USER MANUAL

PRESSURE CE

Digital Pressure Gauges

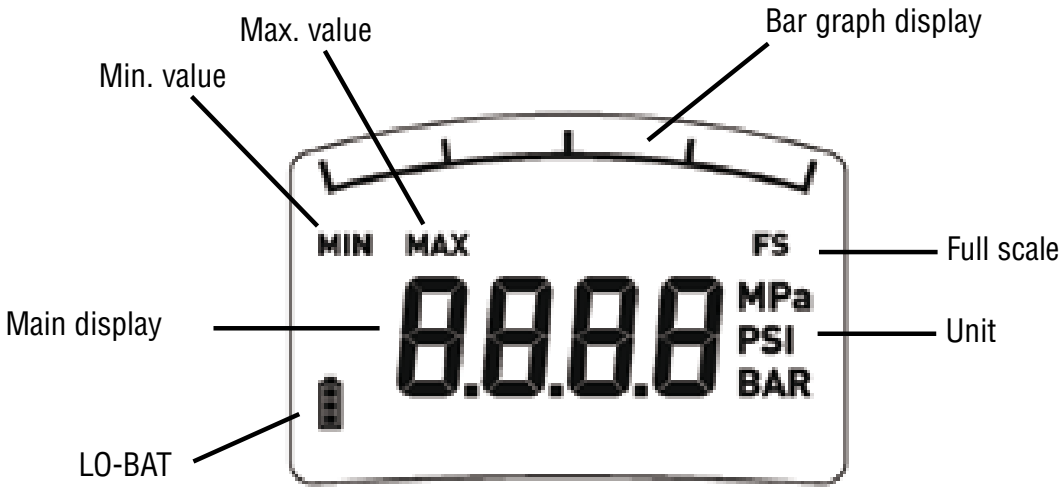
SERIES 1000

HIGH PERFORMANCE DIGITAL PRESSURE GAUGES

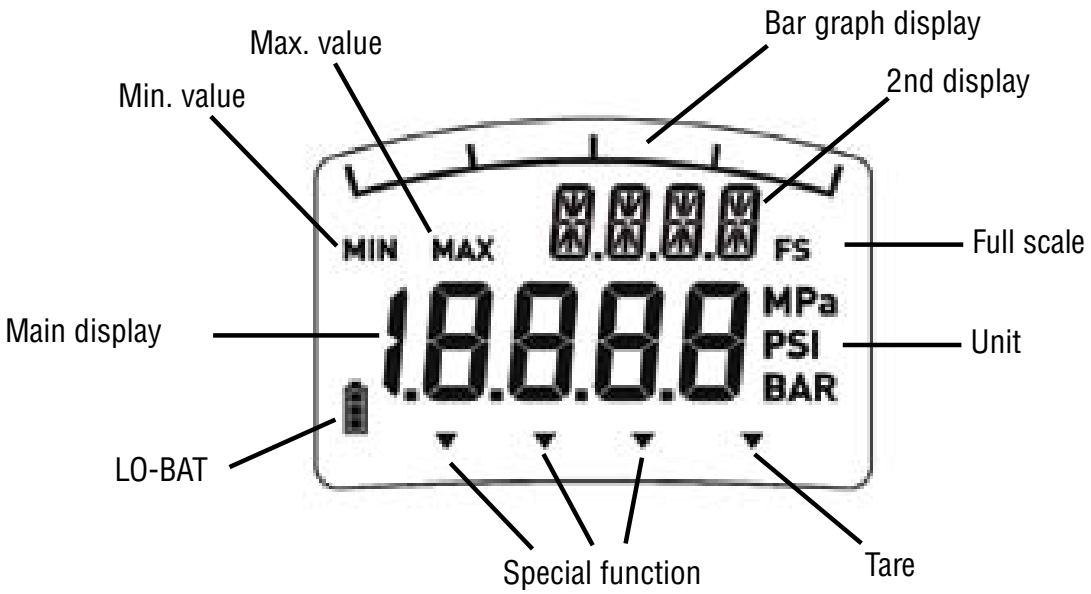
NOSHOK INCORPORATED

1. Description of Parameters

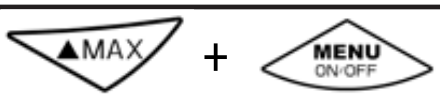
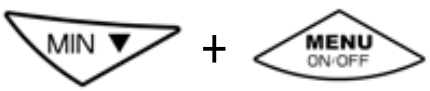
Series 1000 Display Screen



Series 1000 Optional Display Screen



Function in normal mode

Key	Function/Action
	- switches the device on - switches the device off - changes to programming mode if pressed for longer than 3 secs
	- Display indicated max. value as long as key is pressed
	- Display indicates min. value as long as key is pressed
	- Resets max. value to “ 0 “
	- Resets min. value to “ 0 “

Min/Max Memory

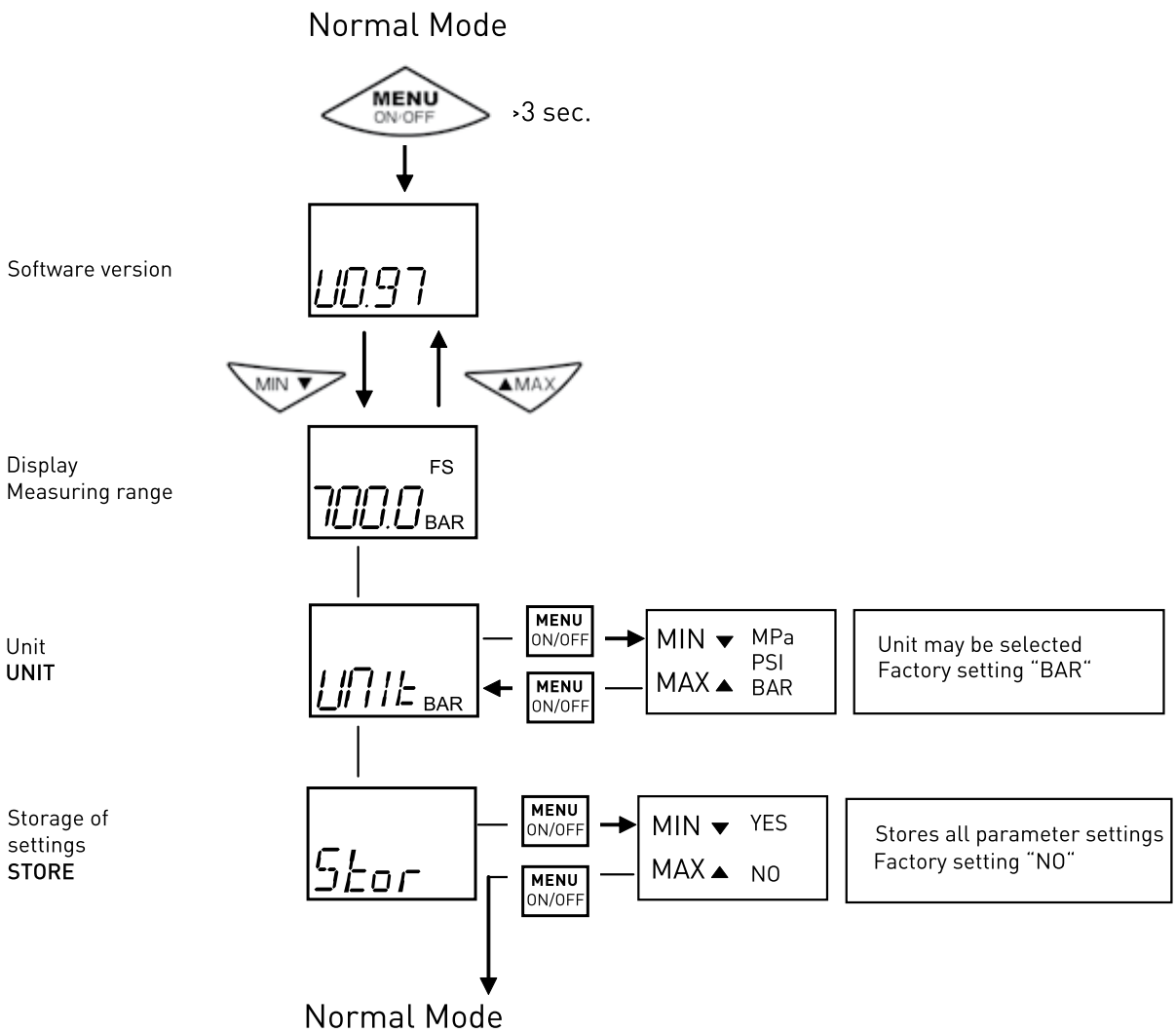
The min/max memory is updated with the current measured value in every measuring cycle.
The min. value is displayed by pressing the min. key.
The max. value is displayed by pressing the max. key.
Pressing and holding the appropriate key (min. or max.) and quickly pressing the menu key at the same time resets the device to the current measured value.

Bar Graph with Trailing Pointer Function

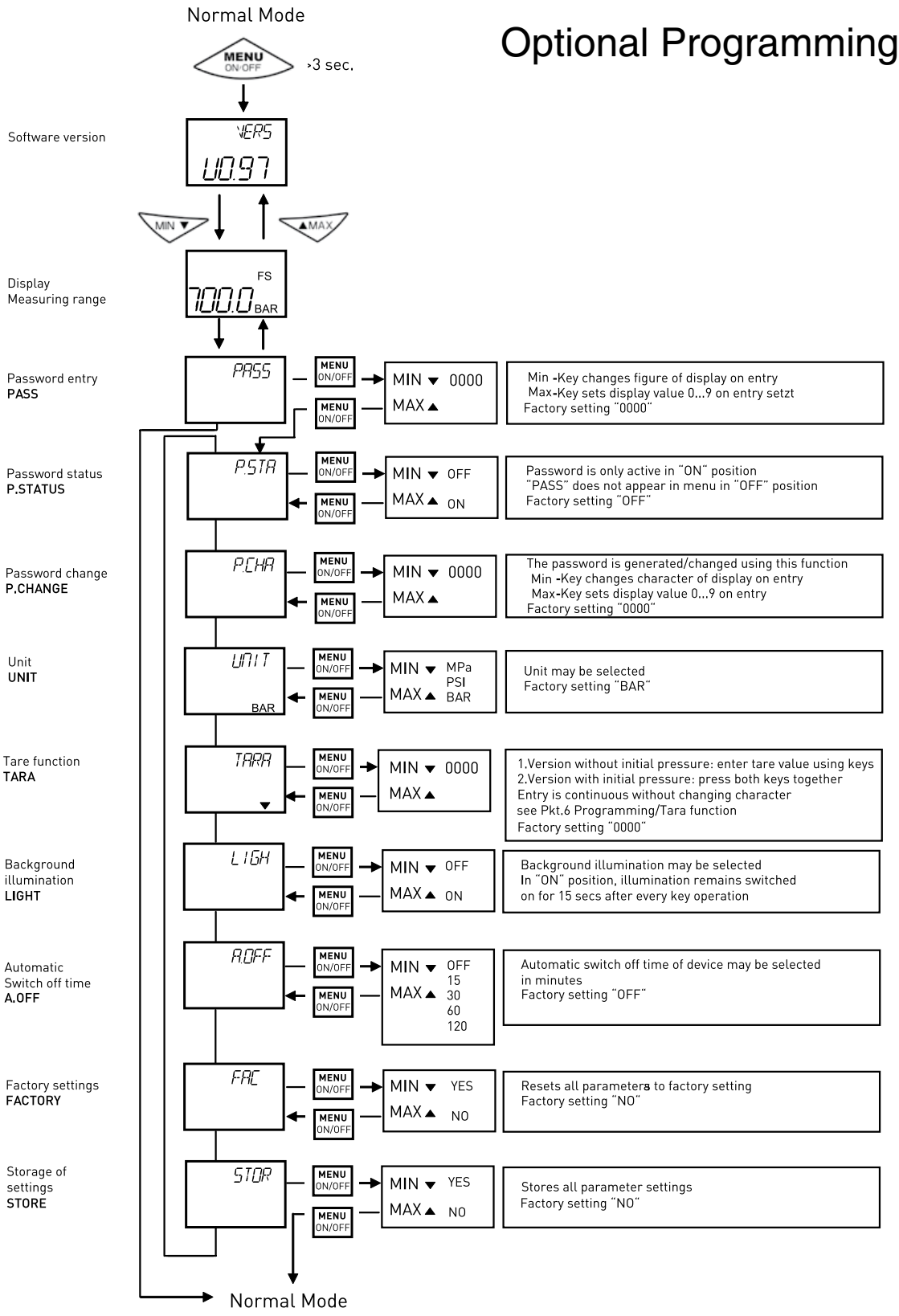
The integrated bar graph display with trailing pointer function additionally indicated on the display shows the trend in current working pressure regardless of the digital display. With the help of the trailing pointer function, the max. stored value is also indicated in the bar graph display in addition to the digital display in the form of a bar segment. This bar segment is also updated to the current measured value when the min./max. value is reset.

2. Programming Series 1000

Standard Programming



Optional Programming



Optional Tare Function

In this mode the positive deviation of the measured value from the tared value (max. 20% of the measuring range) is constantly indicated by the main display. The untared pressure value is always shown on the bar graph display. Thus the Digital Gauge's actual working load can be read off even if the tare function is active. When the tare function is active, a function indicator ▼ appears on the display. There are two:

1) Select the tare function and set the value to be tared using the keys ▼▲. When set, the measured value to be tared is backed up as tare. The main display and the auxiliary display then show the value "0000" in the unpressurised state. Example: If a value to be tared is set as 2 bar, the main display indicates 0 bar in the unpressurised state.
2) Load the Digital Gauge with the pressure to be tared. The current measured value appears in the main display field of the main display. Select the tare function and then operate both keys simultaneously ▼▲ . The current measured value will be backed up as tare. The main display and the auxiliary display are set to (0000).

Setting the tare value to (0000) resets the tare function in both models.

3. Technical Data

Series 1000	with 4 digit, 7 segment Optional: with 4.5 digit, 7/14 segment, second display
Display • Accuracy • Update rate	11mm high, bar graph display 0.25% Full Scale (BFSL) ± 1 digit [1]; ±0.5% Terminal Point; 5/sec
Measuring ranges to EN	0 psig to 30 psig through 0 psig to 10,000 psig, others on request; Compound ranges from 30/30 psig through 30/600 psig
Type of pressure	Positive overpressure, negative overpressure
Overload limit	Twofold, max 15,000 psig
Wetted Materials	Measuring ranges ≤ 750 psig stainless steel; AL 203; NBR, Measuring cell ceramic Measuring ranges ≥ 1500 psig only stainless steel, measuring cell thin-film technology
Pressure connector	¼ NPT, other connectors on request
Stability per year	≤ ± 0.2 % o.F.S. under reference conditions
Memory	MIN/MAX (not volatile even when changing batteries)
Programming mode Parameters • Password • Tare • Automatic switch off time • Measuring unit	 Optional: settable Optional: ≤ 20% o.F.S. settable option 2…90 min. factory set Optional: settable bar, PSI MPa selectable
Illumination of display	Optional
Voltage supply • Operating life	2 x 1.5V cell AA 4000h (AA 2000 mAh)

[1] Measuring deviation to IEC 61 298-2, including non-linearity, hysteresis, deviation of zero point and upper range value

Temperature comp. range	0° F to 140° F (0…60° C)
Temperature effect • Zero point • Measuring range	 ≤ ± 0,15 % /10 K ≤ ± 0,15 % /10 K
Degree of protection • permissible rel. humidity	IP 65 to EN 605 29/IEC 5 29 < 90%, non-condensing
Emitted interference [2)]	acc. to EN 613 26
Noise immunity [2)]	acc. to EN 613 26
Temperature ranges • Storage • Mat. measured • Environment	 -4° F to 158° F (-20…70° C) -22° F to 185° F (-22° F to 212° F for measuring range ≥ 1500 psig); (-30…85° C, -30…100° C for measuring range ≥ 100 bar) 14° F to 140° F (-10…60° C)
Housing	Stainless steel, Optional black protective cap
Weight	Approx. 0.88 lbs.

[2)] Conformity declaration on request

4. CE – Conformity

The Digital Gauge complies with all requirements of EN 613 26 with regard to interference emission and immunity for use in industrial areas. NOSHOK recommends the use of shielded cables. Installation and cable routing must be carried out correctly in order to maintain the effective protection from electromagnetic interference.

Notes:

The Instrumentation Company

NOSHOK INCORPORATED

CORPORATE HEADQUARTERS
1010 West Bagley Road • Berea, Ohio 44017 • 440-243-0888 • FAX 440-243-3472
E-MAIL: noshok@noshok.com • WEB: www.noshok.com.