CEBEK®
ELECTRONIC CIRCUITS

AV-1

MILI-VOLTMETER TILL 200 mV. D.C

The AV-1 module is an accurate voltmeter for D.C. Specially indicated for measures requiring small D.C scales. It offers voltage information between ±200 mV. It also includes front panel as well as terminal to make more easy the installartion.

TECHNICAL CHARACTERISTICS.

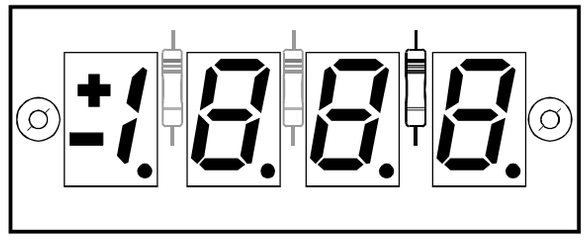
Voltage	12 V. DC.
Minimum Consumption	35 mA.
Maximum Consumption.	100 mA.
Measures Margins	From -199.9 mV up to +199.9 mV.
Imput Impedance	1 Mw.
Evaluation Frequency	6 reads / Sec. .
Displays.	4 x 0,5 " displays (13.5 mm.).
Ten Digits.	1.
Protection Against Polarity Inversion.	Yes.
Sizes.	83 x 50 x 55 mm.

OPERATING.

POWER SUPPLY. *The AV-1module had to be supplied by a 12 V DC. power supply perfectly stabilised, for this reason we recommended you the FE-2 power supply which has been developed to perfectly answer to the circuit needs.For mobile application you have to use a 12 V Battery.*
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 and activate the power supply to light the Power Led.*

***INPUT'S CONNECTION.** The circuit could only measure values inlcuded between + 199.9 mV. and - 199.9 mV. For this reason, do not try to measure voltages superior, to avoid to damage the mudule. Connect the negative terminal fo the signal that you wish to measure to the terminal indicated as Measure Input, then, do the same operation with the positive treminal. Supply the module*
The AV-1 module will display the measrued data with one ten, with the corresponding sign (negative if the voltage si negative).
If you inject a signal out of the measure margins, the module will display error and light off all displays except the last one to show the number "1".

***HOW TO SELECT THE TEN POINT.** Even if the point is determined from the factory, you could chage it increasing or decreasing the ten read.Therefore, you have to desold the 470 W resistor from the present point and sold it on the place correspodning to the new required position. See the schedule.*



***INSTALLATION & HANDLING.** Do never use the same power supply or transformer to supply the AV-1 module and to measure the signal to read. The module's power supply had to be independent from any signal to read.*
The power supply used for the circuit had to be exclusively for the module and not to supply other voltmeters, ampermeters or electrical devices.

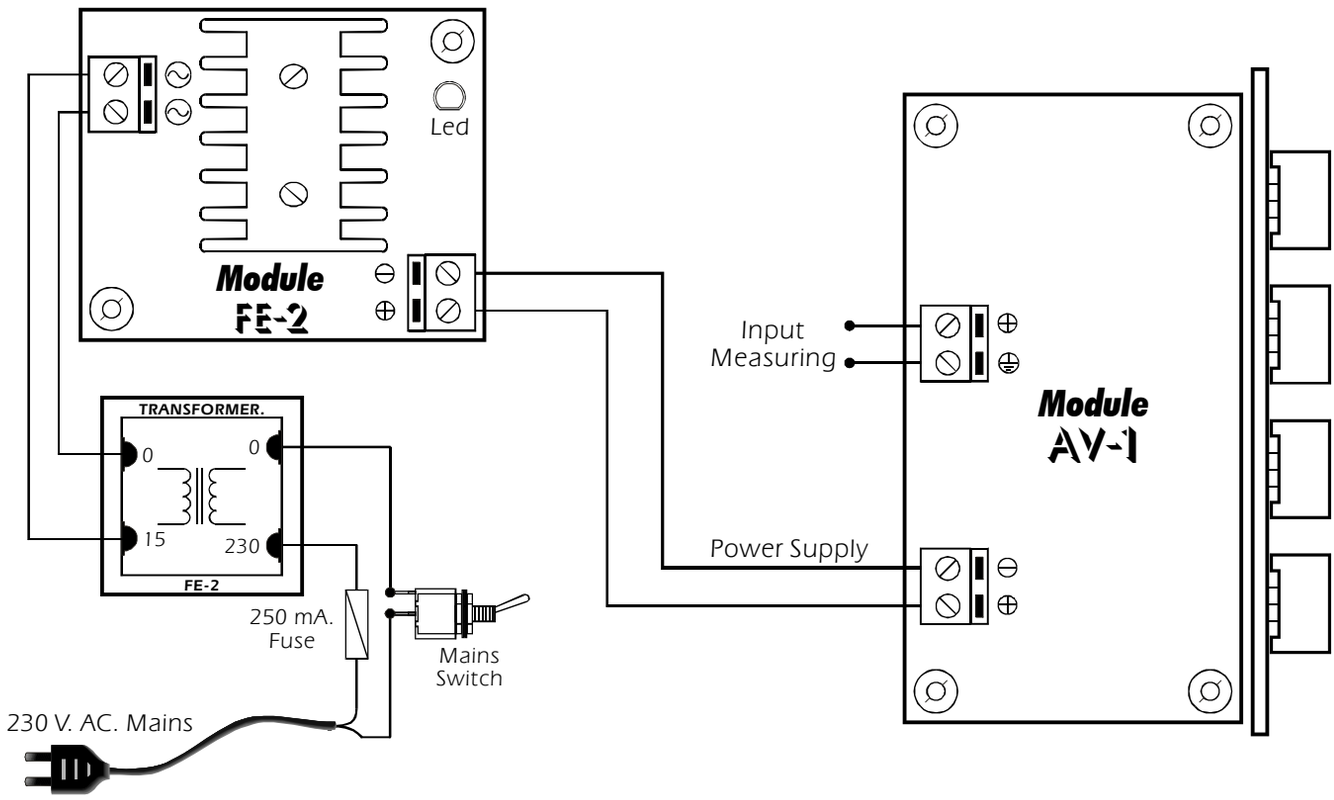
DIGITAL INSTRUMENTATION Ref. Full9810

AV-1

OPERATING.

To avoid to seriously damage the modue, do never separate both circuits composing the voltmeter. Do not try to adjust the potentiometer inserted in the PCB, this one had been adjusted to offer an optimal read. If you wish to modify this one and/or the operating mode i snot correct, please contact your distributor to send-him back the mdoule.
The cabling used to connect input measuring had to be as short as posisble. For length superior than 1 m. The error margin will grow up according to the distance.

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** | by Fax. +34.93.432.29.95 | by mail P.O Box 23455 - 08080 Barcelona- Spain
- **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 thecnical repairing, and spares from the date of buy.

CEBEK is trade make of FADISEL S.L. more than 300 module's are avaible in stock for any purpose **request our CATALOGUE,** or visit our Web.
Http://www.cebek.com

WARRANTY 3 YEARS