



## REMOTE CONTROL

### TL-7



#### TECHNICAL CHARACTERISTICS

Voltage. ....	12 V. DC.
Minimum Consumption. ....	15 mA.
Maximum Consumption. ....	55 mA.
Operating Frequency. ....	433.92 Mhz.
Maximum Reach (approximately) . ....	20 - 30 m.
Maximum Load at Output. ....	3 A.

The TL-7 is a 1 channel remote control flip-flop receiver supplied by 12 VDC with relay output working by radiofrequency. It will recognize 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 Cebek emitters. It includes micro-switches to select the code, antenna output, led and acoustic signal for the output as well as connection terminals

**POWER SUPPLY.** The TL-7 circuit had to be supplied with voltage from 12 up to 15 VDC.

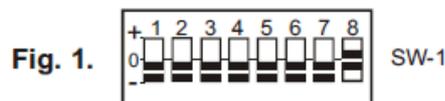
Then, we recommended you the FE-2 power supply which has been developed to perfectly answer to the circuit needs. For mobile appliance, use a 12 VDC battery. Install a fuse and a switch has it i syndicated on the schedule.

Both are necessary for the module's protection as well as for your own safety, as it is required by teh "CE" regulations. 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.** All CEBEK remote control works with a frequency adjusted at 433.92 MHz. For this reason, they include micro-switches (SW-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 N°1, you could note that the micro-switches SW-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 se

Once emitter and reciver are configured with the same code, you could supply the module. Then, press the



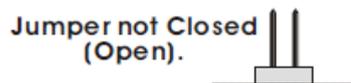
push button on the emitter and the output will be connected till you press again the button, to disconnect the output.

**ANTENNA INSTALLATION.** To obtain a maximum and clear reception, you have to install an exterior antenna.

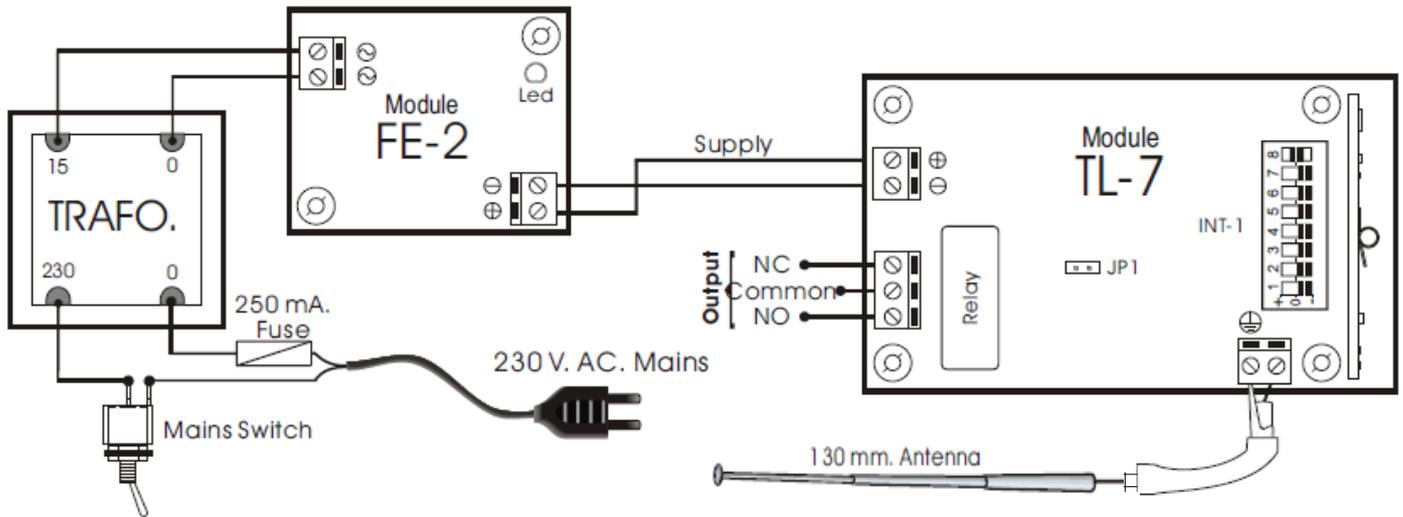
Seeing the paragraph "General Wiring map", install a metallic antenna with a length of 130 mm. The cable between antenna and module had to be shielded and inferior than 25 cm. Connect the negative terminal to the ground.

**OUTPUT CONFIGURATION.** Even if the receiver TL-7 have been developed to control its corresponding emitter with 1 channel (TL-5 module), it also could be controlled by the TL-6 module. 2 Channels emitter. Then, you have to select between two push buttons the wished receiver output.

From the factory, the TL-7 module is supplied to be controlled by the TL-5 module (with 1 channel) with a single push



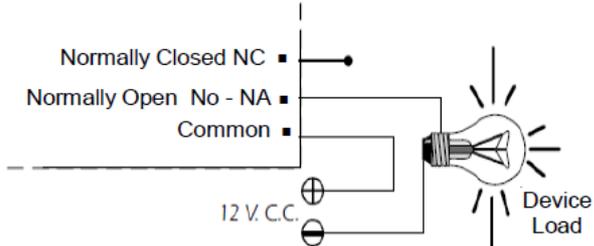
## GENERAL WIRING MAP.



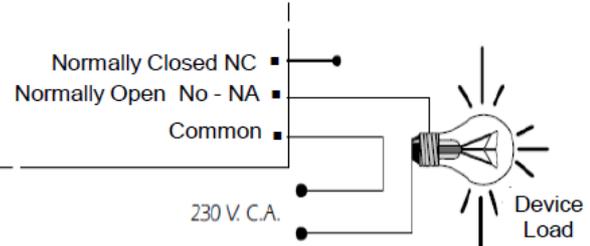
## LOADS CONNECTION

**OUTPUT CONNECTION. LOAD.** The TL-7 output is controlled by a relay, and accept any device up to 3 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.

### 12V DC CONNECTION



### 230V CA CONNECTION



**INFORMATION ABOUT THE OUTPUT.** During the operating mode and according to its load, it could happen a fluctuation or an incorrect working of the output. In such case, you have to install an anti-spark circuit between both contacts of the used relay, as it is indicated on the schedule

### 230 V CA CONNECTION

