



# I-76 "OR" / "NOR" LOGICAL DOOR with RELAY.



The I-76 module do the OR/NOR logic operation regarding two input signals, connecting the corresponding output. It allows to select the operating mode as OR or NOR door. It incorporates indicator LED and protection against polarity inversion.

### TECHNICAL CHARACTERISTICS.

Voltage. ....	12 V. D.C.
Minimum Consumption. ....	5 mA.
Maximum Consumptio. ....	55 mA.
Maximum admissible load. ....	5 A.
Input signal level. ....	0 - 12 V. D.C. (TTL - CMOS).
Protection against polarity inversion, (P.I.P.). ....	Si.
Dimensions. ....	70 x 38 x 30 mm.

### POWER SUPPLY and INSTALLATION

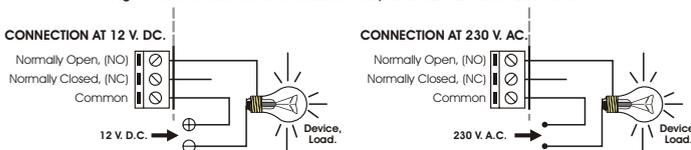
**POWER SUPPLY.** Th I-76 circuit had to be supplied by a 12 VDC power supply correctly filtered. For this reason we recommend you to use the FE-2 power supply, which has been developed to perfectly answer to the circuit needs. To supply the module you have to connect the positive and the negative of the power supply to the respective terminals indicated as "Power", respecting the corresponding polarity. The distance between the power supply and the module has to be as short as possible.

Install a fuse and a switch has it is indicated on the "General Wiring Map" drawing. Both are necessary for the module's protection as well as for your own safety, as it is required by the "CE" regulations. Verify that the assembly is correct.

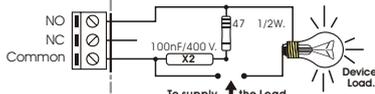
**Note:** Install a fuse and a switch has it is indicated on the schedule. Both are necessary for the module's protection as well as for your own safety, as it is required by the "CE" regulations. Consult the corresponding power supply's instruction manual. Then, Verify that the assembly is correct.

**OUTPUT CONNECTION. LOAD.** The I-76 output is controlled by a relay, and it accepts any device up to 5 A. The relay is not a component supplying voltage but its function is limited to accept or deny the voltage passage like a standard switch. For this reason, you have to supply the load through this component. The relay has three output terminals: The normally open quiescent (NO), the normally closed quiescent (NC) and the common. Install it between the Common and the NO in accordance with the drawing "Fig.1" For the inverse function you have to place the load between the NC and Common.

Fig. 1. How to connect the module's output at 12 V. DC and 230 V. AC.



**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 (100 nF/400V Type X2 Capacitor and 47W. 1/2W resistor) between both contacts of the used relay, as it is indicated on the drawing.



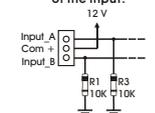
### OPERATING MODE.

**SIGNAL INPUT.** The control signal injected to the module must be TTL or CMOS type, therefore, the maximum voltage level accepted by the circuit is 12 V D.C. Connect the positive of each input signals of entrance to the terminals indicated as Input\_A and Input\_B. Both negatives should be connected to the central terminal indicated by the ground symbol.

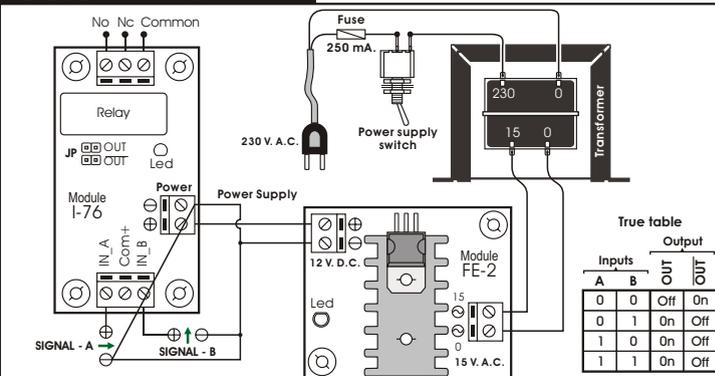
See General Wiring Map paragraph. The length of the cable as to be as short as possible. If the distance is superior to 50 cm, you should use shielded cable, connecting the braid with the negative to the terminal ground. The maximum length being 2 meters. The central terminal, "Com+" is internally connected to the positive of the circuit, for this reason it can be used for the logic operations in substitution of one of the two inputs. See fig 2, indicating the electrical drawing of the configuration of the module's input.

The I-76 can operate like OR door or like denied OR: NOR. To configure the module as OR door, you have to close or to connect terminals of OUT jumper. At the opposite, if you wish to configure the circuit as NOR door, you have to close the OUT jumper.

Fig. 2. Electrical Drawing of the input.



### GENERAL WIRING MAP.



### TECHNICAL CONSULTATIONS.

For any consultations, please contact our technical department.  
 - By E-Mail, [sat@cebek.com](mailto:sat@cebek.com) | by Fax, 93.432.29.95 | By Post c/Quezta, 17-21. (E-08014) BARCELONA.  
 - **Keep the invoice to this module.** To apply the warranty, you have to add a copy of this one.  
**Without this invoice, the 3 years warranty offered to this product, will be automatically cancelled.**

All CEBEK modules have a **TOTAL WARRANTY of 3 YEARS** concerning man labour, and components from the purchase date.

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