Gas Weigher
Users Manual

Intercomp Co.
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Manual #: 700230-E

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Declaration of Conformity

CE

We, Intercomp Company
3839 County Road 116
Medina, Minnesota 55340 USA

Declare under sole responsibility that the Gas Weigher to which this declaration relates meets the essential health and safety requirements and is in conformity with the relevant EC Directives listed below using the relevant section of the following standards and other normative documents.

2001/95/EC - on general product safety
2004/108/EC - relating to electromagnetic compatibility and replacing Directive 89/336/EEC
EN 55011:2009, Class B - Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement
EN61000-6-1:2007 - Generic standards, Residential, commercial and light industry environment
EN 61000-6-2:2005 - Immunity for industrial environments
EN 61000-6-3:2007 - Emission standard for residential, commercial and light-industrial environments
EN 45501:1992 AC:1993 - Specification for metrological aspects of non-automatic weighing instruments
2012/19/EU - on waste electrical and electronic equipment (WEEE) (Directive 20/96/EC Recast)
2013/56/EU amending Directive 2006/66/EC on batteries and accumulators

This product complies with all safety-relevant provision referring to protection against electrical hazards and other hazards, such as mechanical hazards, fire hazards, noise and vibration. The safety issues of this measurement equipment have been evaluated under the self-certification provisions of the relevant directives.

The related technical construction files are held for inspection in the U.K. at Intercomp Europe Limited.

The CE mark, Red M and WEEE marks must be affixed as required in the directives.

Mark Browne / Quality Manager
June 24, 2014

Introduction

This manual contains specifications and operation instructions for Intercomp's Gas Weigher.

Specifications

Controls

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

Electrical

Batteries:	1 (9-volt) size disposable alkaline or rechargeable Nickel-Cadmium cell.
Resolution:	24 bit A/D delivers over 16,000,000 internal counts
Auto-Zero:	Automatically zeros off errors of zero-load.
Battery life:	125 hours with an alkaline battery 20 hours with backlight on
Low battery indication:	Flashes '**L.bAt**' when battery is running low; Automatically turns off when battery power is low enough to affect reliability.

Performance

Accuracy:	±0.1% of applied load or ± display graduation, whichever is greater.
Capacity:	400 lb x 0.1 / 200 kg x 0.05

Environmental

Humidity:	10 to 95% Non-Condensing.
Temperature:	Operating: -10 C to +40 C. / +15 F to +105 F.
	Storage: -40 C to +75 C. / -40 F to +170 F.

Physical

Dimensions:	Pad: 10" x 10" x 3.6" / 25cm x 25cm x 9cm
	Indicator: 4.4" x 3.25" x 1.5" / 11cm x 8 cm x 4 cm
Weight:	12 lb / 5.5 kg

Operations

Controls

On/Off

Press this button to turn the scale on. The scale tests itself; when these tests have completed successfully, the system begins weighing. Press this button again to turn the scale off.

ZERO

Tells the scale to display a zero weight. This button should be used any time the tester shows a non-zero value with no weight on the pad. If you press ZERO with weight on the pad, that weight becomes the zero condition for the scale. When this weight is removed, a negative weight shows until the system is zeroed again. **NOTE:** if this negative number is too large to fit on the display, the scale will display ' dI SP' until you press ZERO.

The Gas Weigher contains a feature called Auto Zero Tracking (AZT), which corrects for slight zero changes during normal operation. If small weights are added slowly, the scale could zero them off.

Backlight
Press this key to toggle the backlight on and off.

Units Switching (lb and kg)
The gas weigher can toggle between lb and kg. 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) "KGS", if you have now switched to display in kgs.
2) "LbS", if you have now switched to display in lbs.

Options menu
The options menu allows access to the following functions: Peak mode, Print, Average rate, Auto-off, Print Mode, and baud rate. To enter into the options menu, simultaneously press the ZERO and backlight keys. The display will show "PEAH". Press the Zero key to scroll through the menu options. To use or edit a specific function, press the backlight key. At this point you may need to enter in a number:

How to enter a number:
Press the backlight key to increment the value of the blinking digit. To move the place of the blinking digit, press the ZERO key. When the desired number is displayed, simultaneously press the ZERO and backlight keys and release.

Options Menu:

Step	Function	Note	Default
PEAH	Peak Mode	Toggles peak and normal mode	nor
Prnt	Print	Prints one line	
A.rt	Average Rate	1, is off, 4 is one second - max 120.	4
A.oFF	Auto off	000 = off, 1 to 240 minutes	0 10
Prt.t	Print Mode	Prnt = demand print, COnt = Continuous.	Prnt
bAUd	Printer baud rate	1200, 2400, 4800, 9600, 19.2k, 38.4k, 57.6k, or 115k	9600

Peak hold mode
In this mode the unit will display only the highest weight applied to the pad - until you press the ZERO key.

To get into peak mode: Access the options menu. When the display shows "PEAH", press the backlight key and release. The display will read: "PH" and the tester will return to measurement mode and will display the peak force.

To return back to normal measurement mode, repeat the above procedure (display will show "nor"). The unit will always turn on in 'normal' operating mode. Note: The averaging (see Average Rate below) is disabled while in peak mode.

Print
Reserved for a future update.

Average Rate
The Average rate is the number of past readings that are averaged together to make a reading. The default average rate is 4.

To adjust the average rate: Access the options menu. Press ZERO until the display reads "A.rt". Press the backlight key and release. Enter the desired average rate. The default rate, 4, is the equivalent to one second. To save the setting, simultaneously press the ZERO and backlight keys. The display will return to the mode menu. (To turn off this feature enter a value of 0)

Auto-off
The auto off time is how long the scale will remain on without any activity (a key being pressed or a change in weight).

To adjust the auto-off time: Access the options menu. Press ZERO until the display reads "A.oFF". Press the backlight key and release. Enter the auto-off time (in minutes). To deactivate auto-off, enter 0. The maximum time is 240 minutes. Simultaneously press Zero and backlight keys to save, the display will return to Mode menu.

Print Mode Select (Serial output)
Reserved for a future update.

Baud Rate
Reserved for a future update.

Changing the Battery

Turn the power off. Slide the battery hatch down. Remove the battery from the case and detach the old battery. Connect the new 9V battery and return to the case. Replace the cover.

Error Messages

Message	Meaning
'EEPE'	**EEPROM FAILURE Calibration information lost or corrupted**
Calibration information is held in a special permanent memory area. A checksum code is generated and written to this memory during the calibration process. Each time the power is turned on this code is regenerated and compared to the stored value. If a change is found this error message is displayed. Recalibration may clear the error display, but if the problem persists the control panel will have to be replaced.	
'Ad 1'	**A/D converter failure**
The A/D circuit board has indicated a fault and needs to be repaired or replaced.	
'LCb 1'	**Power-up Self-Test has detected a load cell error**
The load cell may have failed or there is a bad connection. If the load cell resistance checks are good then the A/D circuit board has indicated a fault and needs to be repaired or replaced.	
'LC 1'	**Run-time checking has detected a load cell error**
The load cell circuit may have failed or there is a bad connection. . If the load cell resistance checks are good then the A/D circuit board has indicated a fault and needs to be repaired or replaced.	
'L.bAt'	**Low battery voltage**
This message displayed intermittently indicates that the control panel has measured the battery voltage and found it to be too low. The most likely cause is that the batteries may need to be changed. If a new set of batteries fail to correct the situation, then the control panel may need to be replaced. Also check the battery holder and wiring.	
'CAP'	**Overload or calibration information lost or bad load cell**
The control panel has detected a weight reading that is larger than expected. This may be caused by the application of too much weight to the scale. If this display is seen when there is no weight on the scale, then the most likely causes are a defective load cell or defective control panel. To isolate the problem, measure the signal across pins two and three on the load cell connector on the control panel. This should be between zero and one millivolt. If found to be higher or lower, then the load cell system must be checked. See procedure elsewhere in this manual. If the signal is within this range then the calibration data may be lost. Attempt to recalibrate the scale. If this does not clear the problem, then replace the control panel.	
'ZErO'	**Zero Range Error**
Scale tried to zero off a load outside the range specified in the zero range setting. Remove any load and press zero.	
'HELd'	**Key is held down**
If this message is displayed with no key pressed examine the key pad and key pad connector ribbon.	
'd ,SP'	**Number can't be displayed**
The most common cause of this error is pressing the zero key with a full load on the scale. When the load is removed, the full number with a minus sign will not fit on the display. Pressing the zero key again will clear this display.	

How to reach Intercomp Service

Things to know:

Inform the Service Dept. that the product is a Gas Weigher.
When was the Gas Weigher purchased?
Where was the Gas Weigher purchased?

For Intercomp Service call or fax:

FAX # (763)-476-2613
(763)-476-2531
1-800-328-3336

Or fill out Service Support Form at:

www.intercompcompany.com