

TECHNICAL SPECIFICATIONS

SIGNAL INPUT

Maximum frequency (tachometer rpm or rate modes)	12kHz
Maximum frequency (frequency meter mode)	9999Hz
Maximum frequency (duty mode)	100Hz
Minimum frequency (all modes)	0.01Hz
Excitation	5V, 8V, 12V DC @ 60 mA (configurable by keyboard)

High input AC voltage

Range 10 to 600 V AC

Magnetic sensor

Sensitivity Vin ≥ 30mV. (f ≤ 60Hz)
 Vin > 300mV. (f ≥ 6kHz)

NAMUR sensor

Rc 1.5kΩ
 I on < 1mA
 I off > 3mA

NPN / PNP / PWM sensors

Rc (NPN) 3k9Ω, (PNP) 1k5Ω
 Logic levels "0" < 2.4V, "1" > 2.6V DC

TTL/24 V DC (encoder)

Logic levels "0" < 2.4V, "1" > 2.6V DC

Contact switch

Vc 5V (internal)
 Rc 3,9kΩ (incorporated)
 Fc 20Hz (is automatically set when selecting contact switch input) (Ton, Toff > 25ms)

ACCURACY @ 23°C±5°C

Maximum error ±(0.01% rdg + 1 digit)
 Temperature coefficient 50 ppm/°C
 Warm-up time 5 minutes

DISPLAY

Principal 9999, 4 digits 8mm
 Decimal point Configurable
 LEDs 4, for functions and outputs
 Display refresh rate 4/s
 Input overrange indication "OuE" or "0" flashing
 Display overrange indication "OuE"
 Relays, maximum and minimum value refresh 10/s

RELAYS

2 Relays SPST (incorporated) 5A@250V AC / 30V DC

ANALOG OUTPUT (0/4-20mA)

Resolution 5.µA
 Accuracy ±(0.3%rdg+40µA)
 EMI Max. influence ±0.25mA
 Temperature coefficient 3µA/°C
 Maximum load ≤500Ω

POWER SUPPLY

PICA10X-F 85-265 V AC / 100-300 V DC
 PICA10X-F6 21-53 V AC / 10,5-70 V DC
 Consumption (all models) 5W

FUSES (DIN 41661) (Not included)

PICA10X-F F 0.2A / 250V
 PICA10X-F6 F 1A / 250V

ENVIRONMENTAL CONDITIONS

Working temperature -10°C to +60°C
 Storage temperature -25°C to +85°C
 Relative humidity (non-condensing) <95% @ 40°C
 Maximum altitude 2000m
 Frontal protection degree IP65

DIMENSIONS

Dimensions 48 x 24 x 100mm
 Panel cutout 45x22mm
 Weight 100g
 Case material Polycarbonate s/UL 94 V-0



CE Conformity.

To obtain the declaration of conformity corresponding to this model enter our website www.ditel.es, where this document and other information of interest can be downloaded freely.



According to 2012/19/EU Directive, You cannot dispose of it at the end of its lifetime as unsorted municipal waste. You can give it back, without any cost, to the place where it was acquired to proceed to its controlled treatment and recycling.



WARNING

To guarantee electromagnetic compatibility, the following guidelines should be kept in mind:

Power supply wires should be separately routed from signal wires and **never runned** in the same conduit.

Use shielded cable for signal wiring.

Cables section should be ≥0.25mm²

INSTALLATION

To meet the requirements of EN 61010-1 standard, where the unit is permanently connected to main supply, its is obligatory to install a circuit breaking device easy reachable to the operator and clearly marked as the disconnecting device.

In the same way, a protective external fuse against overcurrents must be installed.

MAINTENANCE

Instrument repairs should only be carried out by the manufacturer or by its authorized partners. For frontal device cleaning, just wipe it with a damp cloth and neutral soap product. **DO NOT USE SOLVENTS!**

WARRANTY

All products are warranted against defective material and workmanship for a period of 5 years from acquisition date. If a product appears to have a defect or fails during the normal use within warranty period, please contact the distributor from whom you purchased the product to be given proper instructions.

This warranty does not apply to defects resulting from action of the customer 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.



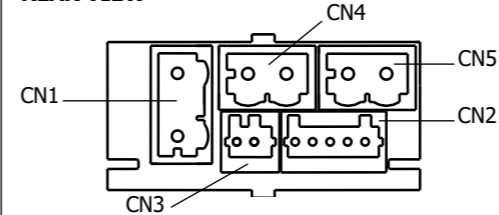
DITEL PICA100-F

INSTRUCTIONS MANUAL

Valid for F2.00 version or higher.

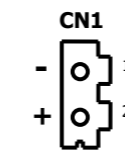


REAR VIEW



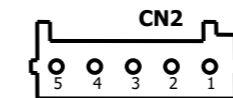
CONNECTORS DESCRIPTION

AC SUPPLY
 PIN 1 Phase
 PIN 2 Neutral
DC SUPPLY
 PIN 1 Negative
 PIN 2 Positive



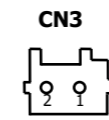
SIGNAL INPUT AND EXCITATION

PIN 1: 10-600V AC
 PIN 2: Non connected
 PIN 3: + Input pulses
 PIN 4: Common
 PIN 5: + Excitation (5, 8, 12V) @ 60mA



RS485 OUTPUT

PIN 1: B = TxD+ / RxD+
 PIN 2: A = TxD- / RxD-
ANA OUTPUT
 PIN 1: -
 PIN 2: +



RELAY 1 OUTPUT

PIN 1: } N.O. Contact
 PIN 2: }

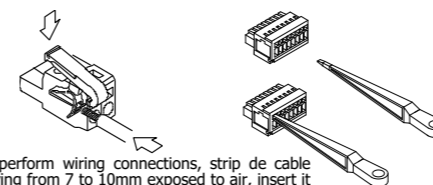


RELAY 2 OUTPUT

PIN 1: } N.O. Contact
 PIN 2: }



KEY TOOLS FOR CABLE INSERTION



To perform wiring connections, strip de cable leaving from 7 to 10mm exposed to air, insert it in the proper terminal while pushing the key insertion tool to open the clip inside the connector. Release the key to fix the wire.

KEYBOARD

Keys detail (bottom view)



- ENTER**: Enters configuration and validates data and parameters.
- SHIFT**: Selects mode or shifts blinking digit in configuration.
- UP**: Increases value of blinking digit in configuration mode.

DESCRIPTION

48x24mm (1/32 DIN) fully programmable panel meter, with 4 x 8mm-high red LED digits and **sensors supply excitation** incorporated, it is designed for measuring **lineal** or in **r.p.m speed** and **signal frequency**.

It provides two relays that allow this instrument not only to measure but also to be capable of controlling, regulating and detecting alarms for the mentioned signals.

Thanks to its RS4P (RS485) communication and analog ANAP options, it can be integrated to a measurement system providing information via MODBUS-RTU protocol or generating a 0/4-20mA signal respectively. These options are isolated from input and power supply.

Tachometer mode (tAC) entering the number of pulses per revolution or Rate mode (rAtE) defining 'input frequency/display' ratio (in desired engineering units).

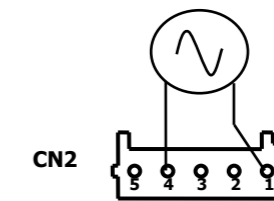
Display range from 0 up to 9999 with programmable decimal point. Controlled by 3 keys located on the bottom of the frontal display to set all configuration parameters.

4-level brightness configuration is possible to adapt it to the light working conditions. Registers the minimum and maximum process values since its starting up or a resetting.

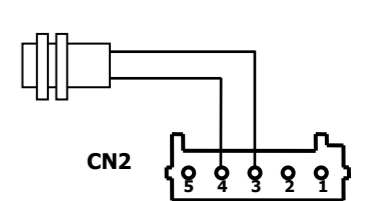
It is possible to set a total or partial configuration lock-out thanks to a code.

WIRING DIAGRAMS ACCORDING TO INPUT TYPE

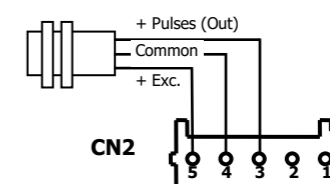
10-600V AC Input



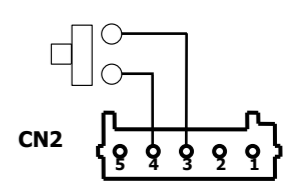
Magnetic sensor



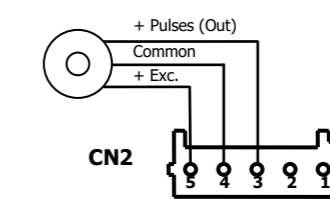
NPN / PNP / PWM sensors



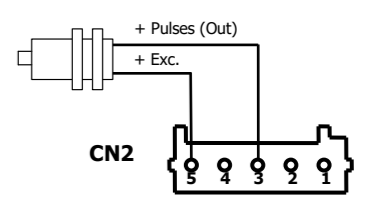
Contact switch



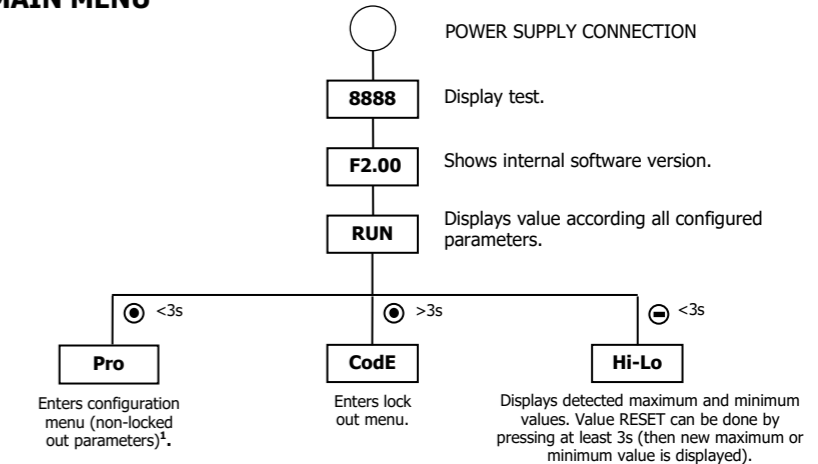
TTL/24V DC /Encoder input



Namur sensor



MAIN MENU



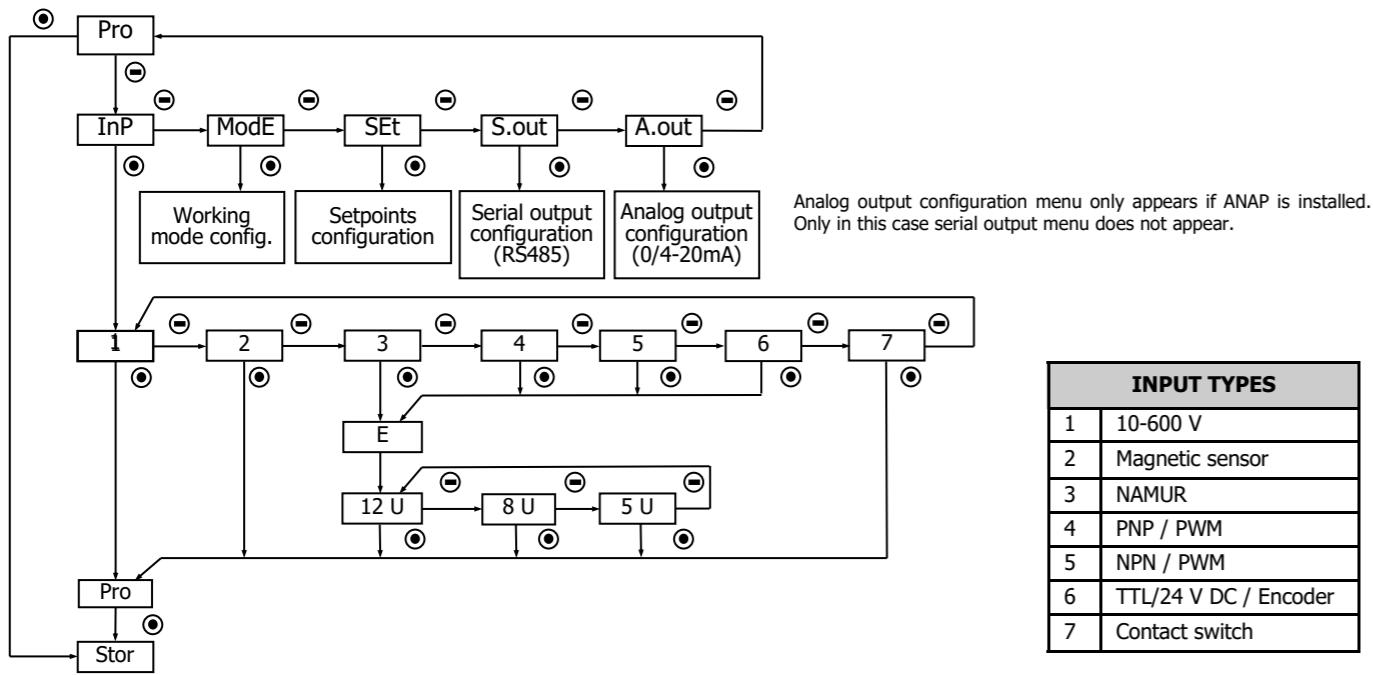
(1) If all parameters are locked out, display shows **dAtA**.



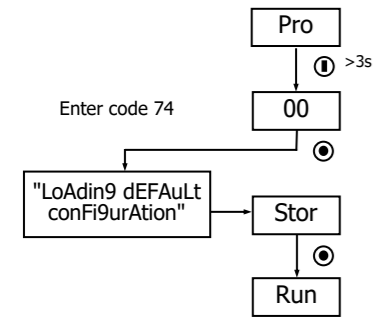
DISEÑOS Y TECNOLOGÍA, S.A.
 Xarol, 6B P.I. Les Guixeres
 08915 Badalona (Barcelona) - Spain.

Tel. +34 933 394 758
 Fax +34 934 903 145
 Email: dtl@ditel.es ; web: www.ditel.es

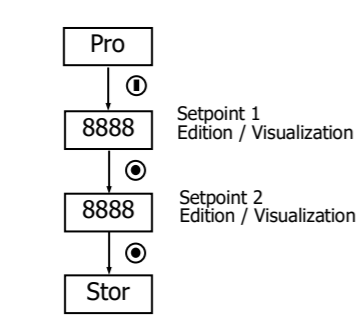
INPUT TYPE CONFIGURATION



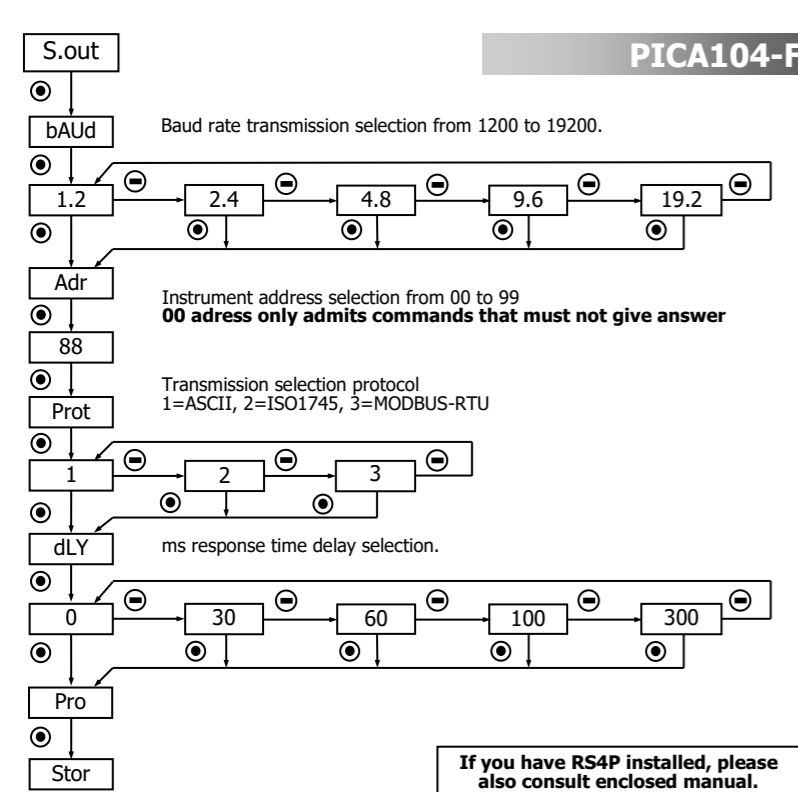
RETURN TO DEFAULT CONFIGURATION



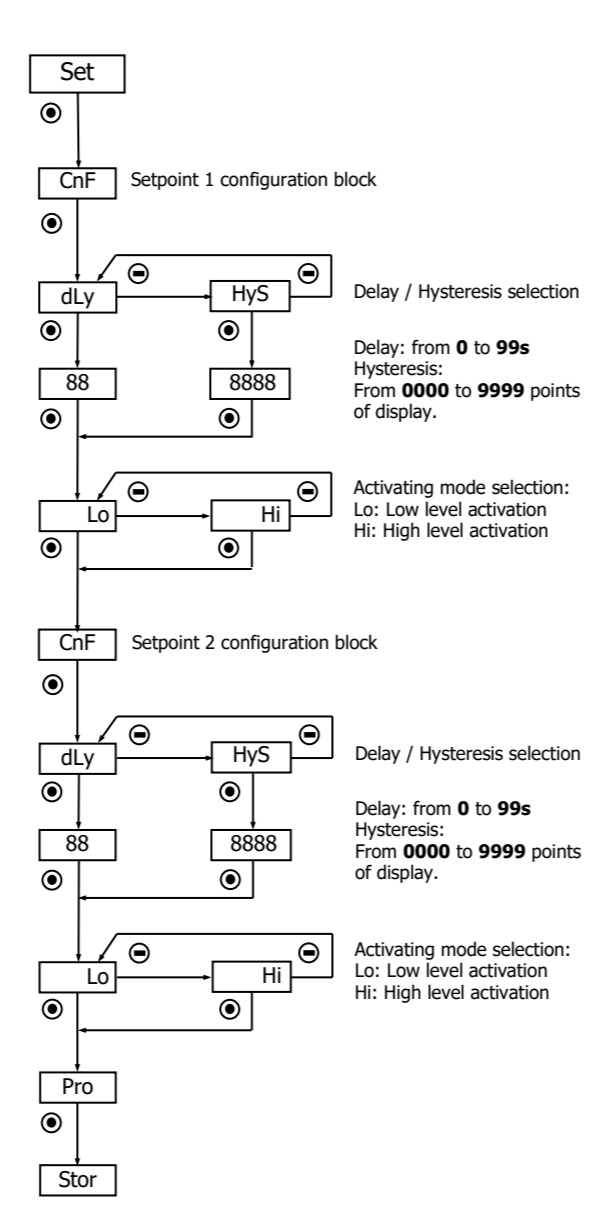
DIRECT ACCESS TO SETPOINTS VALUE



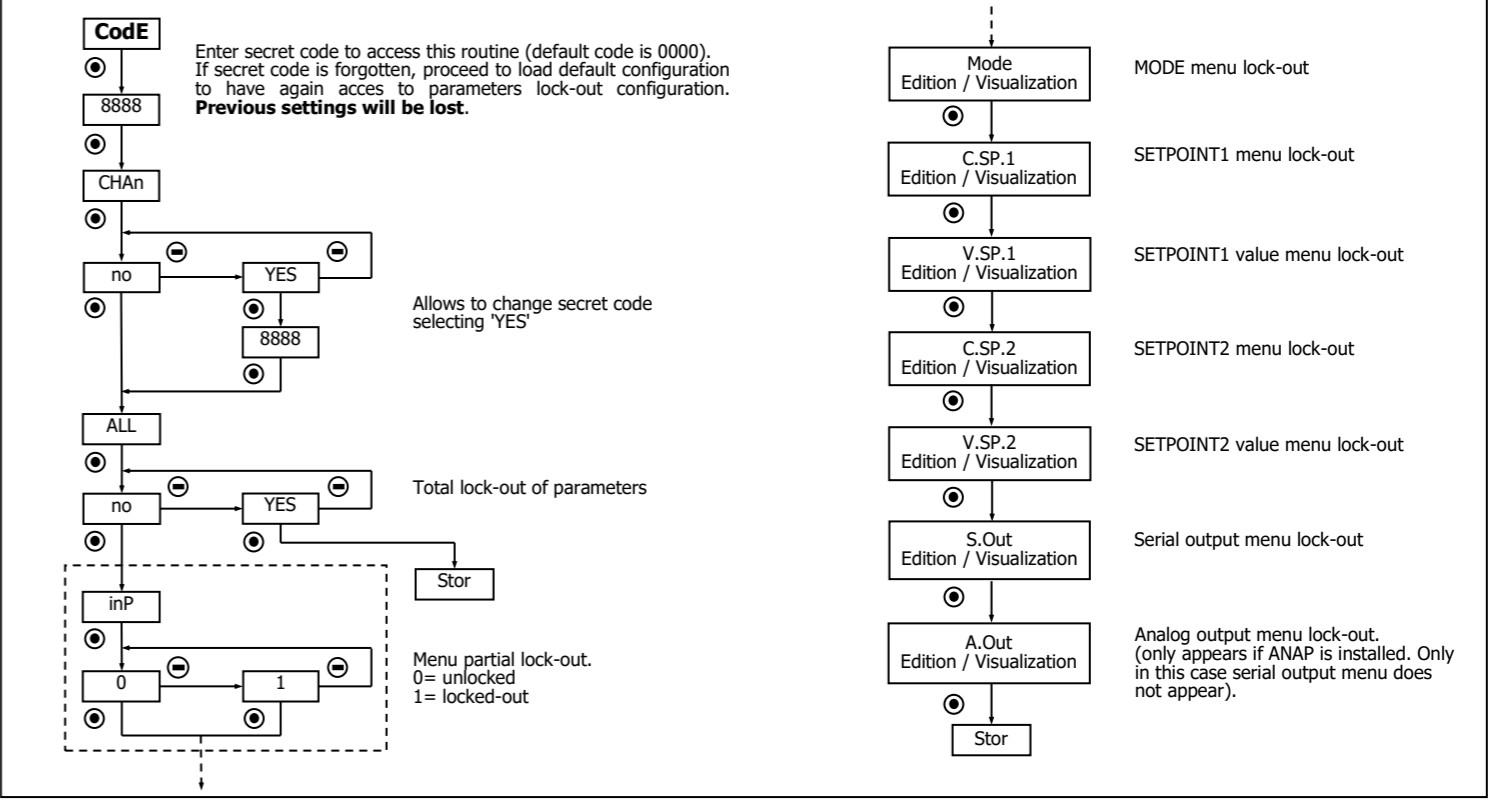
SERIAL OUTPUT (RS4P) CONFIGURATION



SETPOINTS CONFIGURATION



CONFIGURATION LOCK-OUT MENU



WORKING MODE CONFIGURATION

