



# CD-15

## DIGITAL CLOCK WITH BIG DISPLAYS.

The CD-15 module is a digital clock with ABCD outputs, allowing it to transfer hour signals data to CEBEK big displays. Specially designed on a Quartz oscillator, the module offers a high precision. It shows the hour on 24 h. Format and offers a fast and slow possibilities to adjust hour. It includes protection against polarity inversion and terminals to make more easy its connection.

### TECHNICAL CHARACTERISTICS.

Voltage . . . . .	From 15 up to 24 V. DC.
Minimum Consumption. . . . .	70 mA.
Maximum Consumption. . . . .	100 mA.
Hour Format. . . . .	24 H.
Displays . . . . .	CEBEK Big Displays.
Protection against Polarity inversion. . . . .	Yes.
Sizes . . . . .	108 x 102 x 15 mm.

### OPERATING.

**POWER SUPPLY.** The **CD-15** module could be supplied with a voltage included between 15 and 24 V DC. but **it had to be supplied the same voltage that the voltage use for displays** (see Display data sheet and use the same power supply).

Do not use standard power supplies or rectifiers offering a high quantity of parasites. You have to supply the module with a power supply perfectly stabilised and filtered. 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.

**The power supply had to be installed as near as possible from the CD-15 module.**

**CONNECTION BETWEEN CD-15 AND DISPLAYS :** The module offers four outputs, one for each display. Each one with a determinate place for units, ten regarding minutes and seconds. When you connect the CD-15 module and displays you have to respect their corresponding places.

Each output (unit, ten for minutes and seconds) is composed by 4 terminals : A, B, C and D. Seeing the General Wiring Map, you have to connect module and displays using required cable according to the distance between module and displays : Up to 5 m. use 0,25 mm cable, up to 15 m use 0,5 mm cable, For length superior than 15 m you have to use 1 mm cable but do never pass over 25 m. to maintain a correct operating mode

**TIME ADJUSTMENT.** The module offers the possibility to adjust hour in slow or fast mode. Install on indicated terminals 2 push buttons one for each kind of mode. Both push buttons have to be high quality push buttons to avoid a bad operating.

To wire it, you have to use shielded cable for length superior than 10 cm. The maximum total length have to be inferior than 25 cm.

To adjust hour you have to maintain pressed the push button corresponding to the wished mode (slow or fast). The clock will start till you stop to press the push button. You only could adjust the clock on a single direction; it is impossible to go back. When the hour is adjusted the module will automatically start to count up the time from the selected hour.

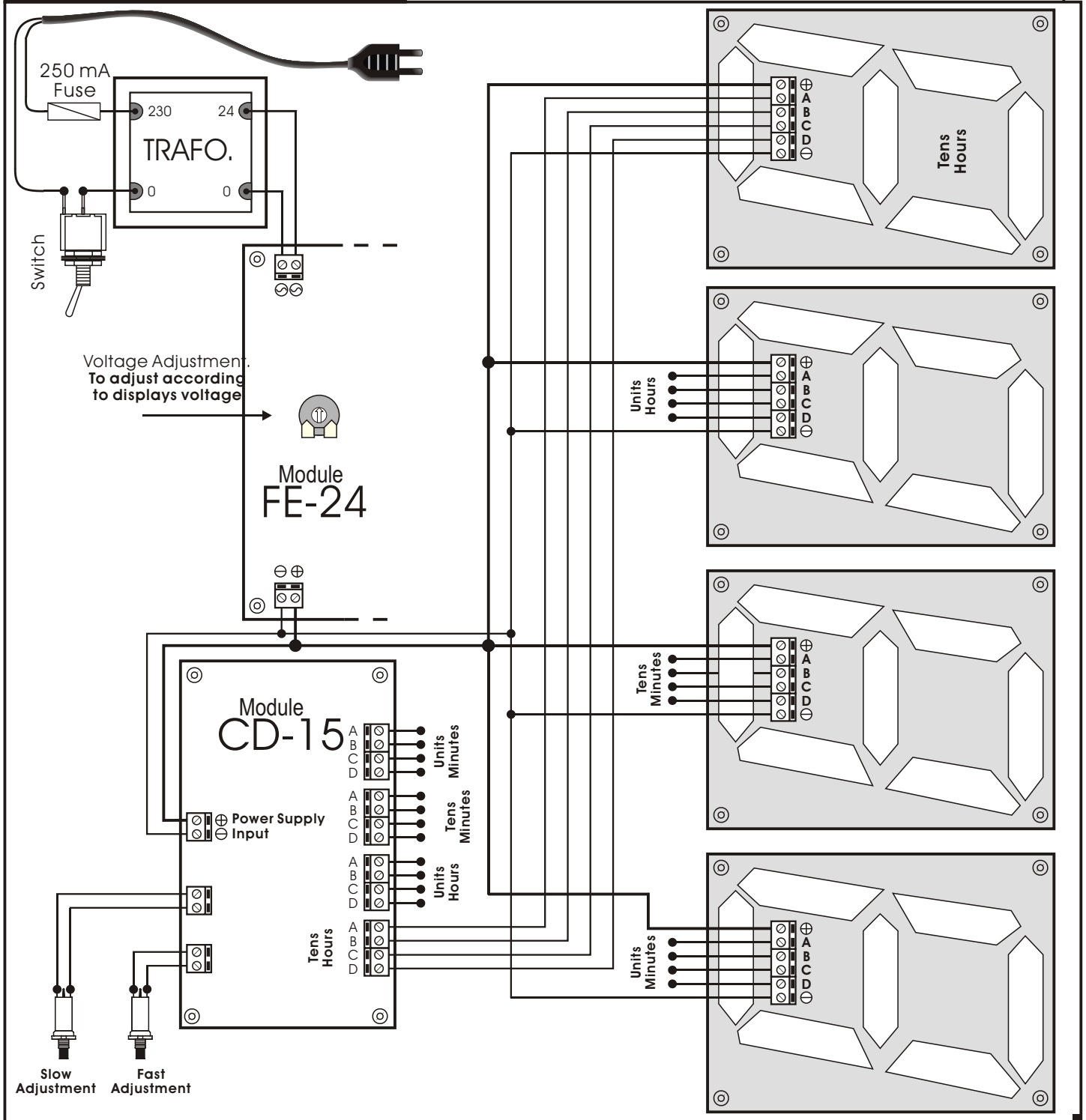
**INSTALLATION AND HANDLING.** Input impulses is done by contacts closing, accepting other devices as push button or switch. If the impulses input of the module is an external clock, it have to be 12 V D.C and supplied with the same power supply than the module or have the negative terminal in common. More over, because of the filter included in the module, the maximum input frequency admitted is 25 Hz.

To connect push buttons, used cable have to be inferior than 100 cm. And for a length superior than 25 cm. the cable have to be shielded.

To install it, we suggest you to use a metallic enclosure and connect the negative terminal to the enclosure.

If the module is disturbed by parasites (coming from coils, relays, neon, etc...), the module could not work

GENERAL WIRING MAP.



TECHNICAL CONSULTATIONS.

If you have any doubt, you could contact your wholesaler or our Technical Department.

- Via E-Mail, [sat@cebek.com](mailto:sat@cebek.com) | by mail c/Quetzal, 17-21. (08014) BARCELONA.

- **Keep the invoice of this module.** For any repair, the corresponding invoice had to be added. If the invoice is not presented together with this module, the module's warranty will be automatically cancelled.

MORE 300  
MODULES.

All the module's CEBEK have **3 years of total warranty** in 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.

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WARRANTY

3  
YEARS