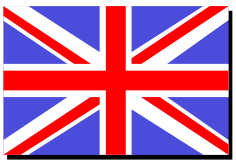
Dostmann electronic

Precision Measuring Instrument
P400-series



English language

User Manual

Summary

1. Handling

1.1 General advice

- For cleaning the instrument please do not use abrasive cleaner, but a dry or damp cloth.
- Please store the measuring instrument in a dry and clean place when not in use.
- Avoid any force like shocks or pressure to the instrument.
- Do not use force to connect the probe or interface plugs in. The interface plug is different from the probe plug.
- If no sensor is connected to the instrument while switching on „OPN“ shows on the display (Please refer to chapter error codes/troubleshooting).
- A retractable stand on the back of the instrument allows it to be used as a bench top instrument.

1.2 Operation

Before switching on the instrument, connect the probe/s to the instrument and insert the battery (Please refer to chapter 6. Power supply / battery changing). A number on the instrument’s housing marks each port.

1.3 Switching on and off

By operating the ON/OFF-key the instrument switched on or off. After switching on the instrument indicates a full segment test for 1,5 sec. afterwards the instrument starts operating in measurement mode indicating the actual measurement temperature.

1.4 Functions

1.4.1 Measuring unit switching °C and °F (Celsius / Fahrenheit)

To change the measuring unit push ON/OFF- and MEM/OUT-Button simultaneously until the measurement value will shown.

1.4.2 CAL-option (how to adjust the instrument)

The instrument offers an easy calibration function to adjust the temperature at one point – to compensate sensor tolerances.

Push once the Hold-Button. On the bottom of the display you will see HLD and the displayed measurement value is “frozen”. By using now the MEM IN-Button the instrument switch to CAL-mode. On the instrument you will see:

00.0

The first 0 is blinking. By using the MEM IN-Button you increase the blinking figure and by using the MEM OUT-Button you decrease the measurement value. By using the Hold button you will switch to the next figure or you will end the adjustment.

Note: The mentioned offset will add or subtract(negative value) from the measurement.

1.5 Recalling the memory data (HOLD MAX MIN AVE)

After pushing first time the key [HOLD MAX MIN AVE] the actual value will be held on the display. Pushing again the key [HOLD MAX MIN AVE], the saved maximum-, minimum and average value will be displayed.

Note: During the recall of the memory data the extremes (MAX MIN) and the average value (AVE) will not be calculated or carried on.

Clearing the memory (MAX MIN AVE)
Press [CLEAR] key once to erase the stored maximum, minimum and average from memory

1.6 19-Measurement Memory

The instruments series P400 provides a 19 measurement memory function. For saving the displayed measurement push the MEM IN-Button. On the bottom of the display the memory position will shown. To readout the memory push the MEM OUT-button. On the bottom of the display “REC” and the position of the memory will be displayed (REC 1-19). For clearing the memory push once the CLEAR-Button while displaying the memory measurements.

1.7 AUTO-OFF-function

P400 and P410 instruments will switch off automatically after 15 minutes without pressing any key. Pressing the CLEAR-Button and switching on the instrument simultaneously can disable this function when **dAo** is displayed.

2. Power supply

For the power supply of the instrument two 1,5 Volt battery (AA size) are used. To exchange the batteries switch off the instrument and open the battery cover on the back of the instrument. Replace the used batteries with new ones.

When the instrument displays the „BAT“ segment, it indicates that the batteries need replacing and the instrument allows app. 1 hour of further measurement time.

Note: For protection of our environment please dispose of the batteries according to current local regulations.

3. Technical Data

	P410	P400
Measuring range **Accuracy** (+- 1 digit)	Thermocouple type K (NiCr-Ni) -99,9°C…+1370°C +-0,5°C (Instrument only)	Pt100, 4-wire -99,9°C…+850°C +-0,3°C (Instrument only)
Resolution	0,1°C from -99,9°C...+399,9°C otherwise 1°C	0,1°C from -99,9°C...+399,9°C otherwise 1°C
Memory	16 Measurements	16 Measurements
Connectors	Miniature connector	DIN 45326 8-pole
Working temperature	0°C ... +50°C	0°C ... +50°C
Display	1-Line LCD	1-Line LCD
Housing	plastic(ABS)	plastic(ABS)
Dimensions	130 x 65 x 25 mm (LxWxH)	130 x 65 x 25 mm (LxWxH)
Weight	240 g	240 g
Power supply	2 x 1,5 Volt AA	2 x 1,5 Volt AA
Battery life	ca. 200 Std.	ca. 200 Std.

4. Guarantee

With normal use, the guarantee lasts for 12 months for the instruments and 6 months for the probes and sensors. Opening of the instruments leads to expiration of guarantee.

The producer guarantees that his product will not have any material defect or defect in workmanship during the above-mentioned period if the product is accordingly used and maintained. Exceptions are defined in the following way:

The guarantee does not apply for batteries and fuses. The guarantee does not cover products that are damaged, used improperly or negligent, practised or stored incorrectly.

These guarantee conditions replace all possible expressly or tacitly confirmations. No liability will be assumed for special, casual or constructive damages when it occurs through unauthorized act or through another way even if it is within the contract.