



# TL-4

## 2 CHANNELS REMOTE CONTROL RECEIVER.

The TL-4 is a 2 channel remote control receiver supplied by 230 VAC with relay output working by radio-frequency. It will recognise the signal from TL-5 or TL-6 emitters, verify the security code and maintain the output connected until you stop to press the push button of the emitter. You could configure you own security code (between 13.122 possibilities) as well as to work with the TL-5 or the TL-6 emitters. It includes micro-switches to select the code, antenna output, led and acoustic signal for the output as well as connection terminals.

**Don't forget to read all the information sheet in order to obtain a perfect operating of the module.**

### TECHNICAL CHARACTERISTICS.

Voltage .....	230 V. A.C.
Minimum Consumption .....	15 mA.
Maximum Consumption .....	100 mA.
Operating Frequency .....	433.92 Mhz.
Maximum Distance (Approx.) .....	30 Meters.
Maximum Output Load .....	3 A.

### OPERATING.

**POWER SUPPLY.** The TL-4 circuit had to be supplied with voltage from 230 VAC. According to the General Wiring Map you have to use an adequate plug and a cable for mains and connect it to the input terminal 220 VAC. Install a fuse and a switch as it is indicated in General Wiring Map (see hereafter). Both are necessary to protect the module and for your own security, as it is indicated in "CE" regulations. Then, verify that you have correctly connected the module.

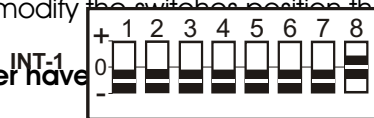
Before to connect the module to the mains inserting voltage, please do the rest of connections specified hereafter. **Don't forget that in several part of the module there is voltage (230 VAC)**, for this reason we suggest you to be careful.

**OPERATING.** Although the circuit's operating is very easy, do not forget following points.

All CEBEK remote control works with a frequency adjusted at 433.92 MHz. For this reason, they include micro-switches (INT-1) allowing to configure a security code between 13.122 possibilities, for each module. Then, your module will be different from others, even if they offer same characteristics.

Seeing the drawing map, you could note that the micro-switches INT-1 have 8 switches with three different positions: "-", "0" and "+". You have to modify the switches position that you have received in order to select you personal code.

**Don't forget: The receiver and emitter have to have the same security code configured to correctly work.**



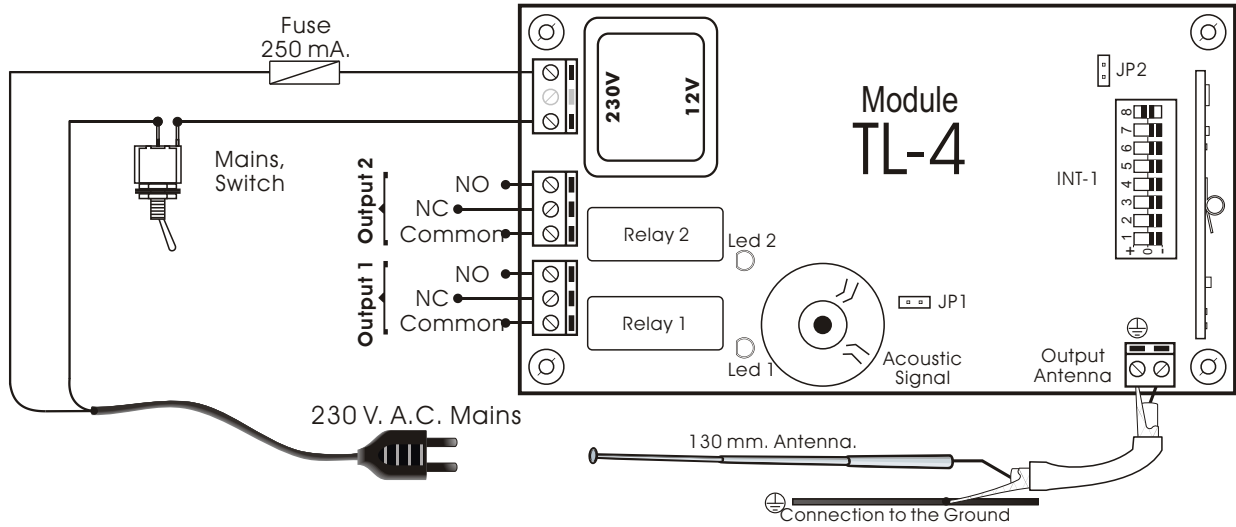
**ANTENNA INSTALLATION.** To obtain a maximum and clear reception, you have to install an exterior antenna. Seeing the paragraph "General Wiring map", install a metallic antenna with a length of 130 mm. The cable between antenna and module had to be shielded and inferior than 25 cm. Connect the negative terminal to the ground.

**OUTPUT CONFIGURATION.** Even if the receiver TL-4 have been developed to control its corresponding emitter with 2 channel (TL-6 module), it also could be controlled by the module: 1 Channels emitter. Then, you have to





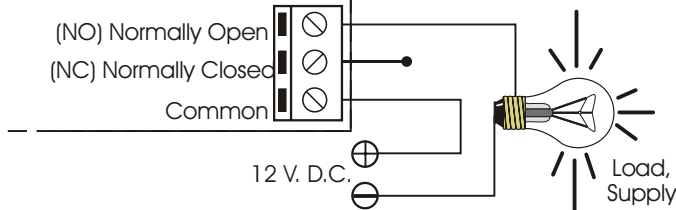
## GENERAL WIRING MAP.



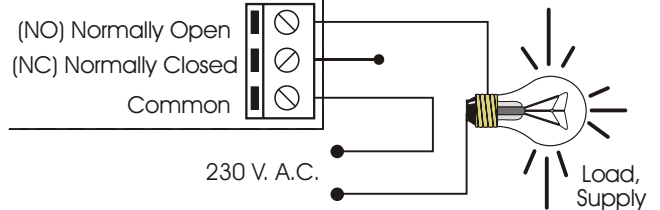
## OUTPUT CONNECTION. LOAD.

The output of the TL-4 module is controlled by a relay, allowing any load until 3 A. as maximum consumption. The relay has 3 output terminals the normally open at quiescent (NO), the normally closed at quiescent (NC) and the common. The operating of this mechanism is the same as a switch with two (2) terminals NO and common, if you wish that the output will be activated during the timer, or between the NC and the common to obtain the reverse operating. In the drawing, you could appreciate the typical connection for a devices operating at 12

### 12 V. D.C. TO CONNECTION

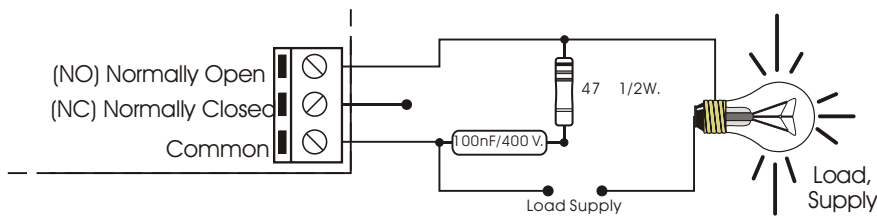


### 230 V. A.C. TO CONNECTION



VDC and to operate at 220 VAC.

**OUTPUT. DON'T FORGET.** When the module is working and according to its load, it could happen an incorrect operating of the output. If it is the case, you have to install a circuit between 2 relay's contacts used for the



## TECHNICAL SUPPORT AND INFORMATION.

For any questions or more information:

**By Fax.** (24h.) +34.3. 432.29.95

**By Mail:** C/ Quetzal, 17-21, Entlo. 2º (08014) BARCELONA - SPAIN.

**By E-Mail:** [cebek@sakma.es](mailto:cebek@sakma.es)

**Keep you invoice.** For any repairing could you send this with module. Else, the module will lost the warranty.

**MORE 300  
MODULES.**

All the module's CEBEK have **3 years of total warranty** in the 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.sakma.com/CEBEK](http://www.sakma.com/CEBEK)

**WARRANTY**

**3  
YEARS**