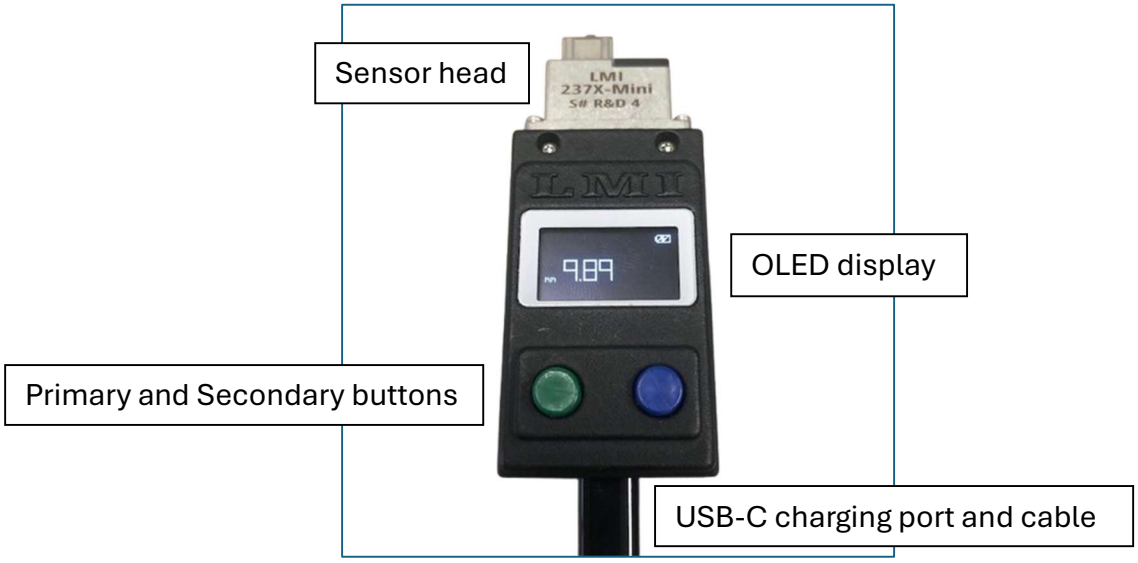
UGI Data Collection System - Seal Gap X Manual

Linear Measurement Instruments, Corp.

Welcome to Seal Gap X

Thank you for the purchase of LMI's Seal Gap X System. The system consists of LMI's Universal Gauge Interface (UGI) and Utility Suite software packages, one LMI USB Bluetooth dongle, and a variety of different styles of Seal Gap sensors. Regardless of style, all Seal Gap X sensors have a two-button layout and OLED display. Below is a list of the functions that can be accessed using those two buttons:

Function	Button Combination
Power on	Press and release the green button.
Start transmitting readings	Press and release the blue button. An arrow will appear at the top of the display indicating the sensor is transmitting readings.
Zero the sensor	Press and hold the green button for at least three seconds, then – while still holding down the green button – press the blue button.
Zero lock	Press the blue and green buttons at the same time. Repeat to unlock.
Power off	Press and hold the blue button for at least three seconds, then – while still holding down the green button – press the green button.



Mastering Note: Seal Gap X gauges do not require the same three-step process as LMI's W-Series Seal Gap gauges. Simply turn the sensor/sensor head upside-down against a flat surface, then press and hold the green button down until the message P2 TO ZERO appears on the screen. Note that this assumes the Zero Lock function is not engaged. The sensor can also be mastered through LMI's Utility Suite software.

Optional Charging Cradle - Charging the SGX gauges/system

SGX gauges can be charged using most USB chargers that have a 5V/2.1amp minimum output. LMI manufactures a optional single-sensor charging cradle (PN: LMI 200X & SGX Charging Cradle) that can be used to charge a seal gap sensor, and up to eight of these charging cradles can be daisy-chained to one AC adapter. When the gauge is not in use, it can be placed in the charging cradle to make sure it's always ready when needed.

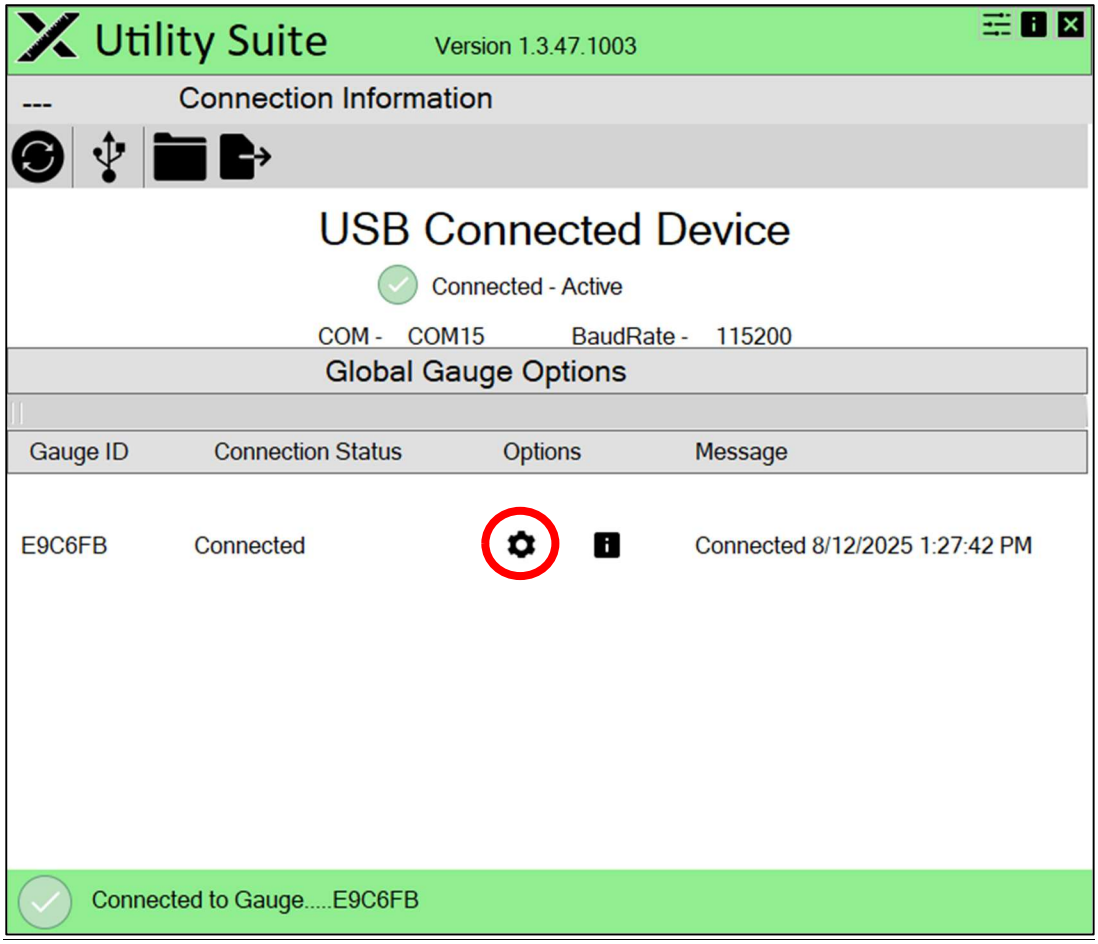
Four charging cradles connected to one power supply.

Note: The charging cradle uses a "trickle" charge, so it is safe to leave the gauge on the charger without worrying about overcharging or overheating. The gauge is charged to 100 percent, and then allowed to "trickle" down to avoid shortening the sensor's battery life. As a result of this, a gauge might not be at full 100% charge depending on where it is in the charging cycle when removed from the cradle.

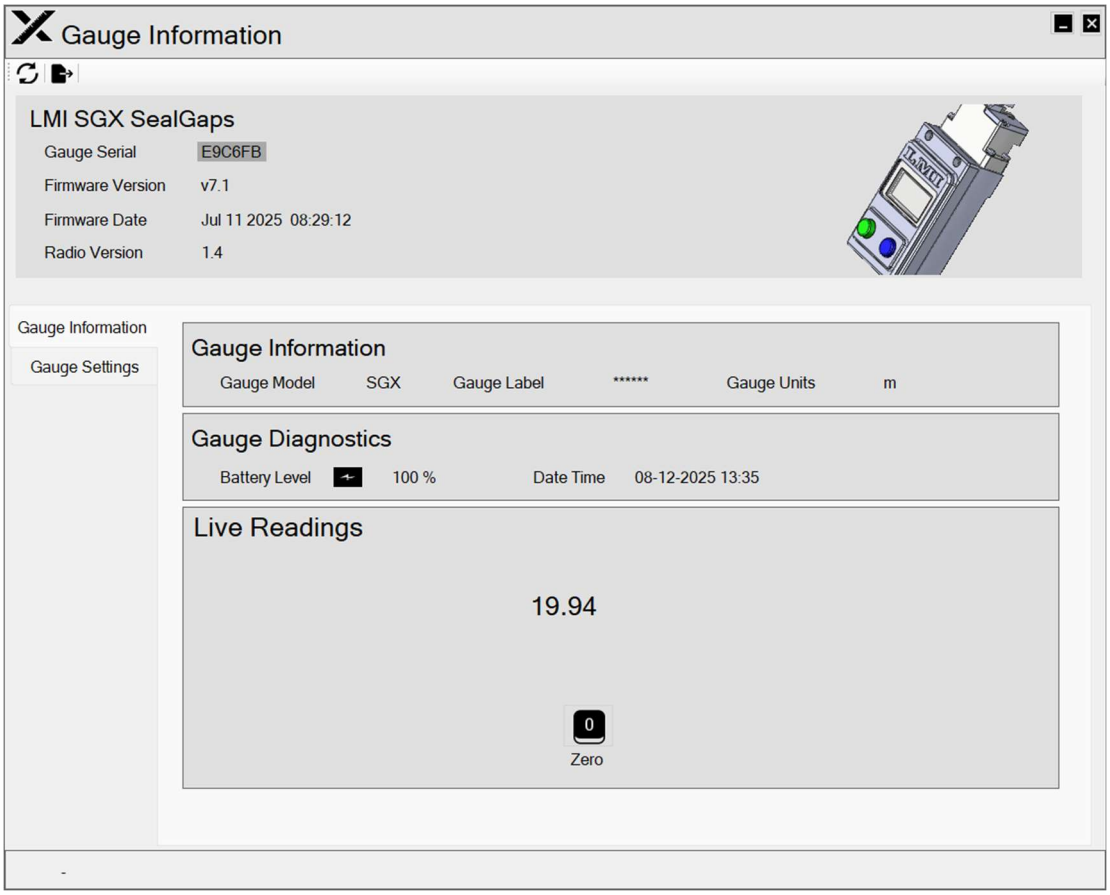
Functions of the Utility Suite Software

LMI's Utility Suite is used to further configure LMI Seal Gap X sensors. For more information, including installation instructions, please consult the LMI Utility Suite Manual.

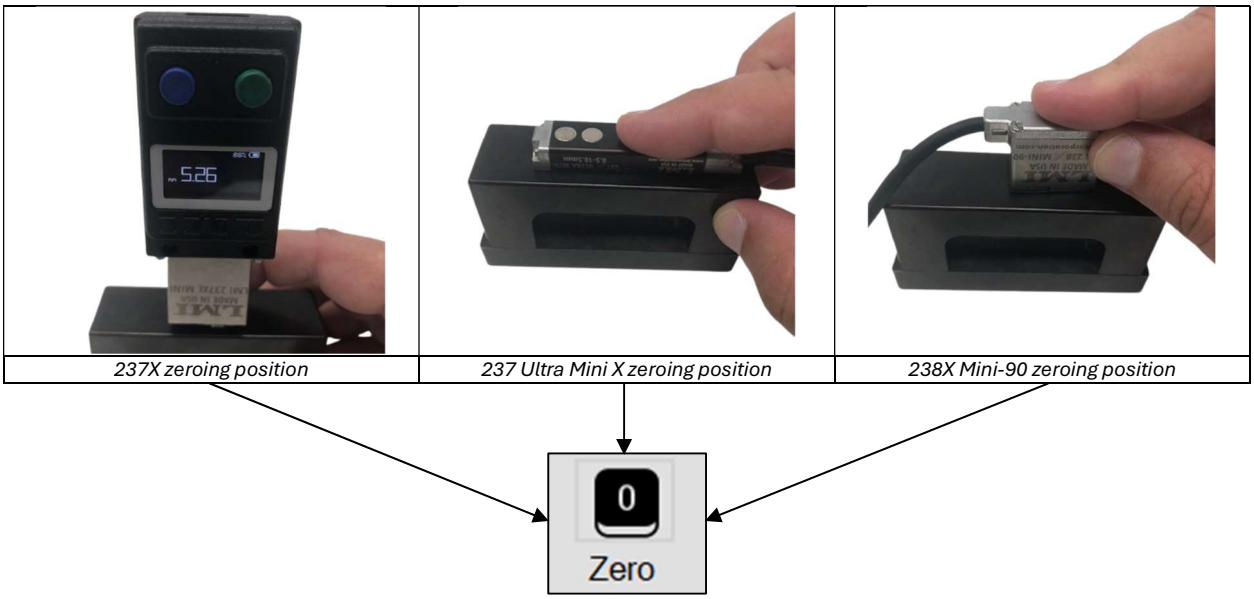
LMI Seal Gap X gauges must be connected to the software using the included USB-C to USB-A cable before Utility Suite is running. To start the software, double-click on the icon. The landing page shown below will look like the following:

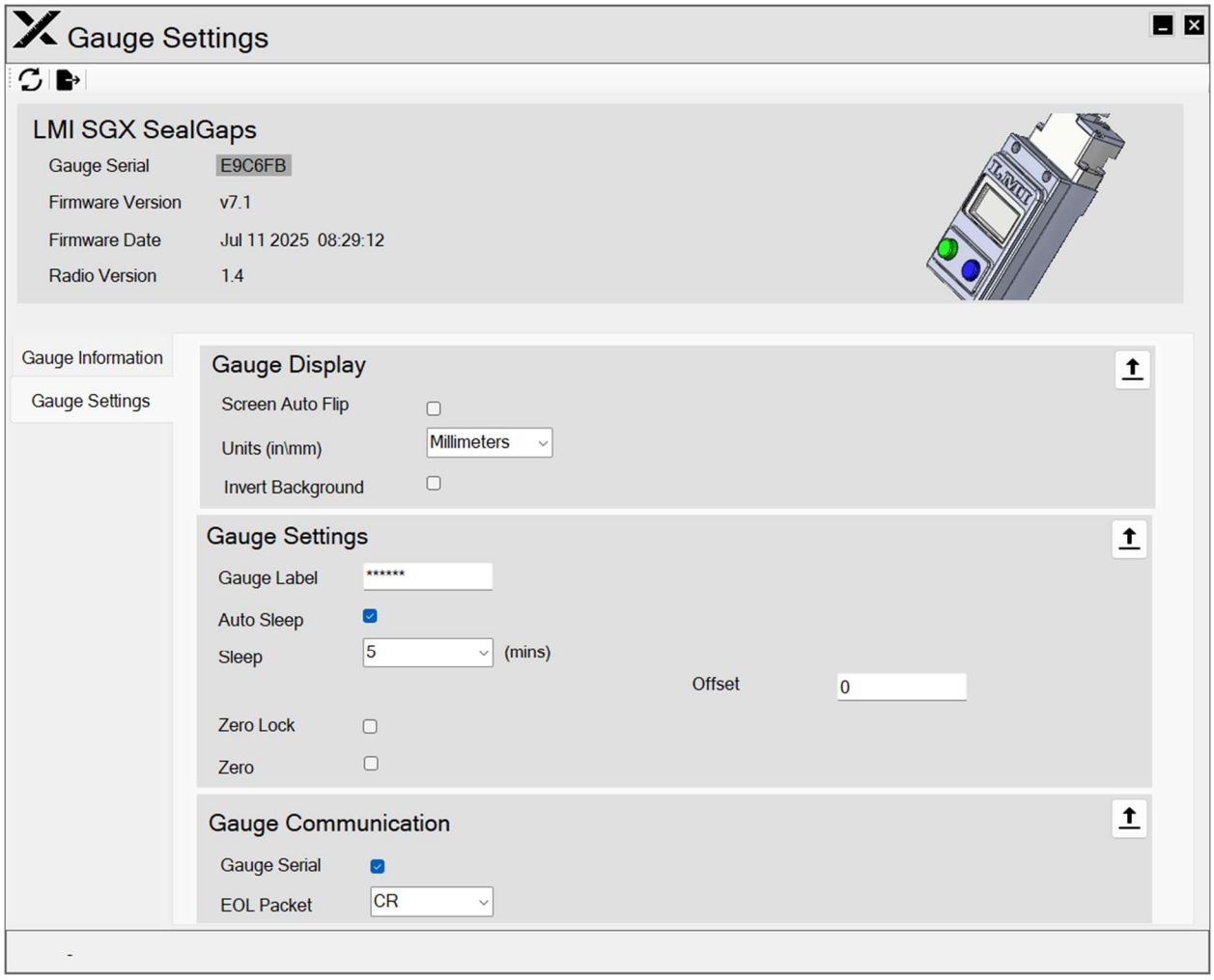


To edit the gauge, click on the gear icon under Options. The window that pops up will display icons for the Gauge Information page and the Gauge Settings page.



From the Gauge Information page, users can view battery life and live measurements and can also zero out the gauge. To zero out the gauge, simply retract the plunger and place it on a flat surface, then push the Zero button in the software.





Gauge Display

- Screen Auto Flip – Allows users to enable or disable the autoflip feature of the gauge.
- Units (in/mm) – Allows users to choose between inches or millimeters.
- Invert Background – Changes the display background from black to white.

Gauge Settings

- Gauge Label – Allows user to apply a six-digit name to the gauge.
- Auto Sleep/Sleep – Allows the gauge to shut off after a period of inactivity.
- Offset – Adds an offset to the gauge output – used to offset SGX gauges based on the thickness of the gauge's flange.
- Zero Lock- Locks out the ability to zero the gauge via the buttons on the gauge.
- Zero – Allows users to zero out the gauge.

Gauge Communication

- Gauge Serial – Determines whether the Gauge ID will be sent after the reading(s). Gauge ID must be included if using UGI data collection software.
- EOL Packet – Allows users to select a different "end of line" packet. Options are Carriage Return (default), Tab, and Carriage Return + Line Feed.

User License Agreement

PLEASE READ CAREFULLY: THE USE OF THIS SOFTWARE IS SUBJECT TO THE SOFTWARE LICENSE TERMS OF LMI Corporation, INC. AND OTHER LICENSORS WHOSE SOFTWARE MAY BE BUNDLED WITH THIS PRODUCT.BY YOUR USE OF THE SOFTWARE INCLUDED WITH THIS PRODUCT YOU AGREE TO THE LICENSE TERMS REQUIRED BY THE LICENSOR OF THAT SOFTWARE, AS SET FORTH BELOW. IF YOU DO NOT AGREE TO THE LICENSE TERMS APPLICABLE TO THE SOFTWARE, YOU MAY RETURN THE ENTIRE UNUSED PRODUCT TO THE SOURCE FROM WHICH IT WAS OBTAINED.

LMI Corporation Software License Agreement

(Single User, Non-Networked Applications)

In return for acquiring a license to use the LMI Corporation software, which may include software from third party licensors and patches made available by LMI Corporation ("Software"), and the related documentation, you agree to the following terms and conditions:

1. License. This Agreement grants you ("Licensee") a license to:

(a) use the Software on a single computer system, which is not intended for use by more than five (5) users; and (b) make one copy of the Software in machine readable form solely for back-up purposes, provided you reproduce LMI Corporation's copyright proprietary legends. As used in this license, the Software is "in use" when it is either loaded into RAM or installed on a hard disk or other permanent memory device. The Software may be "in use" on only one computer at any given time. (Different license terms and fees are applicable for networked or multiple user applications.) Notwithstanding the foregoing, the Software may be used on the home, laptop or other secondary computer of the principal user of the Software, and an additional copy of the Software may be made to support such use. As a specific condition of this license, you agree to use the Software in compliance with all applicable laws, including copyright laws, and that you will not copy, transmit, perform or distribute any audio or other content using the Software without obtaining all necessary licenses or permissions from the owner of the content.

2. Restrictions. You may not distribute copies of the Software to others or electronically transfer the Software from one computer to another over a network. You are not authorized to use any licensed codecs in the Software or the Software itself in real time broadcasting (terrestrial, satellite, cable or other media) or broadcasting via the Internet or other networks such as, but not limited to, intranets, etc. An independent license for any such use is required. You may not post or otherwise make available the Software, or any portion thereof, in any form, on the Internet. You may not use the Software in a computer service business, including in time sharing applications. The Software contains trade secrets and, in order to protect them, you may not decompile, reverse engineer, disassemble, or otherwise reduce the Software to a human-perceivable form. YOU MAY NOT MODIFY, ADAPT, TRANSLATE, RENT, LEASE, LOAN, RESELL FOR PROFIT, DISTRIBUTE, NETWORK OR CREATE DERIVATIVE WORKS BASED UPON THE SOFTWARE OR ANY PART THEREOF.

3. Ownership of Software. As Licensee, you own the media upon which the software is recorded or fixed, but LMI Corporation and its licensors retain title and ownership of the Software recorded on the original media and all subsequent copies of the Software, regardless of the form or media in which or on which the original and other copies may exist. This license is not a sale of the Software or any copy.

4. Confidentiality. You agree to maintain the Software in confidence and that you will not disclose the Software to any third party without the express written consent of LMI Corporation. You further agree to take all reasonable precautions to preclude access of unauthorized persons to the Software.

5. Term. This license is effective until January 1, 2045, unless terminated earlier. You may terminate the license at any time by destroying the Software (including the related documentation) together with all copies or modifications in any form. LMI Corporation will have the right to terminate our license immediately if you fail to comply with any term or condition of this Agreement. Upon any termination, including termination by you, you must destroy the Software (including the related documentation), together with all copies or modifications in any form.

6. Limited Warranty. LMI Corporation and its Licensors warrants only that the Software will perform substantially in accordance with the accompanying written documentation for a period of

thirty (30) days from the date of your purchase receipt. LMI CORPORATION AND ITS LICENSORS DO NOT AND CANNOT WARRANT THE RESULTS YOU MAY OBTAIN BY USING THE SOFTWARE OR DOCUMENTATION. THE FOREGOING STATES THE SOLE AND EXCLUSIVE REMEDIES LMI CORPORATION AND ITS LICENSORS WILL PROVIDE FOR BREACH OF WARRANTY. EXCEPT FOR THE FOREGOING LIMITED WARRANTY, LMI CORPORATION AND ITS LICENSORS MAKE NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED, AS TO NON-INFRINGEMENT OF THIRD-PARTY RIGHTS, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow the exclusion of implied warranties or limitations on how long an implied warranty may last, so the above limitations may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

The entire liability of LMI Corporation and its Licensors, and your exclusive remedy for a breach of this warranty, shall be: (a) the replacement of any Software not meeting the above limited warranty which is returned by you; or (b) if LMI Corporation or its distributor is unable to deliver replacement Software you may terminate this Agreement by returning the Software and your money will be refunded. If you have purchased this Software bundled with a computer hardware product, you must return the Software to the computer hardware manufacturer.

8. Limitation of Liability. IN NO EVENT WILL LMI CORPORATION OR ITS LICENSORS BE LIABLE TO YOU FOR ANY INCIDENTAL, CONSEQUENTIAL OR INDIRECT DAMAGES, INCLUDING ANY LOST PROFITS, LOST SAVINGS, OR LOSS OF DATA, EVEN IF LMI CORPORATION OR A LICENSOR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, OR FOR ANY CLAIM BY ANY OTHER PARTY. Some states do not allow the exclusion or limitation of special, incidental, or consequential damages, so the above limitation or exclusion may not apply to you.

9. Export. You acknowledge that the laws and regulations of the United States and other countries may restrict the export and re-export of the Software. You agree that you will not export or re-export the Software or documentation in any form in violation of applicable United States and foreign law.

10. Indemnity. You agree that LMI Corporation shall have no liability whatsoever for any use you make of the Software. You shall indemnify and hold harmless LMI Corporation from any Third-party claims, damages, liabilities, costs and fees (including reasonable attorney fees) arising from your use of the Software as well as from your failure to comply with any term of this Agreement.

11. Government Restricted Rights. The Software is subject to restricted rights as follows. If the Software is acquired under the terms of a GSA contract: use, reproduction or disclosure is subject to the restrictions set forth in the applicable ADP Schedule contract. If the Software is acquired under the terms of a DoD or civilian agency contract, use, duplication or disclosure by the Government is subject to the restrictions of this Agreement in accordance with 48 C.F.R. 12.212 of the Federal Acquisition Regulations and its successors and 49 C.F.R. 227.7202-1 of the DoD FAR Supplement and its successors

12. General. You acknowledge that you have read this Agreement, understand it, and that by using the Software you agree to be bound by its terms and conditions. You further agree that it is the complete and exclusive statement of the agreement between LMI Corporation and you, and supersedes any proposal or prior agreement, oral or written, and any other communication between LMI Corporation and you relating to the subject matter of this Agreement. No additional or any different terms will be enforceable against LMI Corporation unless LMI Corporation gives its express consent, including an express waiver of the terms of this Agreement, in writing signed by an officer of LMI Corporation. You assume full responsibility for the use of the Software and agree to use the Software legally and responsibly. This Agreement shall be governed by California law, except as to copyright matters, which are covered by Federal law. This Agreement is deemed entered into at Milpitas, California by both parties. Should any provision of this Agreement be declared unenforceable in any jurisdiction, then such provision shall be deemed severable from this Agreement and shall not affect the remainder hereof. All rights in the Software not specifically granted in this Agreement are reserved by LMI Corporation.

Should you have any questions concerning this Agreement, contact LMI Corporation by writing to:

LMI Corporation
101 N. Alloy Dr
Fenton, Michigan 48430

UGI Installation Instructions

Note: If upgrading from an older 5.3.xx version of UGI, please uninstall the old version before installing the new. If installing on a new PC, unzip and install the vjredist.zip from the VJSharpRDP folder before installing UGI. This is the framework and associated libraries UGI needs to run properly on the PC.

1. Make sure proper administrative or user rights are available prior to installing software on the computer. UGI requires read/write access for all users to the C:\Program Data\LMI Corporation folder and child folders contained within.

2. Plug the Universal Gage Interface Installation USB drive into a USB port on the PC. Double-click on either *setup.exe* or *UGI Install.msi* to begin installation.

3. Click **Next** as shown in Figure 3.1 A.

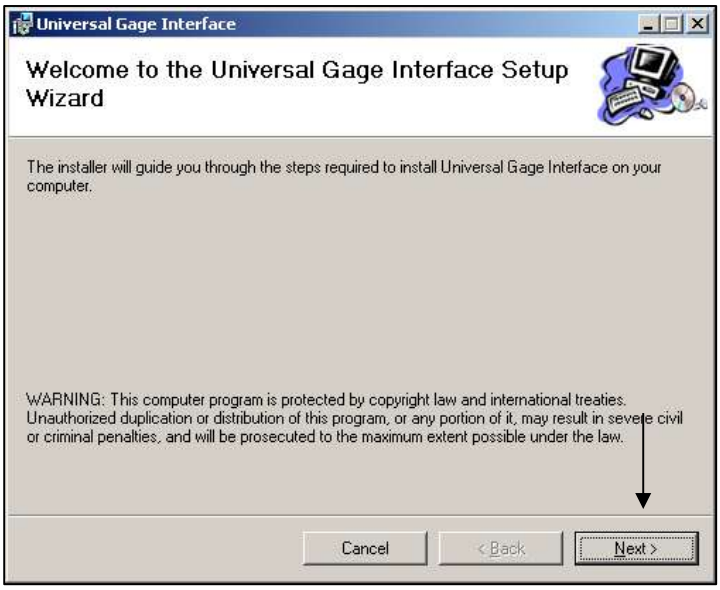


FIGURE 3.1 A – Install Wizard

4. Select the Installation Folder.

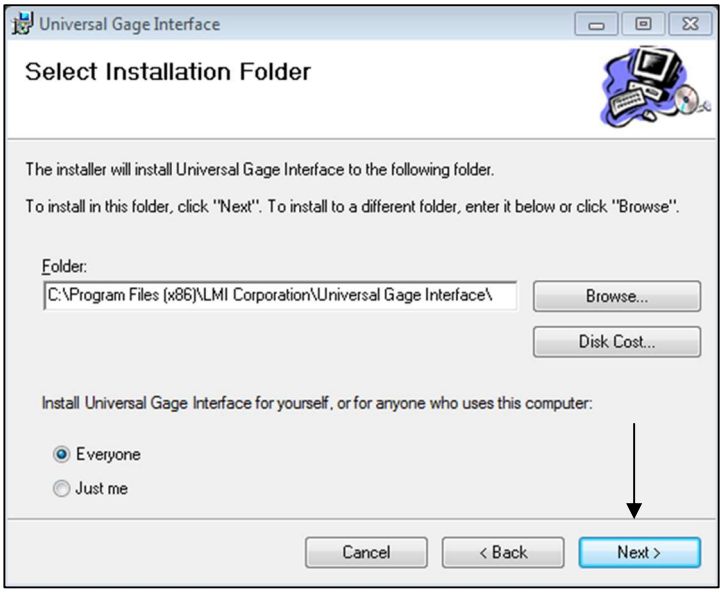


FIGURE 3.1 B – Location Information

Click the **Next** button to begin installation.

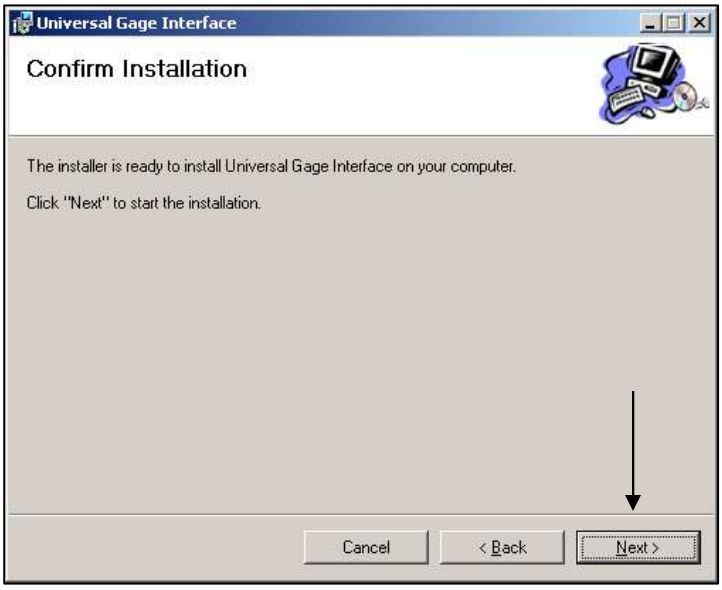


FIGURE 3.1 C – Installation Confirmation

5. Click **Close** when the installation is complete.

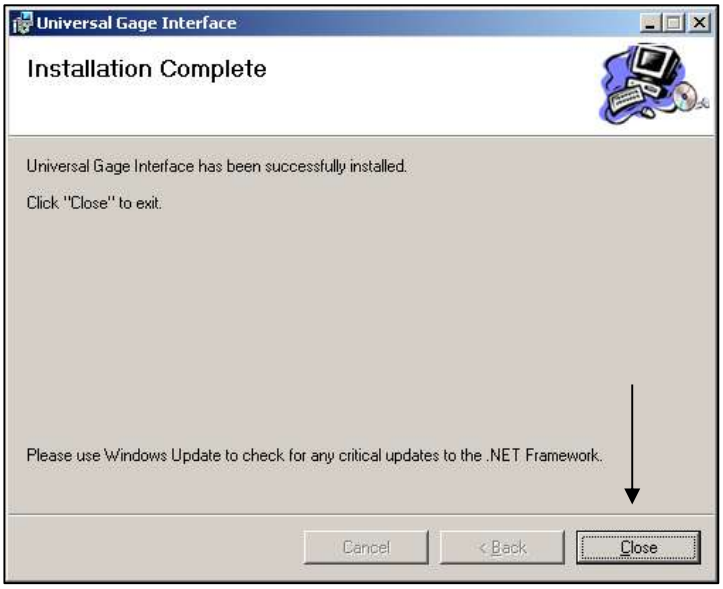
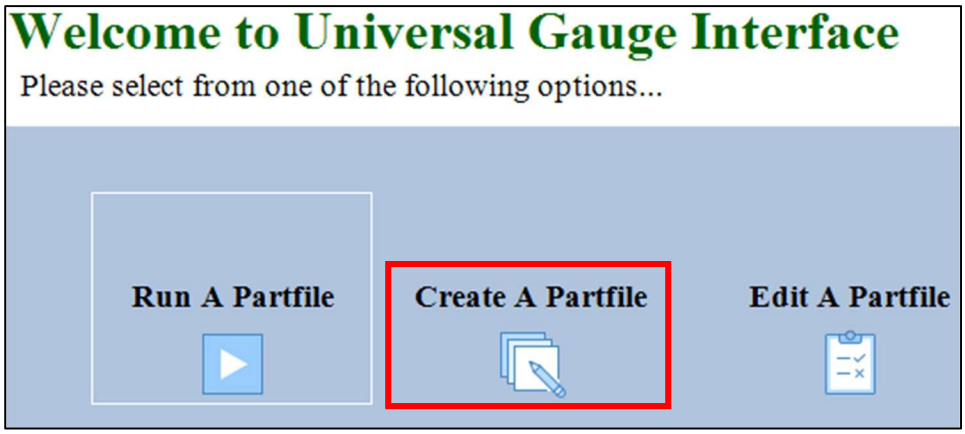


FIGURE 3.1 D – Install Complete

To confirm installation was successful, double-click on the Universal Gauge Interface on the desktop to open the program:

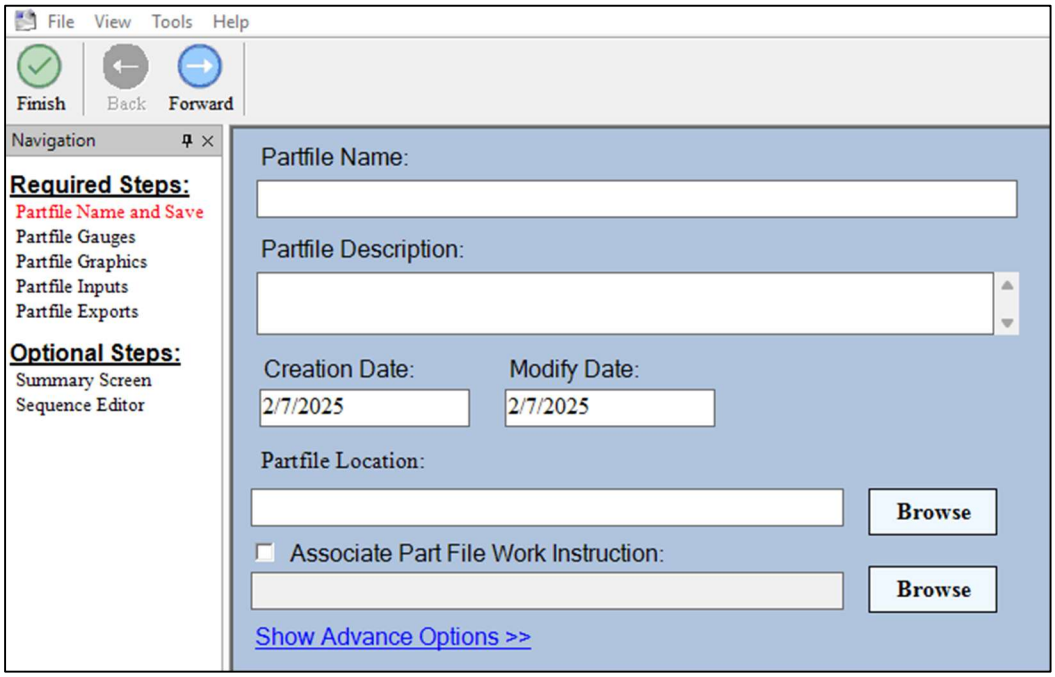
Creating a Seal Gap Partfile in UGI

Double-click on the UGI icon to open the software. From the home screen, click on **Create a Partfile**.



Under the **Required Steps** list on the left-hand side of the window, there are five different sections that must be completed before the partfile can be finalized and used in production. Navigate between the sections using the Forward and Back buttons found in the program ribbon.

Note: *This manual focuses on the basic requirements to complete a Seal Gap X partfile. For additional information, please visit www.lmicorporation.com for the full UGI manual.*



Partfile Name and Save

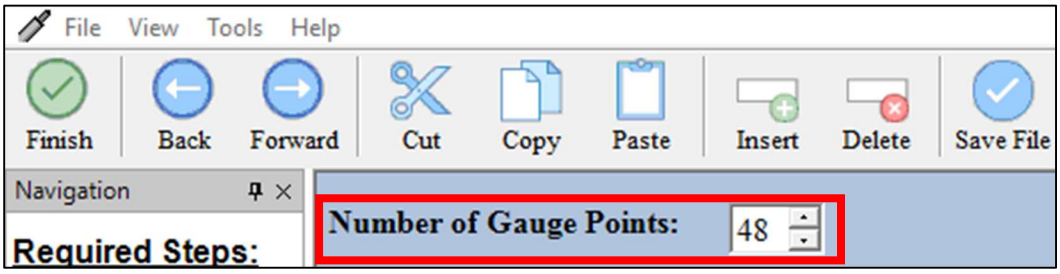
Partfile Name (required): the name of the partfile to be saved as a .ugi file. Usually this is the vehicle or part model number.

Partfile Description: an optional field allowing users to add partfile notes. This is useful if making changes to a partfile throughout the life of the model/vehicle. For example, if the upper and lower spec limits change after running the part for six months, users can note that in this field when they update the spec.

Partfile Location (required): Used to select the folder location where the .ugi file will be stored. LMI recommends leaving this at the default location of C:\Program Data\LMI Corporation\Partfiles. Click on the browse button and then OK to select this location.

Partfile Gauges

This section, the heart and soul of the partfile, is where users set up the names of each point to be measured on the door along with the upper and lower spec limits. Each row represents one measurement point, so users add up the number of measurements needed to capture every door (and possibly deck lid/liftgate) of the vehicle. For example, if a sedan requires 10 measurements around each door frame and eight measurements around the deck lid, users will enter 48 in the Number of Gauge Points box shown below and press the Enter button on the keyboard to create a grid with 48 rows.



The grid consists of 19 columns; however, not all columns will be used within the Seal Gap system. These columns will be defined as N/A in the list below:

Characteristic: Identifier field containing the name of the measurement point, e.g. *LHFD 1* (left-hand front door, point 1). Each cell in this column must be unique.

Description/XGID: Entry place for the gauge ID of each sensor. Note: each sensor can only be used once per component. If users enter the same gauge ID twice on the same component, the partfile will not run correctly.

Component: This field is used to divide up a large partfile with many measurement points into separate, smaller groups of points, where each group can have a unique

picture of the vehicle. If measuring an entire vehicle, users could have five components: left-hand front door, left-hand rear door, deck lid, right-hand rear door, and right-hand front door. Each component will have a unique picture and only the measurement points assigned to that component will appear on that window. For example, if users have 10 Seal Gap X sensors associated with the LHFD component, they will only see those 10 measurement points on that component screen. The number of Components a partfile can have is ultimately defined by how many sensors users have. The less sensors in a system, the more components will be required.

Gauge Type: Choose **SGX** as the Gauge Type either row-by-row or by using the Gauge Type Setup link under Gauge Options on the left-hand side of the window.

Association/Calculation/Mux Port: N/A

COM Port: Select the COM port that Windows has assigned to the LMI SGX Dongle. Active COM ports will be displayed at the bottom of the UGI window. Selection can be either row-by-row or by using the COM Port Setup link under Gauge Options on the left-hand side of the window.

Span/Offset: N/A

USL and LSL: The upper spec and lower spec fields define what passes or fails. If a gauge reading falls in between the upper and lower spec, the box will turn green. If the reading falls outside the USL and LSL, the box will turn red to indicate the point did not pass.

UCL and LCL: Upper and lower cautionary limits indicate that a point is passing but is close to the upper or lower spec limit. LMI recommends setting the UCL and LCL within 10% of the upper and lower spec limits. If the USL and LSL are set to +/- 1.0mm, set the UCL and LCL to +/- 0.9mm. If a reading falls in between the USL and UCL or the LSL and LCL, the box will turn yellow.

HR and LR: Optional high reasonable and low reasonable limits set outer bounds of what is considered a “reasonable” failure. Generally, this field is set to double the tolerance for USL and LSL. If a reading is above the High Reasonable or below the Low Reasonable, the measurement box will turn blue.

Invert Sign: N/A

Active: Determines if the point will be measured. This also allows users to continue taking data if one of the sensors is damaged and needs to be sent in for repair. Unchecking the box for the sensor that is not working allows the rest of the data to be

captured. Note that if that gauge is used in multiple rows across components, then it must be unchecked each time the Gauge ID appears in the XGID column.

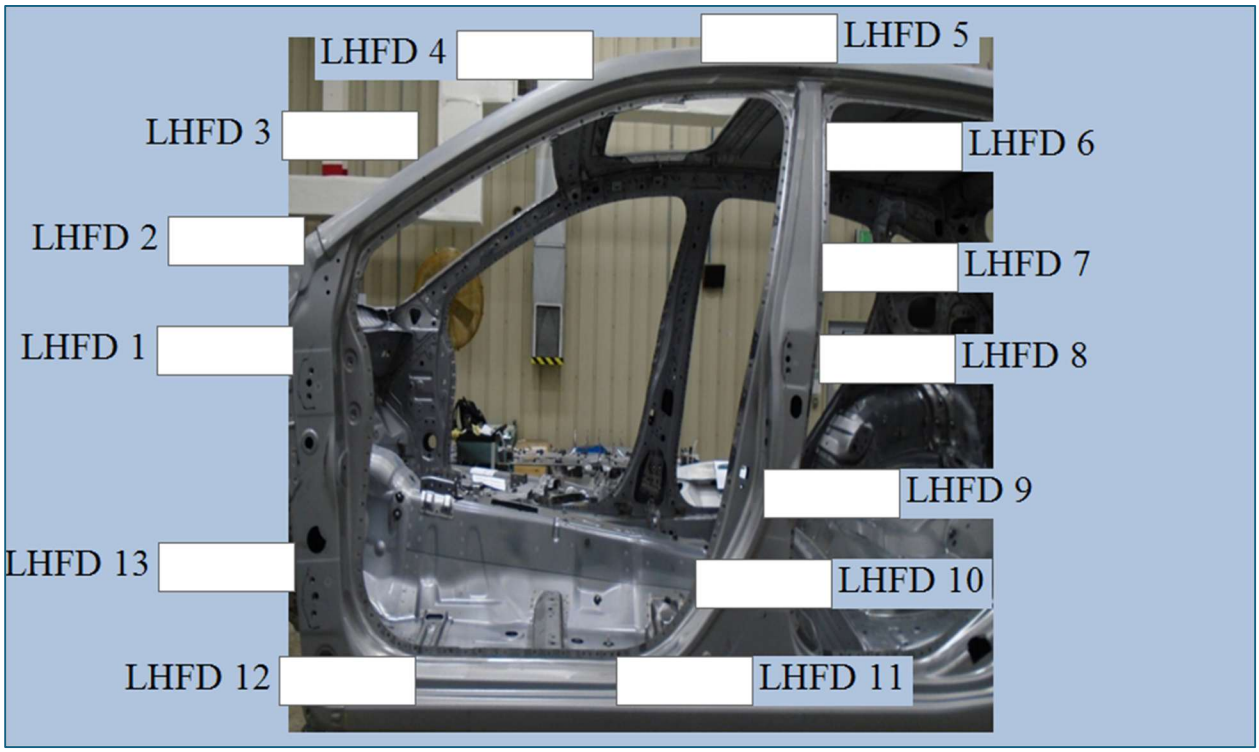
Frequency: NA

	Characteristic	XGID	Component	Gauge Type	Association	Calculation	Mux Port	COM Port	Span	Offset
1	LHFD 1	69705D	LHFD	SGX			N/A	7	N/A	0.00
2	LHFD 2	758F92	LHFD	SGX			N/A	7	N/A	0.00
3	LHFD 3	053081	LHFD	SGX			N/A	7	N/A	0.00
4	LHFD 4	72E278	LHFD	SGX			N/A	7	N/A	0.00
5	LHFD 5	E9C6FB	LHFD	SGX			N/A	7	N/A	0.00

USL	LSL	UCL	LCL	HR	LR	Invert Sign	Active	Frequency
16.00	14.00	16.00	14.00	100.00	-100.00	☐	☑	N/A
2.00	-2.00	2.00	-2.00	100.00	-100.00	☐	☑	N/A
2.00	-2.00	2.00	-2.00	100.00	-100.00	☐	☑	N/A
2.00	-2.00	2.00	-2.00	100.00	-100.00	☐	☑	N/A
2.00	-2.00	2.00	-2.00	100.00	-100.00	☐	☑	N/A

Partfile Graphics

While graphics are not required to create a partfile in UGI, they are an immense help to the operator by serving as a “roadmap” to show which points on the graphic are failing/passing.



Note: Graphics should be stored in the C:\Program Data\LMI Corporation\Graphics folder. UGI can display .jpg, .bmp, or .png (preferred) files. As a SealGap system relies on Components, UGI allows users to select different images for each unique component within the partfile.

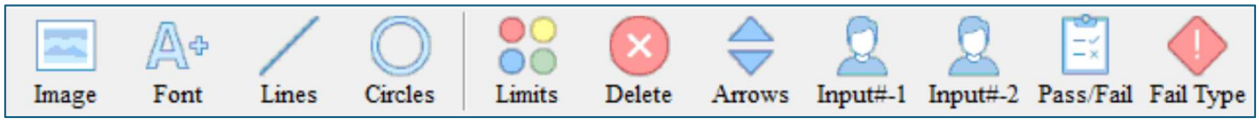


Image – Opens the Graphics folder where users can select an image (or images) to use in the partfile.
Font – Allows users to increase or decrease font size.
Lines – Allows users to draw "leader lines" that connect measurement boxes to points on the image.
Circles – Allows users to put "dots" on images to specify points of measurement.
Limits – Displays the USL and LSL next to each measurement box.
Delete – When the graphic is selected, this will delete the graphic from the screen.
Arrows – When selected, arrows will be displayed indicating whether the reading is high or low of the tolerances.
Input#-1 – Not used with UGI SealGap.
Input#-2 – Not used with UGI SealGap.
Pass/Fail – Displays a Pass or Fail message in the window when the component is sampled.
Fail Type – Not used with UGI SealGap.

Graphics Setup Walkthrough:

UGI has the ability for users to display multiple images on each component screen. These images provide a "roadmap" of where the sensors should be placed on the door frame.

1. Move the image file into the Graphics folder found at C:\Program Data\LMI Corporation\Graphics.

2. Click on the Image icon, select the graphic, and click Open.

3. Double-click on the image. There will be a thin black frame around the image. When this frame is around the image, the image can be resized by clicking and dragging the corners of the image. The image can also be moved by clicking in the center of it and dragging it

to the desired location on the screen.

4. When the image is sized and placed in the middle of the screen, click and drag one of the measurement point boxes to the corresponding point on the graphic. Double-clicking the box will flip the characteristic name from one side of the box to the other. Alternatively, if a particular spot on the graphic is congested with several measurement points, use the Lines tool to extend more precise points to the boxes. With the Lines tool activated, click and drag on the point in the image that needs to be measured, then drag the mouse to the corresponding measurement box. When the box is selected, it will turn brown, and the characteristic name will be italicized. Double-click on the box to anchor the line to the box. After this is completed, the line will follow the box. To remove an unwanted line, de-select the Lines tool, and then click and drag to make a "box" around the line that needs to be deleted. If successful, the line will become dotted. Press the Delete key on the keyboard to permanently remove the line from the image.

5. If needed, click on the Limits and/or Arrows buttons to add these features to the partfile.

6. Select a different component from the Component drop-down menu and repeat the process above until graphics are associated with all components.

Partfile Inputs

Partfile inputs are used to collect additional non-measurement trace data from users. Some of the most common partfile input fields are Operator Name/ID, Shift, and Serial/Part Number. There are two tabs at the top of the window that will determine how often and when each input is asked for as the partfile runs.

Subgroup Inputs are asked for every time a new subgroup is started. This means that if users have a subgroup size of three, they will only be asked for the input data on the first run of the three. If the user has a subgroup of one, then Subgroup Inputs behave the same as Part Inputs.

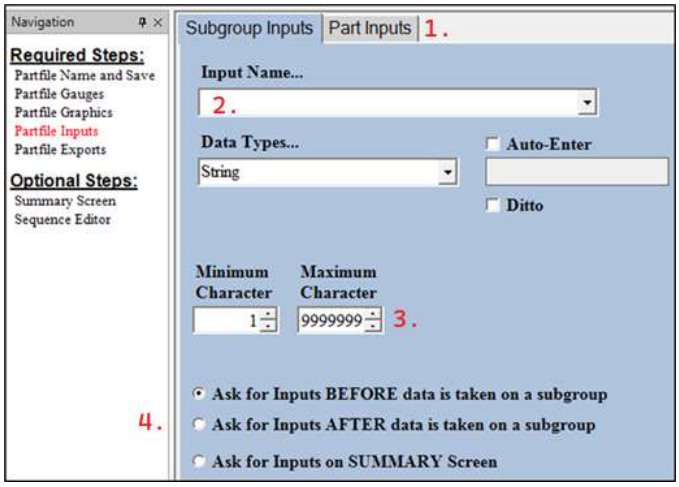
Part Inputs are asked for every time the partfile finishes one round. This is the most common input type. If users have three parts to measure, then they will be required to enter the Part Input data three times – once each time the partfile finishes.

Data Types – What kind of input is required from the operator?

UGI provides several *Data Types* – non-measurement trace inputs – to choose from, with the most common being the String and the List types.

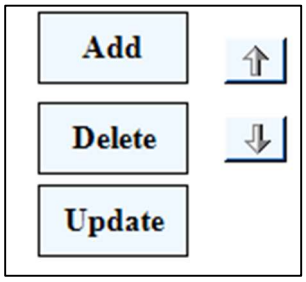
• String – Users can enter alphanumeric characters into the text box. The "Auto-Enter" box allows data to be written to the output file without users having to enter any data. This is useful if the input is needed on the export, but will not change, such as building number or model identifier.
• Integer – Users can only enter whole numbers into the text box.
• Single – Users can enter whole and decimal numbers into the text box.
• True/False – Users will be presented with a choice between two user defined states (yes/no, true/false, etc.).
• Date – Users will be able to select a date from a calendar. This is different than the date that UGI will append to the output file that shows when the measurement data was taken. This type is used when parts will be measured on a date that differs from the build date. The build date can be captured using this feature.
• Time – Users will be able to enter the current time or a selected time. The selected time will be different than the date that UGI will append to the output file that shows when the measurement data was taken. This type is used when parts are measured on a date that differs from the build date. The build time can be captured using this feature.
• List – Users can choose from a selection of pre-defined choices. This is useful for entries that will not change, such as shift or line number.

How to create inputs for VIN and Operator ID

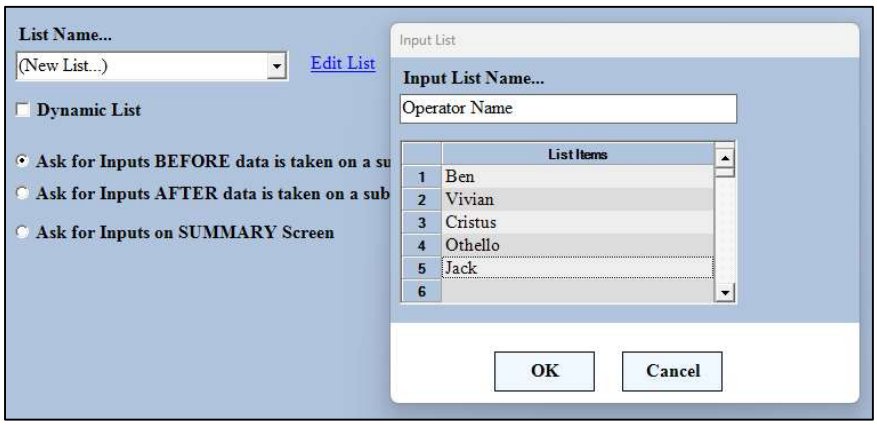


1. Click on the Part Inputs tab.

2. To create a string input, user must first give the input a name. In the *Input Name…* box, type the word *VIN*.
3. If needed, users can limit the number of characters that can be entered in this field using the Minimum and Maximum Character boxes.
4. Next, choose whether the operator will be asked for this information before or after the data is collected. NOTE: If Automatic Write is implemented in the partfile, all user input data must occur BEFORE measurement data is taken.
5. To finalize the input, click on the Add button in the lower right-hand corner of the window.



1. To create a list, start by selecting List from the *Data Types…* dropdown menu.
2. Click on the link for Edit List.
3. The Input List window will appear. Type in *Operator Name* under the Input List Name… field and then enter the name of each operator on each line.
4. Under the Input Name… field, enter the word Shift.
5. Click on Add in the lower right-hand corner of the window to finalize the input.



Partfile Exports

The Partfile Exports section allows users to configure the collected traceability and input data into a data format of their liking. The screen can be divided into three distinct sections:

- Export Location and Extension
- Export Line Information
- Added (completed) exports

Export Location and Extension – This is where users give the export a name, extension, and storage location. Click on the ellipsis to navigate to the location where the extension should be stored. By default, the storage location is C:\Program Data\LMI Corporation\Partfiles; however, users can choose to store the data anywhere on the PC or network if admin read/write privileges have been granted to that location. Give the export a name in the *Export Name…* field. The *Export Extension…* will be attached to the end of the *Export Name…* and can be any three or four alphabetical characters preceded by a period. If users choose something other than .CSV or .XLS (or other Excel extension), they will need to tell the computer what program to use to open the file.

Export Line Information – Export attributes are the items that need to be included in the export file. Nearly all fields in UGI can be added to the export.

- **Fixed Label** – Anything input as a Fixed Label will be static in the export, such as header information. Simply type the name of the attribute in the white box.
- **Field** – Most of the items in the Field dropdown are dynamic, such as readings, trace input data, and date/time. Trace input data (set up on the Partfile Input page) will be prefixed with the word *INPUT* (e.g. – INPUT – Operator ID).
- **Delimiter** – The delimiter is what separates each field and fixed label from one another. If using .CSV as the export file type, the primary delimiter should be a comma. If using any type of Excel-specific extension (.XLS, .XLM, .XLSX), tab will be used as the primary delimiter.
- **Append Date to File** – Adds the date to end of Export Name.
- **Export Unique File** – Adds the Julian date to the end of the Export Name. This is based off the “system time” on the PC.
- **Export Only Valid Data** – Will only write data to the file if all fields have been entered during the data collection process.

Example Export Setup

1. Click in the white box below Fixed Label and type the word Date, then click the Add Line Item button. Field - Date will appear in the Information list.

2. Repeat this process for the words Time, Operator Initials, and Shift.

3. Click on the drop-down menu below Field. Using the down arrow on the menu, scroll until see “All Characteristics” displayed. Click on this and then Add Line Item.

4. Click on the drop-down menu below Field, scroll up, and click on <Start Header>. Click Add Line Item.

5. From the list in the Information window, click on Field - <Start Header>. Once highlighted, use the up arrow on the right-hand side of the screen to move the Field - <Start Header> to the top of the list. Anything that appears between the Field - <Start Header> and Field <End Header> will be static. This will be the first row of the Excel sheet.

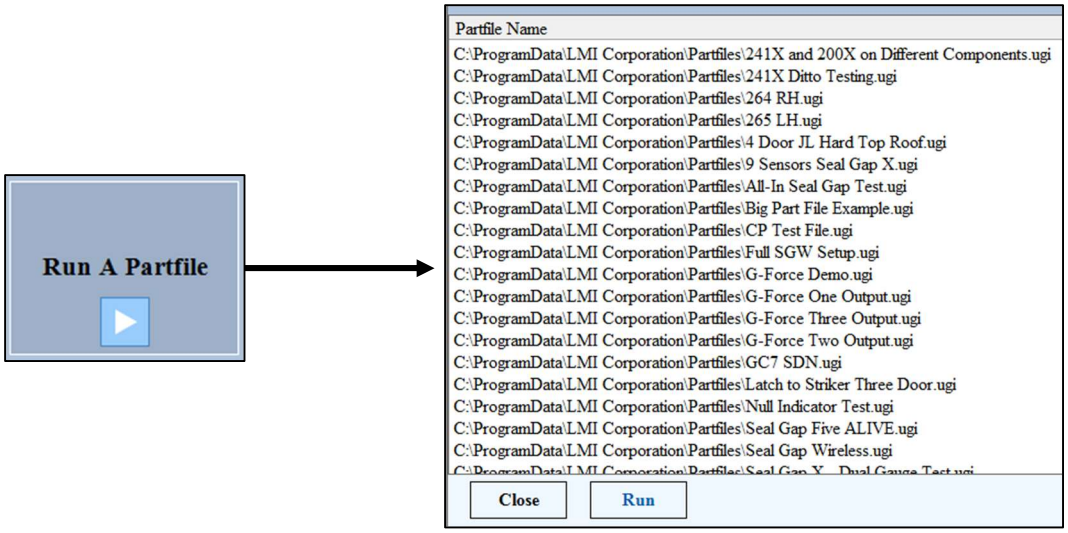
6. From the drop-down menu, select and Add Line Item to the following fields: Date, Time, Input – Operator, Input – Shift, and All Readings. These items are dynamic, meaning that this is the actual data that will be collected when running the part file. These fields should be in the same top-down order that the header information is in so that each column lines up correctly with each row of collected data.

After the export is saved, click on the Finish button in the upper left-hand corner of the window. Select YES in the subsequent window to save the partfile.

Running a Seal Gap Partfile in UGI

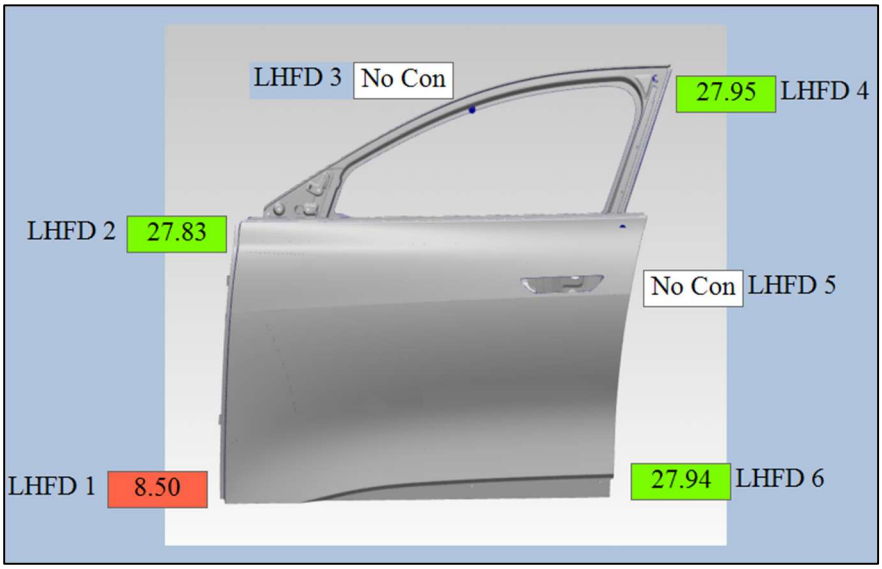
To run the newly created partfile, plug the dongle into the correct port on the PC (set up in the Partfile Gauges tab above) and then press the green button on a sensor to wake it up if it is not on. Once the sensor is on, press and release the blue button to begin transmission from the sensor to the software. Repeat this for every sensor used in the partfile.

Click on the **Run A Partfile** icon and then choose the partfile from the Partfile Name list and click on the Run button.



Click on Run A Partfile, choose the file from the list, then press the Run button.

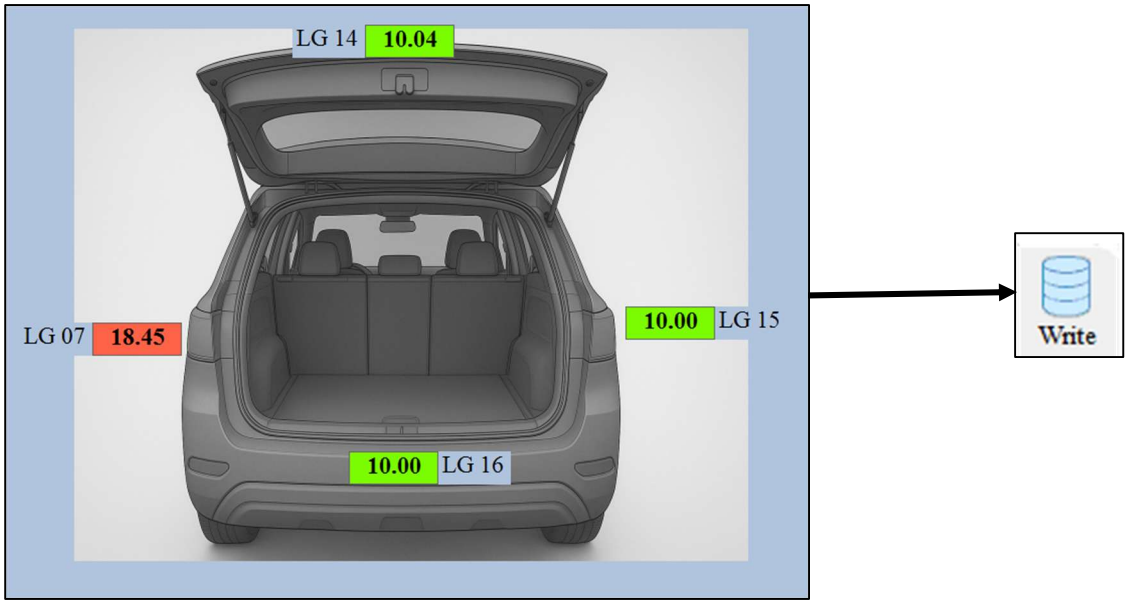
If any Part Inputs are used within the file, users will be prompted to enter that information before any measurements can be captured. If a sensor associated with the partfile is not turned on or not transmitting, UGI will display a “No Con” message in the measurement box for that sensor, as shown below.



No Connection message for points LHFD 3 and LHFD 5.

If the sensor is not on, press the green button to turn it on, followed by the blue button to start the transmission. Transmission to the dongle is indicated by the arrow on the display of the sensor.

Place the sensors in the correct positions on the door frame, then flush out the door. View the readings on the screen and press the Sample button if no adjustments are necessary. The readings on the screen will freeze and change to a bold font. The software will automatically advance to the next component/door. Repeat this process until all doors and the liftgate/decklid have been sampled. If Automatically Write Data is turned on, the data will write to the export after the last door is sampled. If Automatically Write Data is not turned on, press the Write button after sampling the last component/door.



Once the data is written, the partfile will start over and the user will fill in the Part Input data (if included) for the next part and begin sampling the new component.