



# CD-20

## COUNTER UP & COUNTER DOWN TILL 99.

The CD-20 circuit is a counter up & counter down till a maximum of 99 units. It generally use to indicated "your turn" and offer all standard functions of this module as to count up and count down up to 99 as well as reset function. To visualise data, a 10 cm display is used.

It works with 12 V. D.C. Suggested power supply FE-4 or 12 V. Battery.

**Do not forget to read all the information mentioned hereafter to obtain a perfect operating of the module.**

### CHARACTERISTICS TECHNICAL.

Operating Voltage .....	12 VDC
Minimum Consumption .....	110 mA.
Maximum Consumption .....	300 mA.
View Angle .....	120 °.
Protection Against Polarity Inversions .....	Yes.
Recommended Power Supply .....	FE-4

### OPERATING.

**POWER SUPPLY.** The CD-20 circuit had to be supplied by a 12 VDC power supply.

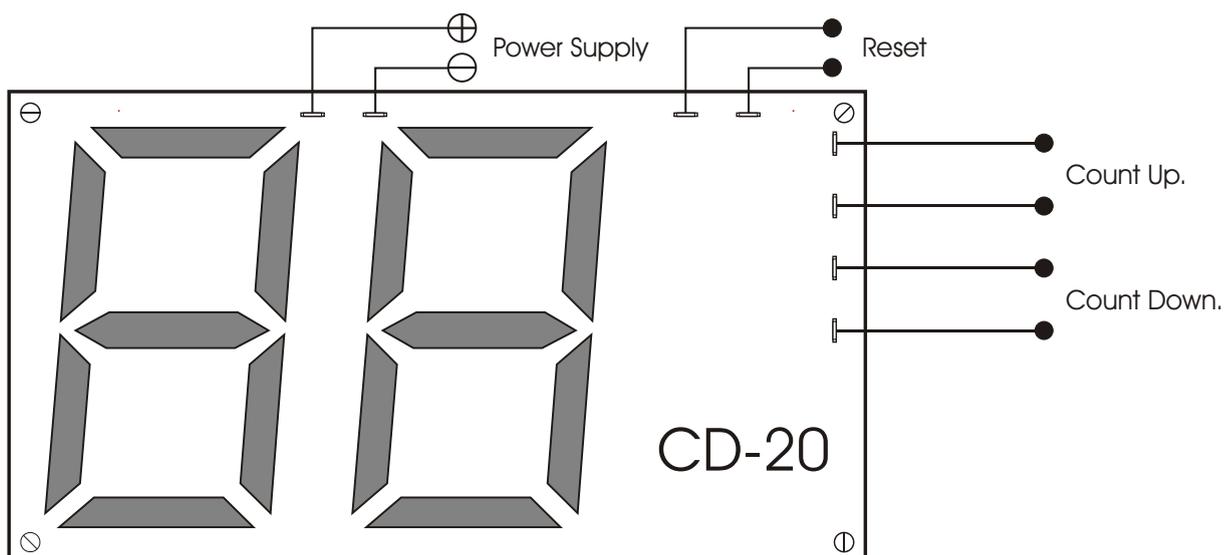
Then, we recommended you the FE-4 power supply which has been developed to perfectly answer to the circuit needs.

Connect the positive of the power supply to the positive terminal indicated in the wiring map, then connect also the negative of the power supply to the negative terminal indicated in the circuit. **Verify** that the assembly has been correctly done.

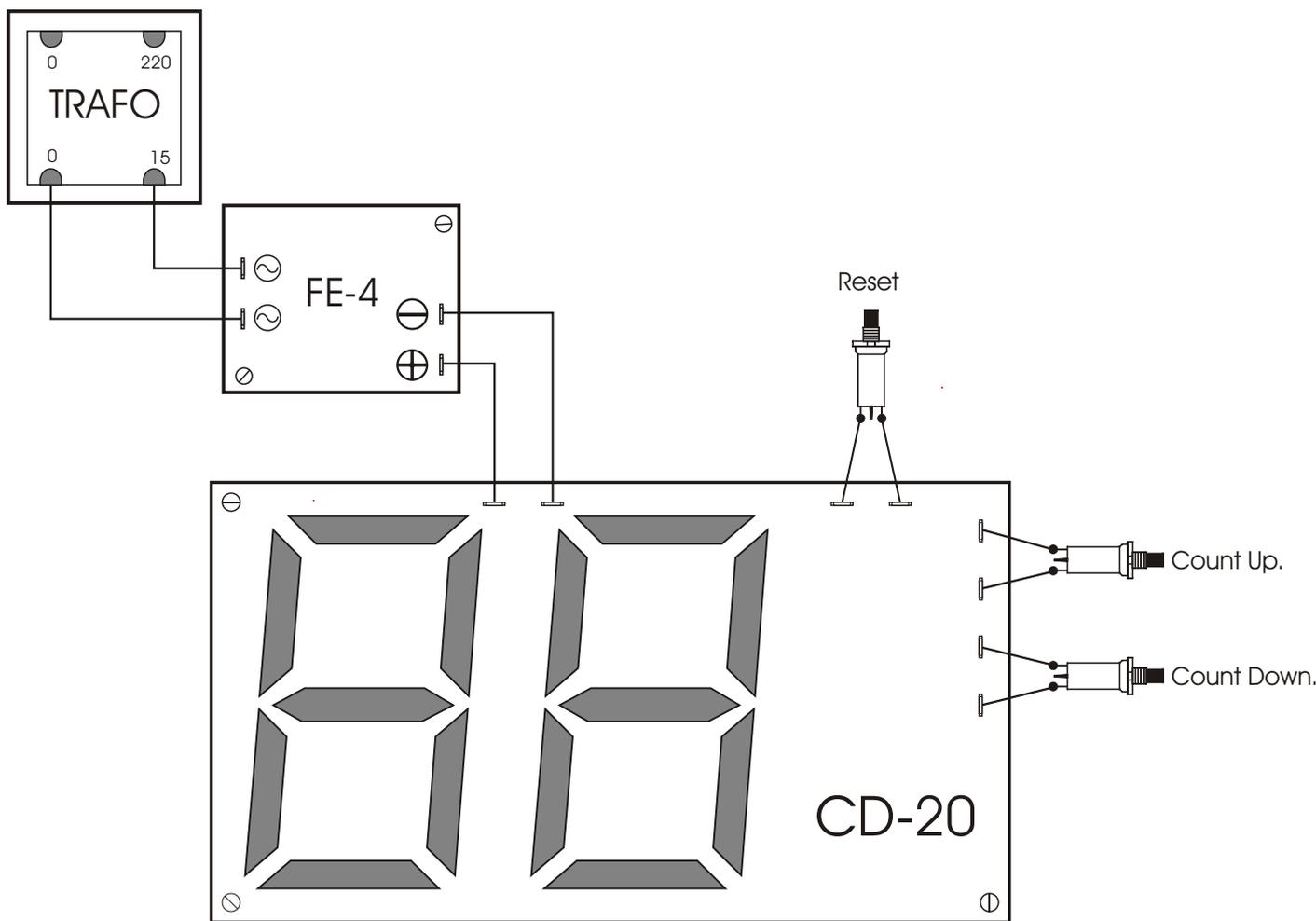
**OPERATING.** Connect count up, count down and reset push buttons as indicated in the General wiring map; then the "0" number will be displayed. To increase the number you have to press the count up push button and to decrease it you have to press count down push button. If you wish to start from the beginning (from zero), you have to press "reset" push button.

To obtain the best quality in your module operating, you have to use quality push buttons and for length superior

### WIRING MAP.



HOW TO INSTALL THE CIRCUIT.



SUGGESTIONS.

**Power Supply.** The power supply had to be installed as near as possible from the CD-20 module. Use the same power supply for module and for display. Cables have to be as short as possible (maximum length: 20 cm).

**Installation.** To connect push buttons, use a shielded cables for length superior than 10 cm; and we suggest you to use quality push buttons. Do not install the CD-20 module neither the power supply at the bad weather without the corresponding and required protection.

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.

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