



# CD-12

## CONTROL CIRCUIT FOR 2 GIANT DISPLAYS

The CD-12 circuit could control up to 2 giant displays allowing you to visualise count up and count down for 99 units. It includes reset function

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

### CHARACTERISTICS TECHNICAL.

Operating Voltage .....	From 12 up to 24 VDC
Maximum Consumption .....	30 mA.
Maximum Frequency To Count .....	20 impulses / sec.
Protection Against Polarity Inversions .....	Yes.

### OPERATING.

**POWER SUPPLY.** The CD-12 circuit had to be supplied by with the same voltage that the voltage use for displays (see Display data sheet and use the same power supply).

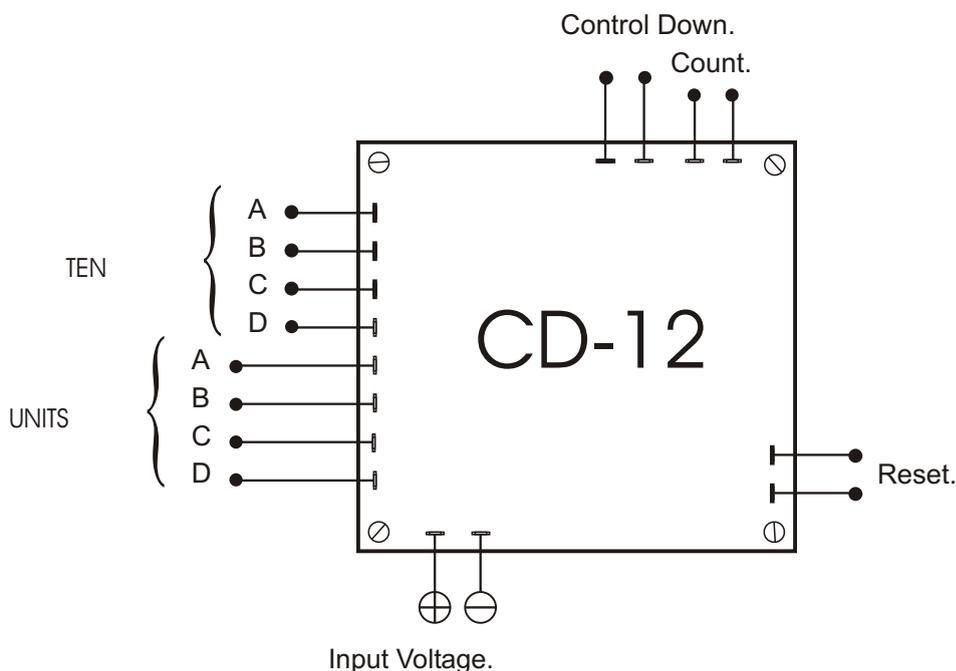
**Use the same power supply for the CD-12 module and for the display, and install the power supply as near as possible from the CD-12 module.**

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.

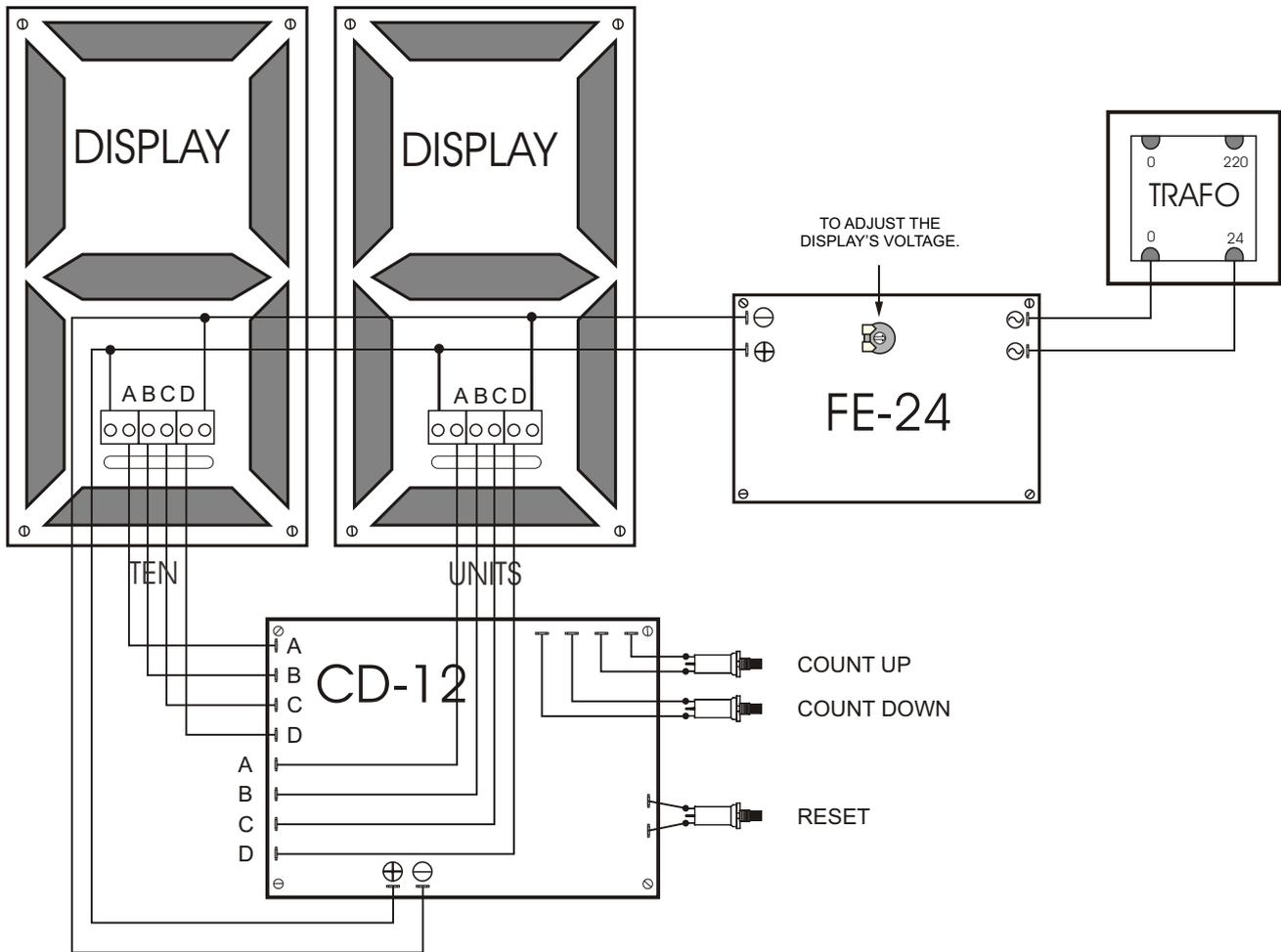
**COUNT UP. COUNT DOWN AND RESET OPERATING.** Install push buttons to the corresponding terminals. See the drawing and connect ABCD points of CD-12 to the ABCD points of display(s) respecting indications mentioned in the wiring map. **Verify that ABCD points (of CD-12 and displays) are well connected.**

To count up and count down use count up or count down push buttons according to your needs and the

### WIRING MAP.



HOW TO INSTALL THE CIRCUIT.



SUGGESTIONS.

**Push Buttons.** The impulses input is basic to obtain a correct impulses operating, for this reason you have to use quality push buttons and shielded cable if the distance between PCB and push buttons is superior than 10 cm.

**Wiring.** To connect CD-12 and displays you have to use cable with correct size. For length up to 5 m use a 0,25 mm cable (as diameter), for length up to 15 m use a 0,5 mm cable and for superior length use 1 mm cable. We suggest you to install CD-12 module at 25 m as maximum length. The power supply had to be as near as

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