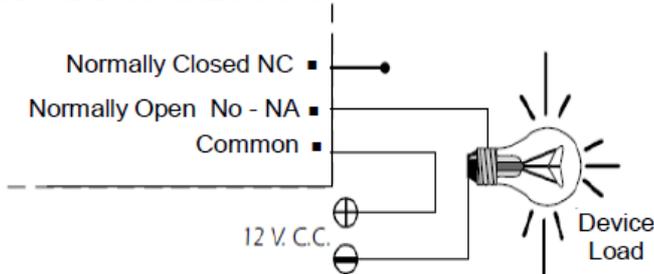
OPERATING : After the module' installation and connection, you could use it. You have to activate the "power" switch and automatically the relay will be activated to informyou that the infra-red fence is ready. Each time you cross this fence, the relay will be disconnected till you re-activate it a gain.

GENERAL WIRING MAP.

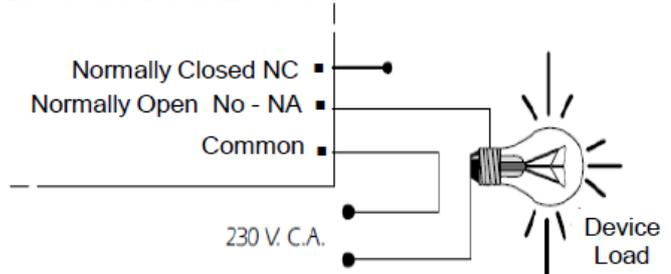


OUTPUT CONNECTION. The RJ-1 output is controlled by a relay, and accept any device up to 5 A. The relay have three output terminals: The normally open quiescent (NO), the normally closed quiescent (NC) and the common. This Mechanism operate like a switch with two terminals NC and Common. For the inverse function you have to use the NO and Common. In the drawing hereafter, you could see a typical connection with a 12 V D.C and 230 V A.C devices.

12V DC CONNECTION



230V CA CONNECTION



230 V CA CONNECTION

