



# cebek<sup>®</sup>

## SUNSET RELAY I-42



### TECHNICAL CHARACTERISTICS

Voltage.....	12 V. D.C.
Minimum Consumption.....	5 mA.
Maximum Consumption.....	60 mA.
Maximum Load Accepted by the Relay.....	5 A.
Maximum Power Accepted by the Relay.....	1000 W.
Minimum Detection Level.....	25 Lux.
Maximum Detection Level.....	130 Lux.
Protection Against Polarity Inversion.....	Yes.
Operating Indicator Led.....	Yes.

The I-42 module, thanks to an incorporated detector, will activate the output when it does not receive enough light. It is supplied by 12 V. D.C. and its operating sensitivity could be adjusted using a potentiometer inserted in the P.C.B. It has a relay output allowing any kind of load or device with 5A as maximum consumption.

It includes protection against polarity inversion, operating indicator led, connector to withdraw the

### OPERATING

**POWER SUPPLY.** The I-42 circuit has to be supplied by a 12 VDC power supply correctly filtered. Do not use suppliers or rectifiers disturbing the module's operating. Then, we recommend you the FE-2 power supply which has been developed to perfectly answer to the circuit needs. 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.

**OPERATING.** Following indications mentioned in the General Wiring Map, install the probe to the reserved terminal. If the assembly needs cable superior than 30 cm, you have to use shielded cable.

When all connections are done, supply the module. Therefore if you manipulate the detector, you could verify that when the detector does not receive light it will activate the module (led lighting and output activate).

The I-42 circuit offers the possibility to adapt the module's sensitivity according to the received light. To determine this sensitivity you have to adjust the potentiometer. Placing it at the minimum the circuit will lose sensitivity and need more darkness to be activated. If you place the potentiometer at the maximum, the module will earn sensitivity and it needs less darkness to be activated.

If you have to place the I-42 module at the exterior (bad weather) you have to fit the module into a waterproof box to protect the module and detector but allowing it to detect.

The I-42 module allows the possibility to use to be used in inverted mode. To obtain this function you have to desold the R5 resistor (4K7) indicated in the circuit and sold it in the place indicated as R6.

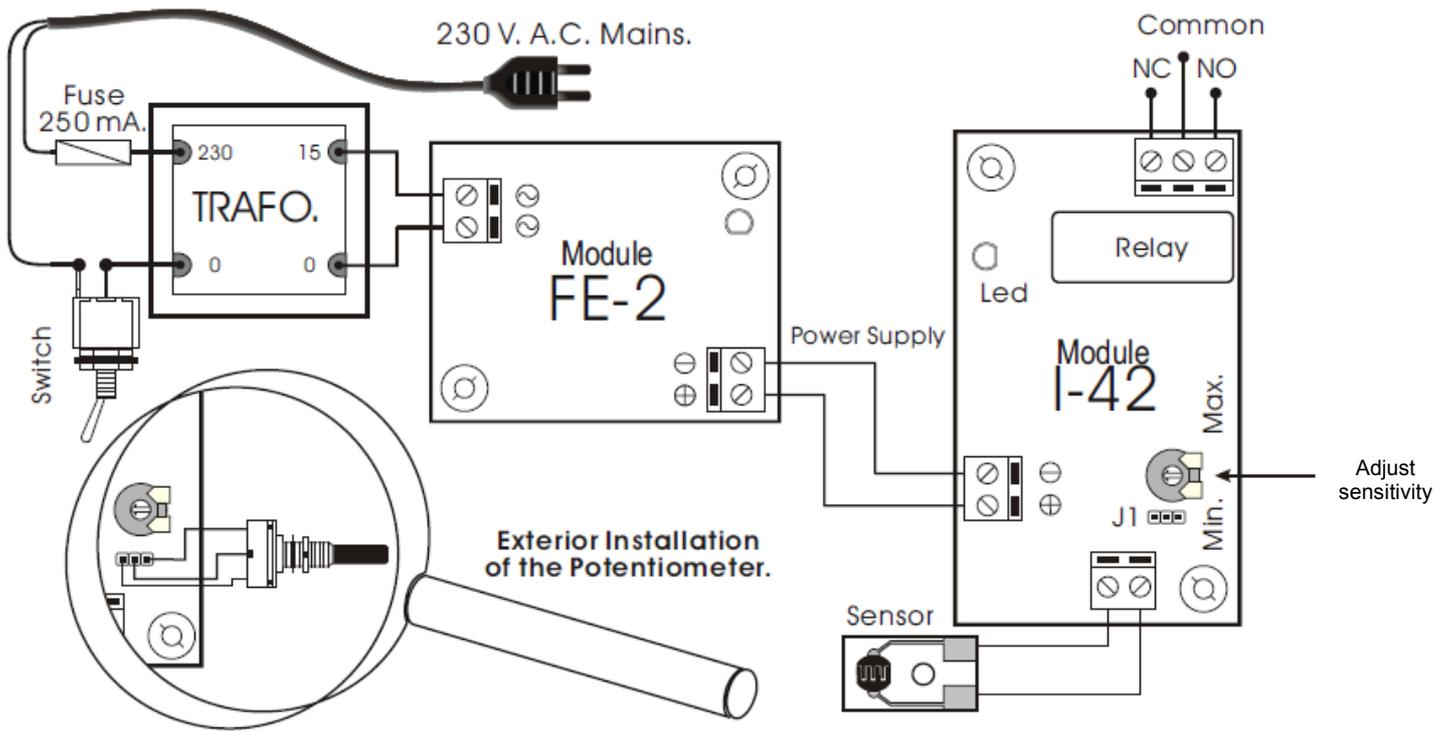
**EXTERIOR INSTALLATION OF THE POTENTIOMETER.** If you wish to withdraw or substitute the potentiometer inserted into the P.C.B. by an exterior one, firstly you have to suppress the already soldered potentiometer. Then, and as it is indicated in the drawing, connect the cable between the element or jumper indicated as "J1" and exterior potentiometer. Both potentiometers have to be linear and offering 22 KOhms (Cable has to be less than 30 cm).

**OUTPUT. CONNECTION OF THE LOAD.** The output Module (I-42) is controlled by a relay, allowing any load until 5 A. as maximum consumption. The relay has 3 output terminals the normally open at quiescent (NA), the normally closed at quiescent (NC) and the common. The operating of this mechanism is the same as a switch with two (2) terminals NA and common, if you wish that the output will be activated when the detector does not receive light, or between the NC and the common to obtain the reverse operating.

In the Output connection paragraph, you could appreciate the typical connection for a device operating at 12 VDC and to operate at 220 VAC.

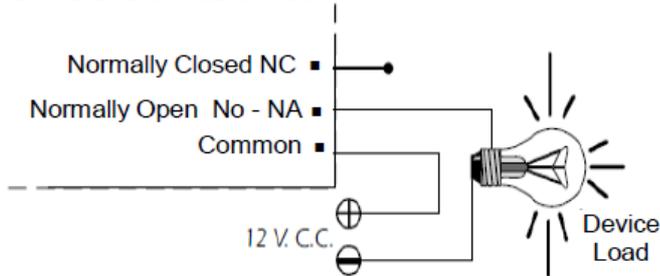
The installation is between the Common and NA, where the device or load that you wish to control will be activated during the operating time.

## GENERAL WIRING MAP.

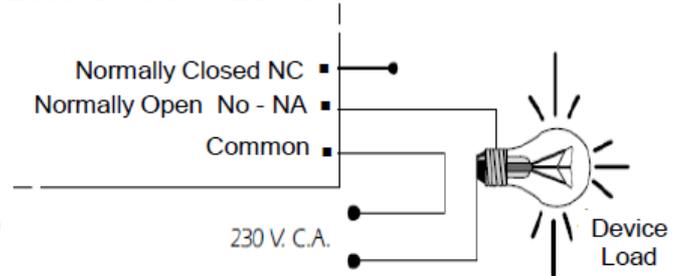


## OUTPUT. LOAD CONNECTION

### 12V DC CONNECTION



### 230V CA CONNECTION



### 230 V CA CONNECTION

