**Ranges and Resolution**

See table below. Resolution is fixed as indicated in table.

<table>
<thead>
<tr>
<th>Dual Alarms: 4-20 mA Output</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPG1000ADA-30V100</td>
<td>~30.0 inHg to 100.0 psig</td>
</tr>
<tr>
<td>DPG1000ADA-30NHG</td>
<td>0.00-30.00 inHg Vac</td>
</tr>
<tr>
<td>DPG1000ADA-05G</td>
<td>0.00-5.000 psig</td>
</tr>
<tr>
<td>DPG1000ADA-15A</td>
<td>0.00-15.00 psia</td>
</tr>
<tr>
<td>DPG1000ADA-15G</td>
<td>0.00-15.00 psig</td>
</tr>
<tr>
<td>DPG1000ADA-30A</td>
<td>0.00-30.00 psig</td>
</tr>
<tr>
<td>DPG1000ADA-30G</td>
<td>0.00-30.00 psig</td>
</tr>
<tr>
<td>DPG1000ADA-60G</td>
<td>0.00-60.00 psig</td>
</tr>
<tr>
<td>DPG1000ADA-100A</td>
<td>0.00-100.0 psia</td>
</tr>
<tr>
<td>DPG1000ADA-100G</td>
<td>0.00-100.0 psig</td>
</tr>
<tr>
<td>DPG1000ADA-300G</td>
<td>0.00-300.0 psig</td>
</tr>
<tr>
<td>DPG1000ADA-500G</td>
<td>0.00-500.0 psig</td>
</tr>
<tr>
<td>DPG1000ADA-1K</td>
<td>0.0-1000 psig</td>
</tr>
<tr>
<td>DPG1000ADA-2K</td>
<td>0.0-2000 psig</td>
</tr>
<tr>
<td>DPG1000ADA-3K</td>
<td>0.0-3000 psig</td>
</tr>
<tr>
<td>DPG1000ADA-5K</td>
<td>0.0-5000 psig</td>
</tr>
</tbody>
</table>

**Accuracy**

Accuracy includes linearity, hysteresis, repeatability

±0.25% of full scale ±1 least significant digit

Sensor hysteresis: ±0.015% FS, included in accuracy

Sensor repeatability: ±0.01% FS, included in accuracy

**Display**

4 readings per second nominal display update rate

4 digit LCD, 0.5” H and 5 character 0.25” H alphanumeric

Alarm 1 and Alarm 2 LCD indicators and bi-color (red/green)

**Controls & Functions**

SEL Select and display alarm trip points

TEST Alarm acknowledge, or toggle alarms when in test mode

Increase alarm setpoint when in setpoint adjust mode

Decrease alarm setpoint when in setpoint adjust mode

Multi-level pass code protection for set-up and calibration

**Alarm Relay Outputs**

Programmable dual form C (SPDT) relay contacts for Hi/Lo,

Hi/Hi, Lo/Lo, normal or reverse acting with 1% deadband,

or adjustable trip and reset points for each relay, manual or auto

acknowledge.

1A/24VDC, 0.5A/115VAC, non-inductive

120 milliseconds typical response time

**Calibration**

Non-interactive, ±10% of range

All pressure and absolute models: zero, midpoint, span

All vacuum models: –span, –midpoint, zero

Vacuum/pressure models: –span, zero, +midpoint, +span

±15 psi models: –span, –midpoint, zero, +midpoint, +span

**Power**

8 to 24 VAC 50/60 Hz or 9 to 32 VDC

Gauge is on when power is on

Designed for continuous operation.

1.0 watt maximum power consumption

**Weight**

9.5 ounces (approx), shipping wt. 1 pound (approx.)

**Housing**

Extruded aluminum case, epoxy powder coated, ABS/ polycarbonate bezel, front and rear gaskets, polycarbonate label

**Overpressure, Burst, Vacuum**

Ranges using 3000 psig sensor: 5000 psig overpressure

Ranges using 5000 psig sensor: 7500 psig overpressure

All others: 2 X pressure range

3000 psi, 5000 psi, and 4 digit ranges 112.5% full scale out-of-range display: 1- - - - or 1- - -

Under-range display (non-vacuum sensors): –Err

4 X sensor burst pressure rating, or 10,000 psi, whichever is less

Vacuum service: 15 psia, ±15 psig, 15 psig, 30 psia,

100 psig, 100 psia, 200 psig sensors

**Environmental**

Storage temperature: –40 to 203°F (–40 to 95°C)

Operating temperature: –4 to 185°F (–20 to 85°C)

Compensated temperature: 32 to 158°F (0 to 70°C)

**Installation Precautions**

Read these instructions before using the gauge. Configuration may be easier before installation. Contact the factory for assistance.

These products do not contain user-serviceable parts. Contact us for repairs, service, or refurbishment.

Gauges must be operated within specified ambient temperature ranges.

Outdoor or wash down applications require a NEMA 4X gauge or installation in a NEMA 4X housing.

Use a pressure or vacuum range appropriate for the application.

Use fittings appropriate for the pressure range of the gauge.

Due to the hardness of 316 stainless steel, it is recommended that a thread sealant be used to ensure leak-free operation.

For contaminated media use an appropriate screen or filter to keep debris out of gauge port.

Remove system pressures before removing or installing gauge.

Install or remove gauge using a wrench on the hex fitting only.

Do not attempt to turn gauge by forcing the housing.

Do not exceed relay current and voltage ratings. Use an appropriate contactor for larger loads. Inductive inrush currents may be up to 5x normal current and may require an RC snubber.

Good design practice dictates that positive displacement liquid pumps include protection devices to prevent sensor damage from pressure spikes, acceleration head, and vacuum extremes.

Avoid internal sensor damage! Do not apply vacuum to non-vacuum gauges or hydraulic vacuum to any gauges.

Avoid permanent sensor damage! NEVER insert objects into gauge or installation in a NEMA 4X housing.

Gauges are not for oxygen service. Accidental rupture of gauge or installation in a NEMA 4X housing.

Avoid permanent sensor damage! NEVER insert objects into gauge or installation in a NEMA 4X housing.

Gauges are not for oxygen service. Accidental rupture of sensor diaphragm may cause silicone oil inside sensor to react with oxygen.

NEVER connect the gauge wires directly to 115 VAC or permanent damage will result.

**DPG1000-PS Optional Power Supply Kit**

The optional power supply kit includes a UL and CSA listed 115 VAC (50/60 Hz) wall-mount power supply with U.S. style 2-prong plug. Output is 12 VDC at 200 mA and is intended for gauges that accept DC power. The power supply’s two-conductor wire is approximately 6 feet long and has plain wire ends.

Also included is a moisture resistant connector to allow easy hookup without having to strip wires. Use a pair of pliers to snap connector onto wires.
Types of Gauges
Gauge reference models read zero with the gauge port open.
Compound ranges read vacuum in inches of mercury, pressure in psig, and zero with the gauge port open.
1000 psi and higher sensors are a sealed-reference type. They read zero with the gauge port open are internally referenced to 14.7 psig. They function like gauge reference sensors.
Absolute reference gauges read zero at full vacuum and atmospheric pressure with the gauge port open. Note that readings of atmospheric pressure vary continuously.

Gauge Wiring Diagram

Power wires
NC Normally Closed
NO Normally Open
C Common

6-conductor relay wires
BLACK NC Normally Closed
RED NC Normally Closed
WHITE NO Normally Open
GREEN NC Normally Closed
BROWN C Common
BLUE NO Normally Open

Gauge Power Connections
The 2-conductor cable RED and BLACK leads is for the gauge power supply. Note the relay cable also has red and black wires. Do not connect power to them.
Connect to 8-24 VAC, 50/60Hz or 9-32 VDC. The gauge will operate on either AC or DC power, either polarity. An unregulated power supply can be used. Note that 24 VAC transformers with small loads may operate at voltages over the 24 VAC limit.
The supply voltage, when within the stated ranges, has negligible effect on the gauge calibration. Operation below 9 VDC or 8 VCA may cause erratic or erroneous readings or outputs.
When operating multiple gauges from the same power supply, refer to the mA rating in the specifications to ensure adequate power. Route the wires away from heat sources and moving equipment.

Alarm Contact Ratings
0.5A/115VAC, 1/2A/24VDC, non-inductive

Gauge Configuration
From the normal operating mode, press and hold the TEST and \text{\textbullet} buttons.
Then press the \text{SEL} button.
Release all buttons when the display indicates \text{CFG}.
Before the gauge enters the Configuration mode, the display initially indicates \_\_\_\_\_\_\_\_, with the first underscore blinking, and \text{CFGP}C on the lower display.
Enter the pass code as described below.

Pass Code Entry
A pass code is required to configure the gauge. Additional levels of security may be enabled by defining separate pass codes for configuration, configuration mode, output test, and set point select modes. See Changing the User-Defined Pass Code at the end of this manual to change pass codes.
Functions in user configuration mode
- Restore original factory configuration
- Enable/disable zero tare function
- Choosing 1% deadband or adjustable hysteresis alarm mode
- Operation for blinking alarm LEDs

Set point modes (high alarm/low alarm or state at power-up)
- Relay action mode (normal/reverse)
- Enable/disable pass code for output test and set point adjust
- When the gauge requests a pass code, the display indicates \_\_\_\_\_\_\_\_\_\_, with the first underscore blinking, and either \text{TSTPC}, \text{CFGP}, \text{CALPC} on the lower display. All three pass codes are initially set to the factory default of \text{3510}.

Note: During pass code entry the LEDs will be off and the gauge will not respond to changes in pressure. The relays will maintain their prior state. The gauge will automatically revert to the normal operation if no buttons are pressed for approx. 15 seconds.

Press and release the \text{SEL} button to index to the next position. The 3 will remain, and the second position will be blinking.

Press and release the \text{SEL} button to index to the next position. 3 5 1 will remain, and the fourth position will be blinking.

Press and release the \text{SEL} button to select 0.
Press and release the \text{SEL} button to proceed.
Press and release the \text{SEL} button to proceed.

If an incorrect pass code was entered, the gauge will exit to the normal operating mode. Upon successful pass code entry, follow the steps in the appropriate section of this manual.

Note: To exit a mode at any time, press and hold the \text{SEL} button until the display indicates \_\_\_\_\_\_.

Zero Tare Configuration
The upper display will be blank, and the lower display will display either \text{USER} or \text{FCTR}.

Use the \text{\textbullet} or \text{\textbullet} buttons to select either \text{USER} or \text{FCTR}.

If \text{USER} is selected, the existing user configuration will be retained and can be modified in the following steps.

If \text{FCTR} is selected, the existing user configuration will be replaced with the factory configuration. It can be modified in the following steps.

When the desired setting is displayed, press and release the \text{SEL} button to move on to the next parameter.

Alarm Contact Ratings
0.5A/115VAC, 1/2A/24VDC, non-inductive

Alarm Type Selection
The lower display will either indicate \text{DBRND} or \text{RDJ_H}.
If \text{DBRND} is selected, each relay will operate with 1% of full-scale deadband between set and reset.
If \text{RDJ_H} is selected, each output relay will have an adjustable set point and an adjustable reset point.

Use the \text{\textbullet} or \text{\textbullet} buttons to select either \text{DBRND} or \text{RDJ_H}.
When no desired mode is displayed, press and release the \text{SEL} button to move on to the next parameter.

LED Alarm Annunciator Function Selection
This setting lerts the operator to an alarm condition by blinking the LEDs. The choices are
- \text{R_RCK} Manually acknowledge:
- \text{F_RCK}
- \text{NO_R}

Use the \text{\textbullet} or \text{\textbullet} buttons to cycle through the three choices.

\text{R_RCK} An alarm condition will be automatically acknowledged when the alarm condition clears. When an alarm condition occurs, the LED for that alarm will begin to blink red until it has been manually acknowledged by a pressing the \text{TEST} button, or until the alarm condition no longer exists.

Use the \text{\textbullet} or \text{\textbullet} buttons to select either \text{SP1_L} or \text{SP1_H}.
If \text{SP1_L} is selected, Alarm 1 will be a low alarm.
If \text{SP1_H} is selected, Alarm 1 will be a high alarm.

Alarm 1 will be \text{SET} when the pressure falls below Setpoint 1.
Alarm 1 will be \text{RESET} when the pressure rises above Setpoint 1 plus the deadband. The fixed 1% deadband is \text{.01} x the full scale range of the gauge.

When the desired alarm type is displayed, press and release the \text{SEL} button to move on to the next parameter.

Fixed Deadband \text{DBRND} Alarm Setup

Alarm 1 Type in \text{DBRND} Mode
If \text{RDJ_H} was selected, skip to the Relay Power Up State Section.
Use the \text{\textbullet} or \text{\textbullet} buttons to select either \text{SP1_L} or \text{SP1_H}.
If \text{SP1_L} is selected, Alarm 1 will be a LOW alarm.
Alarm 1 will be \text{SET} when the pressure rises below Setpoint 1.
Alarm 1 will be \text{RESET} when the pressure falls below Setpoint 1 minus the deadband. The fixed 1% deadband is \text{.01} x the full scale range of the gauge.

When the desired alarm type is displayed, press and release the \text{SEL} button to move to Alarm 2.

Alarm 2 Type in \text{DBRND} Mode
Use the \text{\textbullet} or \text{\textbullet} buttons to select either \text{SP2_L} or \text{SP2_H}.
If \text{SP2_L} is selected, Alarm 2 will be a LOW alarm.
Alarm 2 will be \text{SET} when the pressure rises below Setpoint 2.
Alarm 2 will be \text{RESET} when the pressure rises above Setpoint 2 plus the deadband. The fixed 1% deadband is \text{.01} x the full scale range of the gauge.

When the desired alarm type is displayed, press and release the \text{SEL} button to move to the next parameter.
Relay Action in DMR and Fixed Deadband Mode

Use the ▲ or the ▼ buttons to select either Normal Acting (Fail-safe): _NR_
Reverse Acting: _REV_

If _NR_ is selected, the output relay coils will be energized in the RESET state and de-energized in the SET state.
If _REV_ is selected, the output relay coils will be de-energized in the RESET state and energized in the SET state.

When the desired alarm type is displayed, press and release the SEL button to move to the Output Test and Set Point Adjust Pass Code Protection section.

Adjustable Hysteresis _ADJ_H Alarm Setup

Relay Power Up State in _ADJ_H_Adjustable Hysteresis Mode

This determines the state of the relays if the gauge is powered up while the pressure is between the SET and RESET trip points. For some applications it may not be desirable to have an alarm condition during power-up.

Use the ▲ or the ▼ buttons to select either SP1_L or SP1_H.
If SP1_L is selected and the gauge is powered up while the pressure is between the Relay 1 SET and RESET trip points, Relay 1 will begin in the RESET state.
If SP1_H is selected and the gauge is powered up while the applied pressure is between the Relay 1 SET and RESET trip points, Relay 1 will begin in the SET state.
When the desired alarm state is selected, press and release the SEL button to move to Relay 2.
Use the ▲ or the ▼ buttons to select either SP2_L or SP2_H.
If SP2_L is selected and the gauge is powered up while the applied pressure is between the Relay 2 SET and RESET trip points, Relay 2 will begin in the RESET state.
If SP2_H is selected and the gauge is powered up while the applied pressure is between the Relay 2 SET and RESET trip points, Relay 2 will begin in the SET state.
When the desired alarm state is selected, press and release the SEL button to move to the next parameter.

Relay 1 Action in _ADJ_H_Adjustable Hysteresis Mode

Press and release the ▲ or the ▼ buttons to select either Normal Acting (Fail-safe): _NR_1
Reverse Acting: _REV_1

If _NR_1 is selected, the output relay coil will be energized in the RESET state and de-energized in the SET state.

When the desired Alarm 1 action is selected, press and release the SEL button to move to Alarm 2.
Use the ▲ or the ▼ buttons to select either Normal Acting (Fail-safe): _NR_2
Reverse Acting: _REV_2

If _NR_2 is selected, the output relay coil will be energized in the RESET state and de-energized in the SET state.

When the desired Alarm 2 action is selected, press and release the SEL button to move to the next parameter.

Output Test & Set Point Adjust Pass Code Protection

This setting determines if a pass code is required to access the Output Test and Set Point Adjustments.
Use the ▲ or the ▼ buttons to select either TSTPC or NO TPC.
The lower display will indicate TSTPC to enable Output Test and Set Point Adjust Modes pass code protection.
The lower display will indicate NO TPC to disable Output Test and Set Point Adjust Modes pass code protection.
Press and release the SEL button to save the configuration parameters and restart the gauge.
Note: The configuration parameters will not be saved if the procedure is interrupted before completion.

Operation: Fixed Deadband Alarms

Each relay may be independently configured as a high or low alarm in User Setup and operate as shown in the table below.

<table>
<thead>
<tr>
<th>Pressure</th>
<th>Normal acting, High alarm SP_H</th>
<th>Normal acting, Low alarm SP_L</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; Set point</td>
<td>Off</td>
<td>On</td>
</tr>
<tr>
<td>&gt; Set point</td>
<td>On</td>
<td>Off</td>
</tr>
</tbody>
</table>

Alarm 1 continuity: C-N0 (Red-White), C-NC (Red-Black)
Alarm 2 continuity: C-N0 (Brown-Green), C-NC (Brown-Blue)
Display: Green, Red

Pressure | Reverse acting, High alarm SP_H | Reverse acting, Low alarm SP_L |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; Set point</td>
<td>Off</td>
<td>On</td>
</tr>
<tr>
<td>&gt; Set point</td>
<td>On</td>
<td>Off</td>
</tr>
</tbody>
</table>

Alarm 1 continuity: C-N0 (Red-White), C-NC (Red-Black)
Alarm 2 continuity: C-N0 (Brown-Green), C-NC (Brown-Blue)
Display: Red, Green

While holding the TEST button, use the ▲ and ▼ buttons to adjust Set Point 1 to the desired value.
Release the TEST button to store the Set Point 1 value.
Note: The gauge will not respond to changes in applied pressure while the TEST button is pressed. The alarm relays, LEDs, and LCD alarm icons will maintain their prior states until the TEST button is released.
To exit the Set Point 1 Adjust mode and return to the normal operating mode, press and release the SEL button.

Set Point 2
From the normal operating mode press the SEL button twice to display Trip Point 2.
Press and hold the TEST button and press the SEL button. Release both buttons when the display indicates _______.
If pass code setpoint protection is enabled, the display will indicate _______ with the left-most underscore blinking, and with TSTPC on the display. Enter the pass code as described in the Pass Code Entry section.
If pass code setpoint protection is not enabled, the display will indicate Trip Point 2 with TRIP2 blinking at a slow rate on the lower display, and the alarm indicators and the retransmission output will correspond to the applied pressure.
Press and hold the TEST button. The display will indicate Set Point 2 with 5PC on the lower display.
While holding the TEST button, use the ▲ and ▼ buttons to adjust Set Point 2 to the desired value.
Release the TEST button to store the Set Point 2 value.
Note: The gauge will not respond to changes in applied pressure while the TEST button is pressed. The alarm relays, LEDs, and LCD alarm icons will maintain their prior states until the TEST button is released.
To exit the Set Point 2 Adjust mode and return to normal operation, press and release the SEL button.

Operation: Adjustable Hysteresis Alarms

In the adjustable hysteresis mode, two independent set and reset points used for each relay and operate as shown below.

Pressure | Normal (Fail-safe) acting, RESET value less than SET point | Normal (Fail-safe) acting, RESET value greater than SET point |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; Low Set point</td>
<td>Relay coil</td>
<td>On</td>
</tr>
<tr>
<td>&gt; High Set point</td>
<td>Relay coil</td>
<td>On</td>
</tr>
</tbody>
</table>

Alarm 1 continuity: C-N0 (Red-White), C-NC (Red-Black)
Alarm 2 continuity: C-N0 (Brown-Green), C-NC (Brown-Blue)
LED | Green | Red |

Pressure | Reverse acting, RESET value less than SET point | Reverse acting, RESET value greater than SET point |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; Low Set point</td>
<td>Relay coil</td>
<td>On</td>
</tr>
<tr>
<td>&gt; High Set point</td>
<td>Relay coil</td>
<td>On</td>
</tr>
</tbody>
</table>

Alarm 1 continuity: C-N0 (Red-White), C-NC (Red-Black)
Alarm 2 continuity: C-N0 (Brown-Green), C-NC (Brown-Blue)
LED | Red | Green |

The relevant LED alarm icon will indicate an alarm condition.
The relevant bi-color LED will be illuminated green for a normal condition or red for an alarm condition.
The LED will blink at a slow rate until the alarm is acknowledged unless the annunciator mode was disabled in setup.
Alarms may be configured to be automatically acknowledged when the alarm condition clear or configured to be manually acknowledged by pressing the TEST button.

Displaying Trip Points

The applied pressure, the value of Trip Point 1, and the value of Trip Point 2 may be selected for display as follows:
When the applied pressure is being displayed, press and release the SEL button.
The Trip Point 1 value will be displayed with TRIP1 on the lower display.
When the Trip Point 1 value is being displayed, press and release the SEL button.
The upper display will indicate the Trip Point 2 value with TRIP2 on the lower display.
Press and release the SEL button. The upper display will indicate the applied pressure with engineering units on the lower display.

Adjusting Setpoints: Fixed Deadband Alarms

Set Point is defined as the pressure value that will result in a change of state only from a normal to an alarm condition.
Trip Point is defined as the pressure value that will result in a change of state of alarm condition, and includes the effect of deadband when returning from an alarm to a normal condition.

Set Point 1
From the normal operating mode press the SEL button to display Trip Point 1.
Press and hold the TEST button and press the SEL button. Release both buttons when the display indicates _______.
If pass code setpoint protection is enabled, the display will indicate _______ with the left-most underscore blinking, and with TSTPC on the display. Enter the pass code as described in the Pass Code Entry section.
If pass code setpoint protection is not enabled, the display will indicate Trip Point 1 with TRIP1 blinking at a slow rate on the lower display.
Press and hold the TEST button. The display will indicate Set Point 1 with SP1 on the lower display.
LEDs will blink to indicate unacknowledged alarm conditions. Alarms may be configured to be automatically acknowledged when the alarm condition clears or configured to be manually acknowledged by pressing the TEST button.

Displaying Trip and Reset Points

The applied pressure, the SET trip points, and the RESET trip points may be selected for display as follows. While the applied pressure is being displayed, press and release the SEL button. The upper display will indicate the value of set point 1 with SET _1 on the lower display. While set point 1 is being displayed, press and release the SEL button. The upper display will indicate the value of set point 1 with RST _1 on the lower display.

While set point 2 is being displayed, press and release the SEL button. The upper display will indicate the value of set point 2 with SET _2 on the lower display.

While set point 2 is being displayed, press and release the SEL button. The upper display will indicate the applied pressure value.

Adjusting Trip and Reset Points, Adjustable Hysteresis Mode

From the normal operating mode press the SEL button to display the desired trip point (SET_1, RST_1, SET_2, or RST_2). Press and hold the TEST button and press the SEL button. Release both buttons when the display indicates - - - -.

If pass code protection is enabled, before the unit enters the Set Point Adjust Mode, the display initially indicates - - - - with the left-most underscore blinking, and with TSTPC on the lower display.

Enter the pass code as described in the Pass Code Entry section.

While in the Trip Point Adjust mode with no buttons pressed, the display will indicate the trip point value with its designator (SET_1, RST_1, SET_2, or RST_2) blinking at a slow rate.

To adjust the displayed trip point value, press and hold the TEST button. The display will continue to indicate the trip point value.

Operate the ▲ and ▼ buttons to adjust the trip point to the desired value. The trip point value is stored when the TEST button is released. Note: The relays and indicators will not correspond to the applied pressure value until the TEST button is released.

To exit the Trip Point Adjust mode and return to the normal operating mode, press and release the SEL button.

Zero Tare Mode

If the gauge is not indicating zero with zero pressure applied but is within approximately 3% of full scale pressure of zero, you may tare the gauge to zero. This feature may be enabled or disabled. Absolute ranges are configured with this feature turned off.

From the normal operating mode with the gauge port open to atmosphere, press and hold both the s and t buttons and press the SEL button. The relay outputs and the retransmission output will hold the last value, and the visual indicators will be deactivated. Release all buttons when the display indicates 0 0 0 0.

The display will indicate a newly calculated zero tare value with Z OFF on the lower display. Note: If not within approximately 3% of zero, ERR0 will be displayed. Press the SEL button to cancel the operation and return to normal operating mode without affecting any existing zero tare value.

To cancel and remove any existing zero tare value, press and release the t button. The display will indicate zero. To restore the newly calculated zero tare value, press and release the ▲ button.

To exit the Zero/Tare mode, press and release the SEL button. The gauge will return to normal operation.
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- Signal Conditioners
- Data Acquisition Software

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- Cartridge & Strip Heaters
- Immersion & Band Heaters
- Flexible Heaters
- Laboratory Heaters

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- Pumps & Tubing
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- pH, Conductivity & Dissolved Oxygen Instruments
OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA’s WARRANTY adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that OMEGA’s customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA’s Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA’s WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA’s control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

**OMEGA is pleased to offer suggestions on the use of its various products. However, OMEGA neither assumes responsibility for any omissions or errors nor assumes liability for any damages that result from the use of its products in accordance with information provided by OMEGA, either verbal or written.** OMEGA warrants only that the parts manufactured by the company will be as specified and free of defects. OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, EXCEPT THAT OF TITLE, AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIMITATION OF LIABILITY: The remedies of purchaser set forth herein are exclusive, and the total liability of OMEGA with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the component upon which liability is based. In no event shall OMEGA be liable for consequential, incidental or special damages.

**CONDITIONS:** Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a “Basic Component” under 10 CFR 21 (NRC), used in or with any nuclear installation or activity; or (2) in medical applications or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, used on humans, or misused in any way, OMEGA assumes no responsibility as set forth in our basic WARRANTY/DISCLAIMER language, and, additionally, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

**RETURN REQUESTS/INQUIRIES**

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA’S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

**FOR WARRANTY RETURNS**, please have the following information available BEFORE contacting OMEGA:

1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

OMEGA’s policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

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