

PI CA40-ADC

INSTRUCTIONS MANUAL



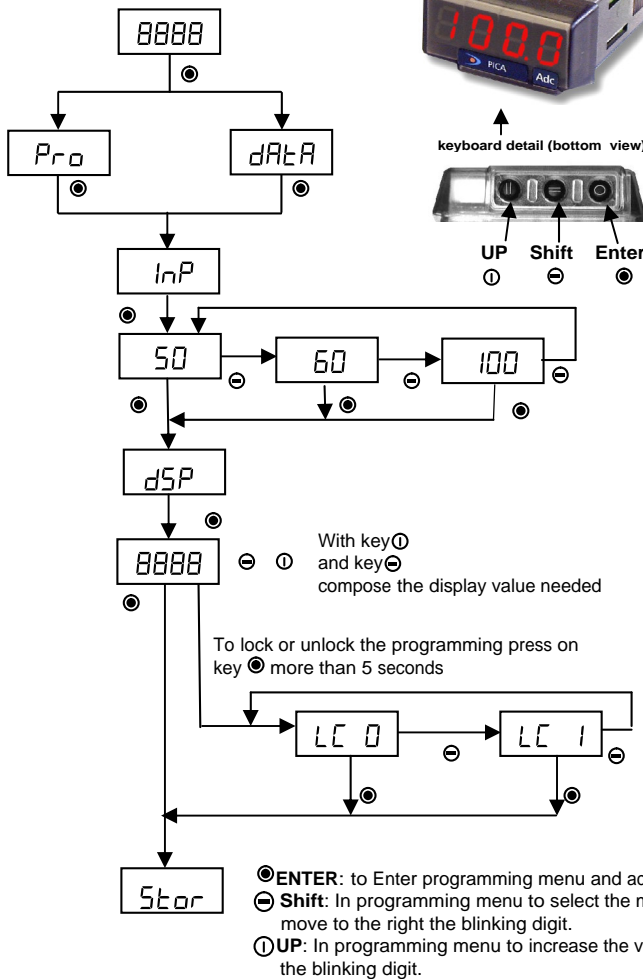
DESCRIPTION

Indicator for dc measurements using external shunt

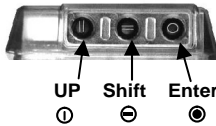
**48 x 24 mm front panel
Length 40 mm**

- designed for a **specific** nautical field application: measurement of batteries charge-discharge current
- Current measurement using a shunt **connected to the battery negative terminal**.
- Type of SHUNT selected is programmable (50/ 60/ 100 mV)
- Programmable scale in the range ± 199.9 or ± 1999 A
- Display starts to blink when exceeding the 25 % of the scale in the case of discharge indication.
- 3 keys Keyboard located below the display.

PROGRAMMING



keyboard detail (bottom view)



TECHNICAL CHARACTERISTICS

VOLTAGE INPUT

Range ± 100 mV
Internal resolution 10 μ V

INPUT IMPEDANCE

mV 100 k Ω

ACCURACY at 23°C $\pm 5^\circ$ C

Max error $\pm (0.2\%$ of reading + 3 digits)
Temperature coefficient 100 ppm/ $^\circ$ C
Warm up 5 minutes

POWER SUPPLY

Range 8 to 32 V dc
Fuse recommended (not supplied) F 0,5 A

CONSUMPTION

8 to 30 V dc ≤ 25 mA

CONVERSION

Technical Single Slope
Resolution 14 bits
Reading rate 166/ s

DISPLAY

Range $\pm 199.9 / \pm 1999$
Resolution scale ± 199.9 A 0.1 A
Resolution scale ± 1999 A 1 A
Type 4 red digits 10 mm
Decimal point for scale values $< \pm 200$ A
Reading rate presentation 2/s
Blinking display for current discharge $> 25\%$ Scale
Blinking rate display ON/ OFF 800 ms/ 200 ms
Overflow indication \pm **DU E**

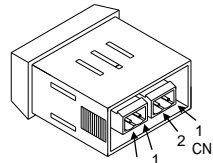
ENVIRONMENTAL

Operating temperature -10° C \div $+60^\circ$ C
Storage temperature -25° C \div $+85^\circ$ C
Relative humidity (non condensed) $< 95\%$ \div 40° C
Maximum altitude 2000 m
Panel sealing IP65

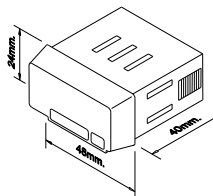
INSTALLATION AND CONNECTION

DIMENSIONS

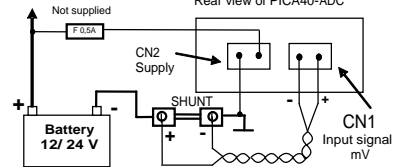
Dimensions 1/32 DIN 48 x 24 x 40 mm.
Panel Cutout 45 x 22 mm.
Weight 50 g.
Case material Polycarbonate s/ UL 94 V-0



CN1	INPUT SIGNAL
PIN 1	+ mV (Shunt)
PIN 2	- mV (Shunt)
CN2	POWER SUPPLY
PIN 1	+ Battery (8 to 32 V dc)
PIN 2	- Battery



INSTALLATION



WARNING

In order to guarantee electromagnetic compatibility, the following guidelines for cable wiring must be followed:
Use shielded cable for signal wiring and connect the shield to ground.
The cable section must be ≥ 0.25 mm²

CLEANING: The frontal cover should be cleaned only with a soft cloth soaked in neutral soap product.

DO NOT USE SOLVENTS

Manufacturer: DITEL - Diseños y Tecnología S.A.
Address: P.I. Les Guixeres C/ Xarol, 8C 08915 BADALONA SPAIN
Declares, that the product:
Description: Digital panel meter
Model: **PICA40-ADC**



Conforms with the directives:

EMC 89/336/CEE
LVD 73/23/CEE

EN 61000-6-2
EN 61000-4-2

Generic immunity
Electrostatic discharge
Air discharge 8kV
Contact discharge 4kV

EN 61000-4-3

Electromagnetic fields RF 10V/m

EN 61000-4-4

Fast transients
Power supply Lines 2 kV
Signal Lines 1 kV

EN 61000-4-5

Surge
Power supply Lines ± 0.5 kV
Signal lines ± 1 kV

EN 61000-4-6

RF conducted interferences
10 V rms

EN 61000-6-3

Generic immunity
EN 55022/ CISPR22

EN 61010-1

General safety
Installation category II
Enclosure: Double

Date: 10-07-2006
Signed: José M. Edo
Function: Technical Manager

InP: Programming of shunt type used. 50 mV, 60 mV or 100 mV
dSP: Programming of shunt nominal value. Example: with a 100 A / 60 mV shunt display is programmed to display 100 and automatically when the value is accepted the displayed value will turn to be 100.0. When a display value < 200 is programmed the value will be with a decimal and when a display value > 200 is programmed the value will be without.
LC 0: indicates that Programming is unlocked, you can enter programming menu with **Pro**
LC 1: Programming is locked (Starts with **Data**, programmed values can be seen but not be changed)

WARRANTY

All products are warranted against defective material 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 whom 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.

