Digital Pressure Gauges M4094/0112

**Ranges and Resolution**
See table below for ranges and user selectable units. Units are user selectable via internal buttons. Resolution is fixed for each engineering unit.

**Accuracy**
Includes linearity, hysteresis, repeatability ±0.25% of full scale ±1 least significant digit

**Display**
3 readings per second nominal display update rate
4 digit LCD, 0.5" H

**Batteries, Battery Life, Low Battery Indication**
2 AA alkaline included. Approx. 2000 hour battery life
DPG3600, DPG5600: 150-1500 hrs. depending on backlight usage
Low battery symbol on display

**Controls & Functions**
Front button turns gauge on or off, zeros gauge reference gauges, and cycles through min/max functions
Internal push buttons for selection of engineering units and auto shutoff times. Pass code protected setup and calibration.

**Calibration**
Pass code protected calibration
Non-interactive zero, span, and linearity, ±10% of range

**Auto Shutoff**
User selectable 1 minute to 8 hours or front button on/off
Factory default 5 minutes

**Weight**
Gauge: 9 ounces (approximately)
Shipping: 1 pound (approximately)

**Housing**
Extruded aluminum case, epox powder coated, ABS/polycarbonate bezel, front and rear gaskets, polycarbonate label

**Connection, Material, Media Compatibility**
1/4" NPT male fitting, 316L stainless steel
All wetted parts are 316L stainless steel.
Compatible with most liquids and gases.

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<table>
<thead>
<tr>
<th>Range (add after model number)</th>
<th>Default Units</th>
<th>Selectable Units (models manufactured after 12-23-2012)</th>
</tr>
</thead>
<tbody>
<tr>
<td>03G</td>
<td>0-3000 psi</td>
<td>psig, inHg, inh0, oz/in², g/cm², mmHg, torr, mbar, cmH2O, mmH2O, ftH2O, kPa</td>
</tr>
<tr>
<td>85INH20G</td>
<td>0-85.0 inches of water</td>
<td>psig, inHg, inh0, oz/in², g/cm², mmHg, torr, mbar, cmH2O, mmH2O, ftH2O, kPa</td>
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<tr>
<td>05G</td>
<td>0-5000 psi</td>
<td>psig, inHg, inh0, oz/in², g/cm², mmHg, torr, mbar, cmH2O, mmH2O, ftH2O, kPa</td>
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<tr>
<td>140INH20G</td>
<td>0-140.0 inches of water</td>
<td>absolute: psia, inHg, inh0, oz/in², g/cm², mmHg, torr, mbar, cmH2O, mmH2O, ftH2O, kPa, bar, kg/cm², atm</td>
</tr>
<tr>
<td>15A</td>
<td>15.00-0 psi absolute</td>
<td>psig, inHg, inh0, oz/in², g/cm², mmHg, torr, mbar, cmH2O, mmH2O, ftH2O, kPa, bar, kg/cm², atm</td>
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<tr>
<td>760TORRRA</td>
<td>760.0-0 torr absolute</td>
<td>psig, inHg, inh0, oz/in², g/cm², mmHg, torr, mbar, cmH2O, mmH2O, ftH2O, kPa, bar, kg/cm², atm</td>
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<tr>
<td>30INHGVAC</td>
<td>0-30.00 inHg vac</td>
<td>absolute: psia, inHg, inh0, oz/in², g/cm², mmHg, torr, mbar, cmH2O, mmH2O, ftH2O, kPa, bar, kg/cm², atm</td>
</tr>
<tr>
<td>30V15G</td>
<td>–30.00 inHg vac to 150 psi</td>
<td>psig, inHg, inh0, oz/in², g/cm², mmHg, torr, mbar, cmH2O, mmH2O, ftH2O, kPa, bar, kg/cm², atm</td>
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<tr>
<td>15G</td>
<td>0-150 psi</td>
<td>psig, inHg, inh0, oz/in², g/cm², mmHg, torr, mbar, cmH2O, mmH2O, ftH2O, kPa, bar, kg/cm², atm</td>
</tr>
<tr>
<td>1BARG</td>
<td>0-1.000 bar</td>
<td>psig, inHg, inh0, oz/in², g/cm², mmHg, torr, mbar, cmH2O, mmH2O, ftH2O, kPa, bar, kg/cm², atm</td>
</tr>
<tr>
<td>30A</td>
<td>30.00-0 psi absolute</td>
<td>psig, inHg, inh0, oz/in², g/cm², mmHg, torr, mbar, cmH2O, mmH2O, ftH2O, kPa, bar, kg/cm², atm</td>
</tr>
<tr>
<td>30G</td>
<td>0-30.00 psi</td>
<td>psig, inHg, inh0, oz/in², g/cm², mmHg, torr, mbar, cmH2O, mmH2O, ftH2O, kPa, bar, kg/cm², atm</td>
</tr>
<tr>
<td>60G</td>
<td>0-60.0 psi</td>
<td>psig, inHg, inh0, oz/in², g/cm², mmHg, torr, mbar, cmH2O, mmH2O, ftH2O, kPa, bar, kg/cm², atm</td>
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<tr>
<td>30V100G</td>
<td>–30.00 inHg vac to 100.0 psi</td>
<td>psig, inHg, inh0, oz/in², g/cm², mmHg, torr, mbar, cmH2O, mmH2O, ftH2O, kPa, bar, kg/cm², atm</td>
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<tr>
<td>100G</td>
<td>0-100.0 psi</td>
<td>psig, inHg, inh0, oz/in², g/cm², mmHg, torr, mbar, cmH2O, mmH2O, ftH2O, kPa, bar, kg/cm², atm</td>
</tr>
<tr>
<td>7BARG</td>
<td>0-7.000 bar</td>
<td>psig, inHg, inh0, oz/in², g/cm², mmHg, torr, mbar, cmH2O, mmH2O, ftH2O, kPa, bar, kg/cm², atm</td>
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<tr>
<td>30V200G</td>
<td>–30.00 inHg vac to 200.0 psi</td>
<td>psig, inHg, inh0, oz/in², g/cm², mmHg, torr, mbar, cmH2O, mmH2O, ftH2O, kPa, bar, kg/cm², atm</td>
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<tr>
<td>200G</td>
<td>0-200.0 psi</td>
<td>psig, inHg, inh0, oz/in², ftH2O, kPa, bar, kg/cm², atm</td>
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<tr>
<td>1BARG</td>
<td>0-14.00 bar</td>
<td>psig, inHg, inh0, oz/in², ftH2O, kPa, bar, kg/cm², atm</td>
</tr>
<tr>
<td>300G</td>
<td>0-300.0 psi</td>
<td>psig, inHg, inh0, oz/in², ftH2O, kPa, bar, kg/cm², atm</td>
</tr>
<tr>
<td>500G</td>
<td>0-500.0 psi</td>
<td>psig, inHg, inh0, oz/in², ftH2O, kPa, bar, kg/cm², atm</td>
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<tr>
<td>1KG</td>
<td>0-1000 psi</td>
<td>psig, inHg, inh0, oz/in², ftH2O, kPa, bar, kg/cm², atm</td>
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<tr>
<td>2KG</td>
<td>0-2000 psi</td>
<td>psig, inHg, inh0, oz/in², ftH2O, kPa, bar, kg/cm², atm</td>
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<tr>
<td>3KG</td>
<td>0-3000 psi</td>
<td>psig, inHg, inh0, oz/in², ftH2O, kPa, bar, kg/cm², atm</td>
</tr>
<tr>
<td>5KG</td>
<td>0-5000 psi</td>
<td>psig, inHg, inh0, oz/in², ftH2O, kPa, bar, kg/cm², atm</td>
</tr>
</tbody>
</table>
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 down-draft 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.
- 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 permanent sensor damage! Do not apply vacuum to non-vacuum gauges or hydraulic vacuum to any gauges.

Avoid permanent service damage! Never insert objects into gauge port or blow out with compressed air.

Gauges are not for oxygen service. Accidental rupture of sensor diaphragm may cause toxic or flammable gas exposure.

Absolute reference gauges are subject to a 0.1% of full-scale pressure vacuum with the gauge port open. Note that readings are subject to a 0.1% of full-range in the selected units are indicated, the display will indicate –Err until the MAX/MIN readings are cleared.

After MIN is displayed, press and hold the button again for about 1 second until * * * * is displayed. The MAX and MIN memory is not erased and the gauge returns normal operation with the display indicating the current reading.

Press and continue to hold the button until the display indicates CLR MX/MN (about 3 seconds total) and then release the button. Both maximum and minimum values are cleared and the display returns to the normal mode and displays the current pressure.

Shut-Down
To shut-off the gauge manually at any time, press and hold the button until the display indicates OFF (about 5 seconds) and then release. When an auto shut-off timer is used, the display indicates OFF five seconds prior to auto shut-off. The button can be pressed to keep the gauge on. The auto shut-off and backlight (if equipped) timers are reset whenever the button is pressed and released.

If the gauge is set up without auto shut-off (on/off operation) it will stay on until manually shut off or until the batteries are depleted. Turn gauge off when not in use to conserve battery life.

Basic Configuration—continued

Auto Shutoff Time Selection
Auto shutoff time selection is done via internal buttons to help prevent accidental or unauthorized changes. The selected shut-off time is stored in non-volatile memory and will be retained even with the battery off or batteries removed.

Remove the rear cover to gain access to the two internal buttons located near the lower right and left corners of the circuit board.

With the gauge powered up, press and hold the DOWN button. Release the button when the auto shutoff time is displayed.

The lower display will indicate AS T M if the time displayed is in minutes, and AS T H if in hours.

An auto shutoff time of 0 signifies that the auto shutoff feature is disabled and the front button turns the gauge on and off.

Use the UP and DOWN buttons to select 0, 1, 2, 5, 10, 15, 20 or 30 minutes, or 1, 2, 4, or 8 hours.

When the desired time is displayed, press and release the front button to save the selection and return to normal operation.

Note: The gauge will automatically revert to normal operation if no buttons are operated for approximately 15 seconds.

Replace the rear cover taking care not to pinch the power wires between the cover and the case.

Advanced Configuration

Advanced configuration requires a pass code for access and allows more features to be configured.

To access the rear cover to gain access to the buttons located in the lower right and left corners of the circuit board.

With the gauge off, press and hold the UP button. Then press the front button. Release all buttons when the display indicates CFG and the program version then the full-scale range is indicated and the display is tested.

The display then indicates USER_ with the first underscore blinking, and with CFG/CFG (configuration pass code) on the character segments.

Note: The gauge will automatically revert to normal operation if no buttons are operated for approximately 15 seconds. To cancel and return to normal operation, press and release the front button without entering any pass code characters.

Pass Code Entry

The factory default is 3510, but this may be changed by the user under the Pass Code Configuration section.

1. Use the UP or DOWNS buttons to set the leftmost digit to 3.
2. Press and release the front button to move to the next position.
3. The 3 will remain, and the second position will be blinking.
4. Use the UP or DOWNS buttons to select 5.
5. Press and release the front button to move to the next position.
6. The 5 will remain, and the third position will be blinking.
7. Use the UP or DOWNS buttons to select 1.
8. Press and release the front button to index to the next position.
9. The 1 will remain, and the fourth position will be blinking.
10. Use the UP or DOWNS buttons to select 0.

Press and release the front button to proceed with configuration procedures.

If an incorrect pass code is entered, the gauge will return to the start of the pass code entry sequence.

Factory/User Configuration

The upper display section will be blank, and the lower section will display either USER_ or FCTRY.

If USER_ is selected, the user configuration can be modified as described in the following steps.

To select USER_, press and release the DOWN button.

The lower display will indicate USER_.

Press and release the front button to continue.

If FCTRY is selected, the existing configuration will be replaced by the original factory configuration.

To select FCTRY, press and release the UP button.

The lower display will indicate FCTRY.

Press and release the front button to restore the factory configuration and restart the gauge.

Max/Min Configuration

Use the UP and DOWN buttons to select from the following:

MV/MN Both highest and lowest values will be captured
MV/--- Only highest value will be captured
---/MN Only lowest value will be captured
---/--- Capture feature is disabled

Press and release the front button to move to the next parameter.

Types of Gauges

Gauge reference models read zero with the gauge port open. Compound ranges read vacuum in inches of Mercury, pressure in psi, and zero with the gauge port open.

Absolute reference gauges are subject to a 0.1% of full-scale vacuum with the gauge port open. Note that readings are subject to a 0.1% of full-range in the selected units are indicated, the display will indicate –Err until the MAX/MIN readings are cleared.

After MIN is displayed, press and hold the button again for about 1 second until * * * * is displayed. The MAX and MIN memory is not erased and the gauge returns normal operation with the display indicating the current reading.

Press and continue to hold the button until the display indicates CLR MX/MN (about 3 seconds total) and then release the button. Both maximum and minimum values are cleared and the display returns to the normal mode and displays the current pressure.

Shut-Down
To shut-off the gauge manually at any time, press and hold the button until the display indicates OFF (about 5 seconds) and then release. When an auto shut-off timer is used, the display indicates OFF five seconds prior to auto shut-off. The button can be pressed to keep the gauge on. The auto shut-off and backlight (if equipped) timers are reset whenever the button is pressed and released.

If the gauge is set up without auto shut-off (on/off operation) it will stay on until manually shut off or until the batteries are depleted. Turn gauge off when not in use to conserve battery life.

Basic Configuration—continued

Auto Shutoff Time Selection
Auto shutoff time selection is done via internal buttons to help prevent accidental or unauthorized changes. The selected shut-off time is stored in non-volatile memory and will be retained even with the battery off or batteries removed.

Remove the rear cover to gain access to the two internal buttons located near the lower right and left corners of the circuit board.

With the gauge powered up, press and hold the DOWN button. Release the button when the auto shutoff time is displayed.

The lower display will indicate AS T M if the time displayed is in minutes, and AS T H if in hours.

An auto shutoff time of 0 signifies that the auto shutoff feature is disabled and the front button turns the gauge on and off.

Use the UP and DOWN buttons to select 0, 1, 2, 5, 10, 15, 20 or 30 minutes, or 1, 2, 4, or 8 hours.

When the desired time is displayed, press and release the front button to save the selection and return to normal operation.

Note: The gauge will automatically revert to normal operation if no buttons are operated for approximately 15 seconds.

Replace the rear cover taking care not to pinch the power wires between the cover and the case.

Advanced Configuration

Advanced configuration requires a pass code for access and allows more features to be configured.

To access the rear cover to gain access to the buttons located in the lower right and left corners of the circuit board.

With the gauge off, press and hold the UP button. Then press the front button. Release all buttons when the display indicates CFG and the program version then the full-scale range is indicated and the display is tested.

The display then indicates USER_ with the first underscore blinking, and with CFG/CFG (configuration pass code) on the character segments.

Note: The gauge will automatically revert to normal operation if no buttons are operated for approximately 15 seconds.

Press and release the front button to proceed with configuration procedures.

If an incorrect pass code is entered, the gauge will return to the start of the pass code entry sequence.

Factory/User Configuration

The upper display section will be blank, and the lower section will display either USER_ or FCTRY.

If USER_ is selected, the user configuration can be modified as described in the following steps.

To select USER_, press and release the DOWN button.

The lower display will indicate USER_.

Press and release the front button to continue.

If FCTRY is selected, the existing configuration will be replaced by the original factory configuration.

To select FCTRY, press and release the UP button.

The lower display will indicate FCTRY.

Press and release the front button to restore the factory configuration and restart the gauge.

Max/Min Configuration

Use the UP and DOWN buttons to select from the following:

MV/MN Both highest and lowest values will be captured
MV/--- Only highest value will be captured
---/MN Only lowest value will be captured
---/--- Capture feature is disabled

Press and release the front button to move to the next parameter.
Advanced Configuration—continued

Max/Min Memory
The upper display section will indicate the.

Use the UP and DOWN buttons to select from the following:

AUTO Automatically clear max. and min. values when the gauge is powered off.

MAN Manually clear max. and min. values.

Press and release the front button to move to the next parameter.

Gauge Type Configuration
This will only appear with 15, 100, or 200 psig ranges that were originally ordered as compound gauges.

Use the UP and DOWN buttons to select from the following:

+-EU Vacuum is indicated as negative pressure in the engineering units.

CMPPVD Vacuum is negative INHG, pressure is PSIg. This setting will disable engineering unit selection.

Press and release the front button to save the user configuration and restart the gauge.

Replace the rear cover taking care not to pinch the power wires between the cover and the case.

Battery Replacement
A low battery indication will be shown in the upper left-hand corner of the display when the battery voltage falls sufficiently. The battery should be replaced soon after the indicator comes on or unreliable readings may result.

1. Remove the 6 Phillips screws on the back of the unit.
2. Remove batteries by lifting the positive end of the battery (opposite the spring) taking care not to bend the battery holder spring.
3. Discard old batteries properly, do not discard into fire, sources of extreme heat, or in any hazardous manner.
4. Always replace both batteries at the same time with high quality alkaline batteries. Install batteries with correct orientation. The negative (flat) end of each battery should be inserted first facing the battery holder spring.

5. Replace the back cover, including the rubber gasket.

Calibration Preparation
Gauges are calibrated at the factory using equipment traceable to NIST. There is no need to calibrate the gauge before putting it into service. Calibration intervals depend on your quality control program requirements, although many customers calibrate annually.

Calibration should only be performed by qualified individuals using appropriate calibration standards and procedures. The calibration equipment should be at least four times more accurate than the gauge being calibrated.

The calibration system must be able to generate and measure pressures/vacuum over the full range of the gauge.

A vacuum pump able to produce a vacuum of 100 microns (0.1 torr or 100 millitorr) or lower is required for vacuum and absolute gauges. Warning: application of vacuum to non-vacuum models may result in irreparable damage to the sensor.

Allow the gauge to acclimate to ambient temperature for 20 minutes.

Remove the rear cover to gain access to the UP and DOWN buttons located near the lower right and left corners of the circuit board. Install fresh batteries.

Calibration

Entering Calibration Mode
With the gauge off, press and hold the DOWN button. Then press the front button. Release all buttons when the display indicates CAL.

The display begins by indicating the full-scale positive pressure rating of the gauge in the engineering units as configured by the factory, and then shows all display.

Before the gauge enters the Calibration Mode, the display initially indicates _ _ _ _ with the first underscore blinking.

Note: If an incorrect access code was entered, the gauge will return to the start of the access code entry sequence.

The calibration system must be able to generate and measure pressures/vacuum over the full range of the gauge.

A vacuum pump able to produce a vacuum of 100 microns (0.1 torr or 100 millitorr) or lower is required for vacuum and absolute gauges. Warning: application of vacuum to non-vacuum models may result in irreparable damage to the sensor.

Allow the gauge to acclimate to ambient temperature for 20 minutes.

Remove the rear cover to gain access to the UP and DOWN buttons located near the lower right and left corners of the circuit board. Install fresh batteries.

Calibration Preparation
Gauges are calibrated at the factory using equipment traceable to NIST. There is no need to calibrate the gauge before putting it into service. Calibration intervals depend on your quality control program requirements, although many customers calibrate annually.

Calibration should only be performed by qualified individuals using appropriate calibration standards and procedures. The calibration equipment should be at least four times more accurate than the gauge being calibrated.

The calibration system must be able to generate and measure pressures/vacuum over the full range of the gauge.

A vacuum pump able to produce a vacuum of 100 microns (0.1 torr or 100 millitorr) or lower is required for vacuum and absolute gauges. Warning: application of vacuum to non-vacuum models may result in irreparable damage to the sensor.

Allow the gauge to acclimate to ambient temperature for 20 minutes.

Remove the rear cover to gain access to the UP and DOWN buttons located near the lower right and left corners of the circuit board. Install fresh batteries.

Calibration

Entering Calibration Mode
With the gauge off, press and hold the DOWN button. Then press the front button. Release all buttons when the display indicates CAL.

The display begins by indicating the full-scale positive pressure rating of the gauge in the engineering units as configured by the factory, and then shows all display.

Before the gauge enters the Calibration Mode, the display initially indicates _ _ _ _ with the first underscore blinking.

Note: If an incorrect access code was entered, the gauge will return to the start of the access code entry sequence.

1. Operate the UP or DOWN button to set to the left-most digit to 3.
2. Press and release the front button to move to the next position.
3. The 3 will remain, and the second position will be blinking.

4. Press and release the front button to index to the next position.
35 will remain, and the third position will be blinking.

5. Use the UP or DOWN buttons to select 1.
6. Press and release the front button to index to the next position.
351 will remain, and the fourth position will be blinking.

7. Use the UP or DOWN buttons to select 0.
8. Press and release the front button to proceed with configuration procedures.

If an incorrect pass code is entered, the gauge will return to the start of the pass code entry sequence.

Calibration Mode
The gauge enters and remains in the calibration mode until restarted manually or power is removed. Features not related to calibration are disabled and compound range models are set for the same engineering units for pressure and for vacuum.

The calibration may be performed in any of the available engineering units as well as percent (PCT). For greatest accuracy, use the UP and DOWN buttons to select engineering units for calibration with highest resolution (highest number of display counts). Press and release the front button when the appropriate engineering units are displayed. Suggested units are listed below.

Sensor Suggested units for calibration
5 PSI 50.00 PSI
15 PSI 75.75 INHG (TORR)
30 PSI 61.08 INHG
50 PSI 50.00 PSI
100 PSI 7.031 KG/CMS
200 PSI 407.4 INHG
300 PSI 610.8 INHG
500 PSI 500.0 PSI
1000 PSI 70.31 KG/CMS
2000 PSI 407.2 INHG
3000 PSI 610.6 INHG
5000 PSI 5000 PSI
Any 100.00 PCT (percent)

The display will then indicate the currently applied pressure in the engineering units selected for calibration.

UP and DOWN Button Operation
Each time one of the calibration buttons is pressed and released quickly, a small change is made to the digitized pressure signal. It may take more than one of these small changes to result in a single digit change on the display.

To make larger changes, press, hold and release the appropriate calibration button. After about one second, the display will begin to change continuously. Release the button to stop. Then make fine adjustments by pressing and quickly releasing the calibration buttons as previously described.

Gauge Reference Pressure Gauges
Apply zero pressure by venting the gauge port to atmosphere. The character display will alternate between ZERO and CAL. Adjust for a display indication of zero using the UP and the DOWN buttons.

Apply full-scale pressure. The character display will alternate between +SPAN and CAL. Adjust for a display indication of full-scale pressure using the UP and the DOWN buttons.

Apply zero pressure by venting the gauge port to atmosphere. The character display will alternate between ZERO and CAL. Adjust for a display indication of zero using the UP and the DOWN buttons.

Apply full-scale pressure. The character display will alternate between +SPAN and CAL. Adjust for a display indication of full-scale pressure using the UP and the DOWN buttons.

Apply full-scale vacuum. The character display will alternate between +SPAN and CAL. Adjust for a display indication of full-scale vacuum using the UP and the DOWN buttons.

Apply full-scale pressure. The character display will alternate between +SPAN and CAL. Adjust for a display indication of full-scale pressure using the UP and the DOWN buttons.

Absolute Reference Gauges
Apply full vacuum to the gauge. The character display will alternate between ZERO and CAL. Press the UP and DOWN buttons to obtain a display indication of zero.

Apply full-scale pressure. The character display will alternate between +SPAN and CAL. Press the UP and DOWN buttons to obtain a display indication equal to full-scale pressure.

Apply 50% of full-scale pressure. The lower display will alternate between +MID and CAL. Press the UP and DOWN buttons to obtain an indication equal to 50% of full-scale pressure.

Compound and Bipolar Gauges
In addition to the steps described above for pressure gauges, apply full-scale vacuum. The character display will alternate between -SPAN and CAL. Adjust for a display indication of actual applied vacuum using the UP and the DOWN buttons.

For bipolar and -30.00inch+15.00psi compound range models only, apply 50% full-scale vacuum. The character display will alternate between -MID and CAL. Adjust for a display indication equal to 50% of full-scale vacuum using the UP and the DOWN buttons.

Save Calibration
Once the adjustments are complete, press and hold the front button until the display indicates _ _ _ _ _ _ then release the button to store the calibration parameters in non-volatile memory and restart the gauge.

Verify the pressure indications at 0%, 25%, 50%, 75% and 100% of full scale.
Replace the rear cover taking care not to pinch the wires between the cover and the case.

User-Defined Pass Code Configuration
Remove the rear cover to access the buttons located near the lower right and left corners of the circuit board.

View or Change User Configuration Pass Code
Remove the rear cover to access the buttons located near the lower right and left corners of the circuit board.

With the unit off, press and hold the UP button, then press the front button.

Release all buttons when the display indicates CFG.

View or Change User Calibration Pass Code
With the unit off, press and hold the DOWN button, then press the front button.

Release all buttons when the display indicates CAL.

Enter Access Code 1220
Before the unit enters the view or change pass code mode, the display initially indicates _ _ _ _ _ _ with the first underscore blinking, and with CFGPC or CALPC on the character display.

Note: The gauge will automatically revert to normal operation if no buttons are operated for approximately 15 seconds.

To cancel and return to normal operation, press and release the POWER button without entering any pass code characters.

1. Use the UP and DOWN buttons to set the left-most digit to 1.

2. Press and release the front button to move to the next position.

3. The 1 will remain, and the second position will be blinking.

3. Press and release the front button to move to the next position.

4. The 12 will remain, and the third position will be blinking.

5. Use the UP and DOWN buttons to select 2.

6. Press and release the front button to move to the next position.

7. The 1 will remain, and the second position will be blinking.

8. Press and release the front button to proceed.

Note: If an incorrect access code was entered, the gauge will return to the start of the access code entry sequence.

Once the access code has been entered correctly, the display will indicate the existing user-defined pass code with CFGPC or CALPC on the character segments.

1. Operate the UP or DOWN button to select the first character of the new pass code.

2. When the correct first character is being displayed, press and release the front button to proceed to the next pass code character.

3. Repeat above until the entire pass code is complete.

4. To exit, press and hold the front button. Release the button when the display indicates _ _ _ _ _ _ to restart the gauge.

5. Replace the rear cover taking care not to pinch the power wires between the cover and the case.
WARRANTY/DISCLAIMER

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 which wear are not warranted, including but 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 it will be as specified and free of defects. OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESS 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.

PATENT NOTICE: U. S. Pat. No. 6,074,089; 5,465,838 / Canada 2,228,333; 2,116,055 / UK GB 2,321,712 / Holland 1008153 / Israel 123052 / France 2762 908 / EPO 0614194. Other patents pending.

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.

FOR NON-WARRANTY REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, 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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