

Introduction

Two ranges of analog output (0-10 V y 4-20 mA) can be incorporated to the new MICRA family by means of an additional card, either the NMV card for voltage output or the NMA card for current output, which is installed on the meter's main board via plug-in connector M3, both cards, cannot be used simultaneously.

The outputs are opto-isolated with respect to the signal input and the power supply.

The optional board provides a two terminal connector [(+) and (-)] that drives out a signal variation from 0 to 10V or from 4mA to 20mA proportional to a user-defined display range.

This way, the meter is furnished with a signal that can be used to control variables and operates at each moment proportionally to the magnitude of the effect under control.

These signals can also be used to transmit display information to a variety of terminal equipment such as graphic recorders, controllers, remote displays or other devices that accept input data in analog form.

The instrument will detect the type of option that has been installed and will operate in accordance.

The display values producing the full scale output (OUT-HI and OUT-LO) are also introduced via front-panel buttons in the same programming module. The analog output then follows the display variation between the HI and LO programmed points.

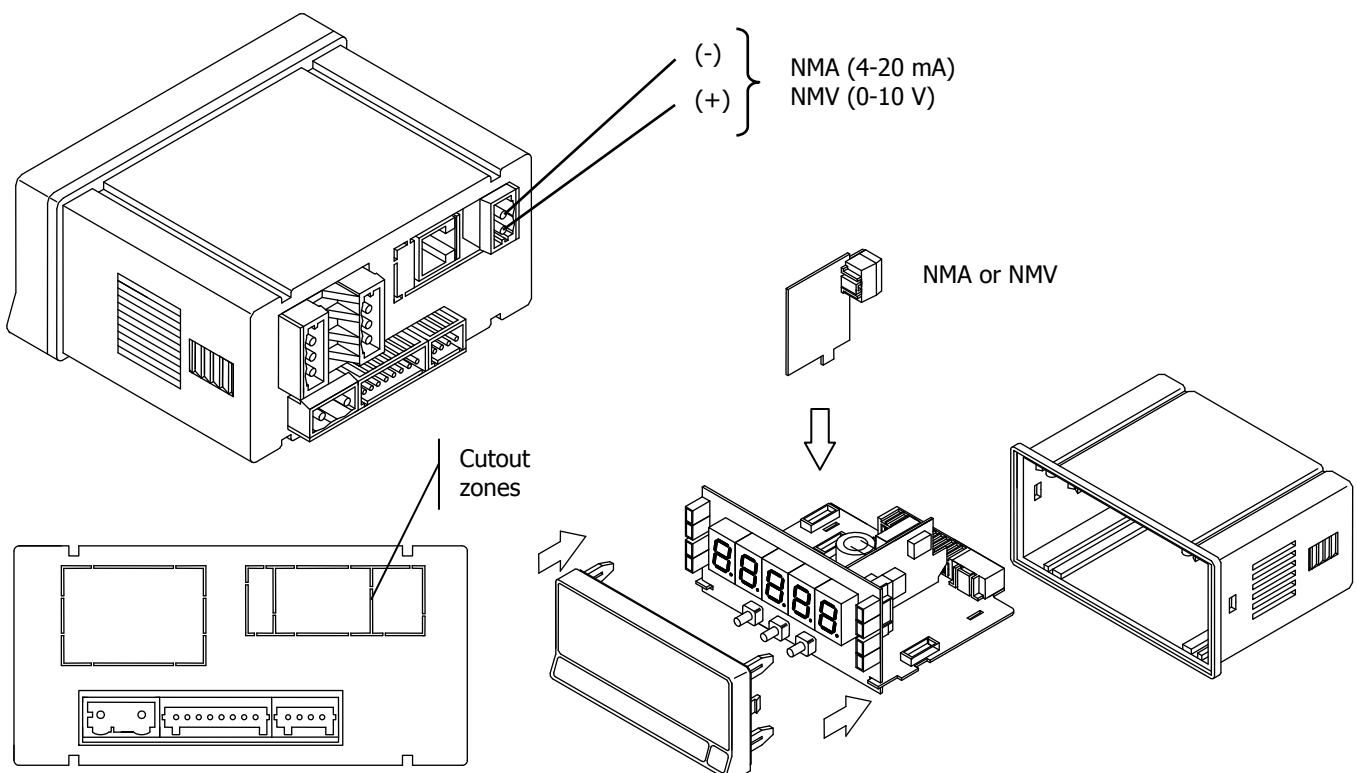
The output signal can be set up for reverse action by programming the low display for the high output (OUT-HI) and the high display for the low output (OUT-LO).

Installation of NMA or NMV option

Lift out the electronics assembly from the case and use a screwdriver to pull on the junctions between the case and the grey-marked area to detach it from the case. The so performed orifice will allow the analog output board connector be brought out at the rear of the instrument. Install the circuit board so that the lower pin fits into the corresponding main board insertion slot and push down to plug the M3 option connector in the main board M3 location. If the instrument is to be installed in high vibrating environments, it is recommended to solder the card to the main board making use of the copper tracks on both sides of the card pin and around the main board hole on its solder side.

Connection

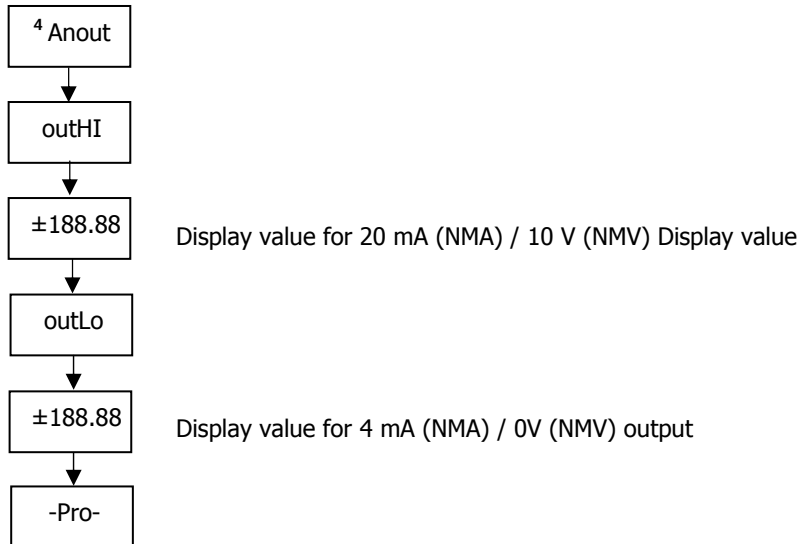
Each output card is supplied with an adhesive label that indicates the wiring connections of each option (see fig.). To help identifying each terminal, this label should be placed in the lower side of the meter case, beside the basic functions label.



Technical specifications

CHARACTERISTICS	NMA OUTPUT	NMV OUTPUT
RESOLUTION.....	13 BITS.....	13 BITS.....
ACCURACY.....	0.1% F.S. ± 1 BIT.....	0.1% F.S. ± 1 BIT.....
RESPONSE TIME.....	50 ms.....	50 ms.....
THERMAL DRIFT.....	0.5 μ A/ $^{\circ}$ C.....	0.2 mV/ $^{\circ}$ C.....
MAXIMUM LOAD.....	$\leq 500 \Omega$	$\geq 10 K\Omega$

Analog output menu diagram



The instruments are warranted against defective materials and workmanship for a period of three years from date of delivery.

If a product appears to have a defect or fails during the normal use within the warranty period, please contact the distributor from which you purchased the product.

This warranty does not apply to defects resulting from action of the buyer such as mishandling or improper interfacing.

The liability under this warranty shall extend only to the repair of the instrument. No responsibility is assumed by the manufacturer for any damage which may result from its use.



All the DITEL products benefit from an unlimited and unconditional warranty of THREE (3) years from the date of their purchase. Now you can extend this period of warranty up to FIVE (5) years from the product commissioning, only by fulfilling the corresponding form.

Fill up the form you have received with the instrument or visit our website at: <http://www.ditel.es/warranty>

INSTRUCTIONS FOR THE RECYCLING



This electronic instrument is covered by the 2002/96/CE European Directive so, it is properly marked with the crossed-out wheeled bin symbol that makes reference to the selective collection for electrical and electronic equipment which indicates that at the end of its lifetime, the final user cannot dispose of it as unsorted municipal waste.

In order to protect the environment and in agreement with the European legislation regarding waste of electrical and electronic equipments from products put on the market after 13 August 2005, the user can give it back, without any cost, to the place where it was acquired to proceed to its controlled treatment and recycling.

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