



TL-2

2 CHANNELS REMOTE CONTROL RECEIVER.

The TL-2 is a 2 channel remote control receiver supplied by 12 VDC 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 your 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.

TECNICAL CHARACTERISTICS.

Voltage	From 12 up to 15 VDC.
Minimum Consumption	15 mA.
Maximum Consumption	100 mA.
Operating Frequency	433.92 Mhz.
Maximum Distance (Approx.)	30 Meters.
Maximum Output load	3 A.
Sizes	99 x 64 x 30 mm.

OPERATING.

POWER SUPPLY. The TL-2 circuit had to be supplied with voltage from 12 up to 15 VDC.

Then, we recommended you the FE-2 power supply which has been developed to perfectly answer to the circuit needs. For mobile appliance, use a 12 VDC battery.

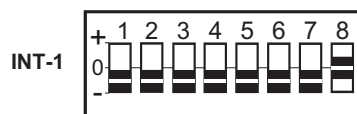
Connect the positive of the power supply to the positive terminal indicated in the wiring map, then connect also the negative of the power supply to the negative terminal indicated in the circuit. **Verify** that the assembly has been correctly done, before to activate the switch supplying the module. Connect other connections as it is indicated hereafter.

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.

Do not forget. The receiver and emitter have to have the same security code configured to correctly work.

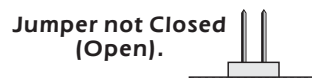


ANTENNA INSTALLATION. To obtain a maximum and clear reception, you have to install an exterior antenna. Seeing the paragraph "General Wiring map", install a metallic antenna with a length of 130 mm. The cable between antenna and module had to be shielded and inferior than 25 cm. Connect the negative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

OUTPUT CONFIGURATION. Even if the receiver TL-2 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 select between two push buttons the wished receiver output.

From the factory, the relay N°1 is selected closing the jumper JP1. If you wish to control the relay N°2 you have to get out the piece "JP" of the jumper JP1 and with is close the jumper JP2.

More over, the circuit offer the possibility to activate both relays at the same time. To configure this option you have to close both jumpers JP1 and JP2.



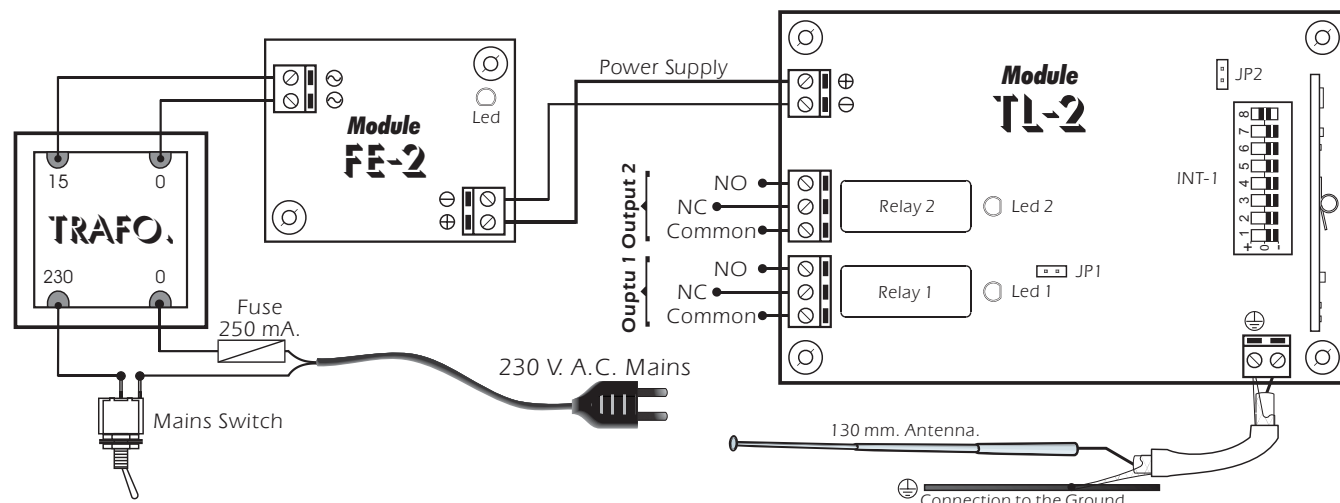


CONTROL REMOTE.

Rev. Full9809

TL-2

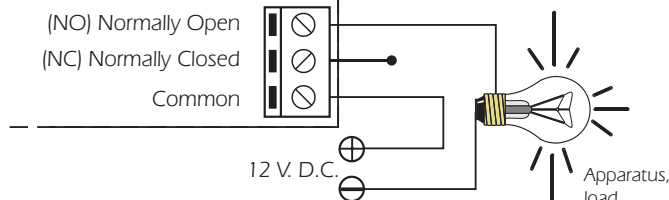
GENERAL WIRING MAP.



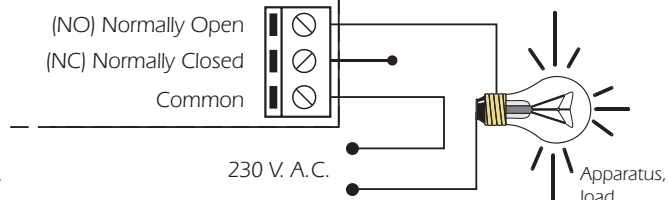
OUTPUT CONNECTION. LOAD.

The output of the TL-2 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 NA 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 VDC and to operate at 220 VAC.

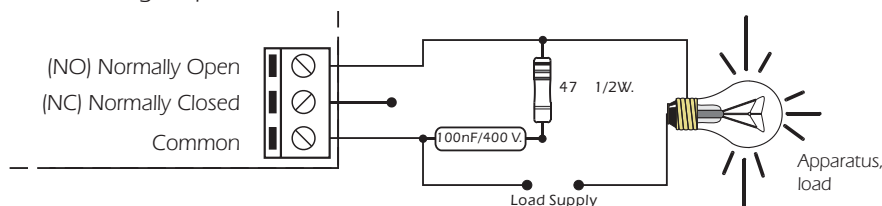
12 V. D.C. TO CONNECTION



230 V. A.C. TO CONNECTION



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 connection. See the drawing map.



TECHNICAL SUPPORT AND INFORMATION.

For any questions or more information:

By Fax. 34.93 432.29.95

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

By E-Mail: sat@cebek.com

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

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**3
YEARS**