



## Digital Air Pressure Gauge Users Manual

Intercomp Co.  
3839 County Road 116  
Medina, MN 55340, U.S.A.

(763)-476-2531  
1-800-328-3336  
Fax: 763-476-2613  
[www.intercompracing.com](http://www.intercompracing.com)

Manual #: 700099 Rev H

## Table of Contents

<b>SPECIFICATIONS .....</b>	<b>3</b>
CONTROLS .....	3
ELECTRICAL.....	3
PERFORMANCE .....	3
ENVIRONMENTAL .....	3
PHYSICAL .....	3
<b>OPERATIONS.....</b>	<b>4</b>
CONTROLS .....	4
<i>On/Off</i> .....	4
<i>Backlight</i> .....	4
<i>ZERO</i> .....	4
<i>Units Switching (PSI - Bar - kg/cm<sup>2</sup>)</i> .....	5
PEAK HOLD MODE.....	5
CHANGING THE BATTERY .....	5
<b>ERROR MESSAGES .....</b>	<b>6</b>
<b>HOW TO REACH INTERCOMP SERVICE DEPT.....</b>	<b>7</b>

"This document is the property of Intercomp Co. It contains material and information that is confidential and protected under federal and/or state trade secret, unfair competition, and copyright law. Any reproduction, use or disclosure without written permission from Intercomp Co. is prohibited".

# Specifications

## Controls

General:	Zero, On/Off, backlight
Display:	4 digit LCD

## Electrical

Batteries:	1 (9-volt) size disposable alkaline or rechargeable Nickel-Cadmium cell.
Internal resolution:	14 bit A/D delivers over 16,000 internal counts.
Operating pressure:	P/N 360045: 100 x 0.01 PSI, 7 x 0.001 Bar, or 7 x 0.001 kg/cm <sup>2</sup> P/N 360045-150 : 150 PSI x 0.1 PSI , 10 x .01 Bar, 10 x .01 kg/cm <sup>2</sup>
Auto-Zero:	Automatically zeros off errors of zero-pressure.
Battery life:	300 hours with an alkaline battery 20 hours with backlight on
Low battery indication:	Flashes 'batt' when battery is running low; Automatically turns off when battery power is low enough to affect reliability.

## Performance

Accuracy:	±0.1% of applied pressure.
Capacity / resolution:	P/N 360045: 100 PSI x 0.1 PSI or 0.01 PSI P/N 360045-150 : 150 PSI x 0.1 PSI or 0.01 PSI

## Environmental

Humidity:	10 to 95% Non-Condensing.
Ambient Temperature:	Operating: -10° C to +45° C / +14° F to +113° F. Storage: -40° C to +75° C / -40° F to +167° F.
Air Pressure Temp:	-10° C to +65° C / +14° F to +149° F.

## Physical

Dimensions:	Housing: 3.2" x 4.3" x 1.5" / 8.1cm x 11cm x 3.8cm.
	Hose: 29" / 74cm.
	Weight: 1 lb / 0.45kg.

# Operations

## Controls



### ON/OFF

Press this button to turn the air gauge on. The unit quickly tests itself and when these tests have completed successfully, the system begins measuring. Press this button again to turn the unit off. As the gauge turns off it will briefly display its version number. The gauge has a 10 minute auto-off feature. If there is no change in pressure or any key pressed for 10 minutes, the gauge will automatically shut off.

### Backlight

Press this key to toggle the backlight on and off.

### Display Resolution

The display resolution can display by 0.1 PSI or 0.01 PSI. To toggle between the two settings press and hold the backlight key for 3 seconds. This will toggle the display and save the setting until changed again by the user.

### ZERO

Tells the air gauge to display a zero pressure. If ZERO is pressed with pressure on the gauge, that pressure becomes the zero condition. When this pressure is removed, a negative pressure shows until the unit is zeroed again.

The gauge contains a feature called Auto Zero Tracking (AZT), which corrects for slight zero changes during normal operation. If small pressures are added

slowly, the air gauge can zero them off.

## Units Switching (PSI - Bar - kg/cm<sup>2</sup>)

The air pressure gauge can toggle between PSI, Bar, and kg/cm<sup>2</sup>. To switch units simultaneously press and hold the ZERO and backlight keys. After pressing and holding these keys for a few seconds, the unit will momentarily display:

- 1) “**PSI**”, if you have now switched to display in PSI.
- 2) “**BAR**”, if you have now switched to display in Bars.
- 3) “**kg/cm<sup>2</sup>**”, if you have now switched to display in kg/cm<sup>2</sup>.

## Peak hold mode

To get into peak hold mode simultaneously press and the ZERO and backlight keys. (The Internal calibration blocking shunt must be in place). The unit will momentarily display "Peak". In peak mode the display will show only the highest pressure applied to the gauge. To exit peak hold mode, press the ZERO and backlight keys simultaneously. The display will show "nor" for a few seconds and return to normal mode.

**NOTES:** The unit will always turn on in 'normal' operating mode. During normal mode, the air pressure gauge takes 4 readings per second. During peak mode, the air pressure gauge is increased to 25 readings per second (in order to better capture the true peak pressure).

## Changing the Battery

Turn the power off. Slide the battery hatch down. Remove the battery from the case and detach the old battery, being careful not to tug on the connector wires. Connect the new battery and return to the case. Replace the cover.

## Error Messages

<i>dl SP</i>	Display error, the pressure gauge is unable to display the number completely. If no pressure on the gauge, press zero to return the pressure reading to zero.
<i>EEPE</i>	EEPROM error, the pressure gauge has had it's calibration corrupted or destroyed; the gauge will require calibration.
<i>OE</i>	The pressure gauge is over capacity or outside the A/D converter range. Reduce the pressure to the gauge. If the gauge continues to display “ <i>OE</i> ”, the problem could be a bad sensor or a bad chip on the circuit board.
<i>DUEr</i>	The pressure gauge is over capacity. Reduce the pressure on the gauge
<i>bAtE</i>	Low battery, the unit requires a new battery. It will shut off if this message is ignored for too long.

## **How to reach Intercomp Service Dept.**

Things to know:

- Inform the Service Dept. that the product is a Digital Air Pressure Gauge.
- When was the gauge purchased?
- Where was the gauge purchased?
- What is the serial number?

For Intercomp Service call or fax:

(763)476-2531  
Toll-Free US: **1-800-328-3336**  
FAX # (763)-476-2613

Copyright Intercomp Company © 2010  
**ALL RIGHTS RESERVED**