



# **USER MANUAL**

# MP112 - MP 115

## Manometer

# Description of the device

- 1. OK key
- 2. Backlight key
- 3. Select key
- 4. On/Off/Esc key
- 5. Hold/min/max key



#### Piezoresistive sensor

## **General features**

Measuring element	Piezoresistive sensor			
Tolerated overpressure	MP 110: 250 mbar / MP 111: 700 mbar / MP 115: 1.4 bar / MP 112: 3 bar			
Connector	MP 110 / 111: $\emptyset$ 6.2 mm barbed connectors made of nickelled brass / MP 115 / 112: $\emptyset$ 4.6 mm barbed connectors made of nickelled brass			
Display	4 lines, LCD technology. Dimensions 50 x 36 mm. 2 lines of 5 digits with 7 segments (value) 2 lines of 5 digits with 16 segments (unit)			
Housing	ABS, protection IP54			
Keypad	5 keys			
European directives	2014/30/EU EMC; 2014/35/EU Low Voltage; 2011/65/EU RoHS II; 2012/19/EU WEEE			
Power supply	4 batteries AAA LR03 1.5 V			
Battery life	180 hours			
Ambience	Neutral gas			
Conditions of use (°C, %RH, m)	From 0 to $+50$ °C. In non condensing conditions. From 0 to 2000 m.			
Storage temperature	From -20 to +80 °C			
Auto shut-off	Adjustable from 0 to 120 min			
Weight	220 g			

# **Technical specifications**

Parameter	Models	Measuring units	Accuracy*	Measuring range	Resolution
Pressure	MP 110	Pa, mmH <sub>2</sub> O, inWg, daPa	$\pm 0.5\%$ of reading $\pm 2$ Pa	From -1000 to +1000 Pa	1 Pa
	MP 111	kPa, mmH <sub>2</sub> O, inWg, mbar, mmHg, daPa	$\pm 0.5\%$ of reading $\pm 2 \text{ mmH}_2\text{O}$	From -1000 to +1000 mmH <sub>2</sub> O	From 0 to $\pm 2000$ mmH <sub>2</sub> 0: 0.1 mmH <sub>2</sub> 0 Beyond: 1 mmH <sub>2</sub> 0
	MP 115	kPa, inWg, mbar, mmHg, PSI	$\pm 0.5\%$ of reading $\pm 0.5$ mbar	From -500 to +500 mbar	0.1 mbar
	MP 112	kPa, inWg, mbar, mmHg, PSI, bar	$\pm 0.5\%$ of reading $\pm 2$ mbar	From -2000 to +2000 mbar	1 mbar

#### Perform a measurement

- Turn on the device by pressing on "On/Off/Esc".

  The device displays its name "MP110", "MP111", "MP112" or "MP115", then performs an autozero.
- Connect the pressure tubes. The device displays the pressure.

#### Perform an autozero

The device is on and displays the pressure measurements.

· Press on "OK".

"Autozero" displays on screen, the device performs an autozero then returns to the measurements display.

#### Freeze the measurement

During a measurement:

- Press on "Hold/min/max".
  - "Hold" appears on the screen and the measurements are frozen.
- Press on "On/Off/Esc" to exit the hold function. The device returns to the measurement display.

## Display the maximum and the minimum

Once the measurement are frozen:

- Press once on "Hold/min/max".
   The device display the maximum value of pressure measured since the last questioning at the top of the screen and the minimum value of pressure measured since the last questioning at the bottom of the screen.
- Press on "On/Off/Esc" to return to the measurement display.

## Adjust the device

#### Device drop-down menu



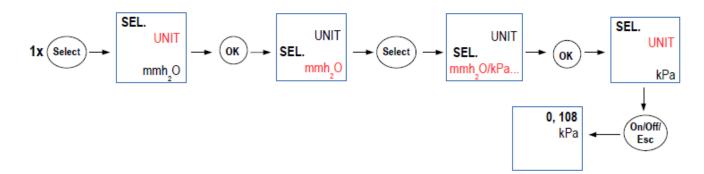
#### Select the measuring unit in pressure

The device is on and displays the measurement.

- Press on "Select"."UNIT" blinks on screen.
- Press on "OK".

The unit currently used blinks on screen.

- Press on "Select" until the required unit appears: daPa, mmh<sub>3</sub>O, kPa, inWg, mbar, mmHg...
- Press on "OK" to validate.
   "UNIT" blinks on screen.
- Press on "On/Off/Esc" to return to the measurement display.



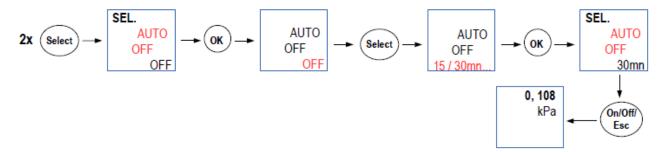
## Adjust the auto shut-off

The device is on and display the measurement.

- Press on "Select" until "AUTO OFF" blinks on screen.
- Press on "OK".

The time before device auto shut-off blinks at the bottom of the screen.

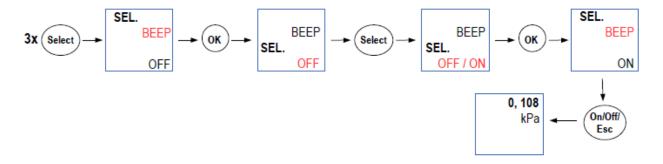
- Press on "Select" until the required time before auto shut-off appears: 15, 30, 45, 60, 75, 90, 105, 120 minutes or OFF.
- Press on "OK" to validate.
  - "AUTO OFF" blinks on screen.
- Press on "On/Off/Esc" to return to the measurement display.



## Activate or deactivate the keys beep

The device is on and displays the measurement.

- Press on "Select" until "BEEP" blinks on screen.
- Press on "OK".
  - "OFF" or "ON" blinks on screen.
- Press on "Select" to activate the key beep "ON" or deactivate it "OFF".
- Press on "OK" to validate.
  - "BEEP" blinks on screen.
- Press on "On/Off/Esc" to return to the measurement display.



## Activate the backlight

The device is on.

- Press on "Backlight" to activate the device backlight.
- Press again on this key to deactivate the backlight.



## **Change the batteries**

- Remove the front part at the back of the device.
- Change the old batteries by AAA LR03 1.5V batteries.
- Replace the front part.

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