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Find the *Luna Innovations FiberPro 2* at our website: ***Click HERE***

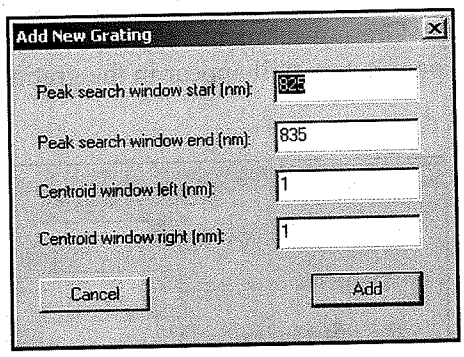


Figure 39. Submenu for Adding a New Grating.

The user has two methods for accessing the menus to modify, delete, or activate an existing grating. The first method requires that the user first select a grating from the grating list by clicking on the grating under the Active column to highlight it. The user then selects one of the options to Modify Grating, Delete Grating, or Set as Active Grating by selecting the menu button.

In the second method, shown in Figure 40, the user places the cursor on the appropriate grating under the Active column and clicks the left mouse button to activate the pull-down menu. The user then selects the desired action from the pull-down menu.

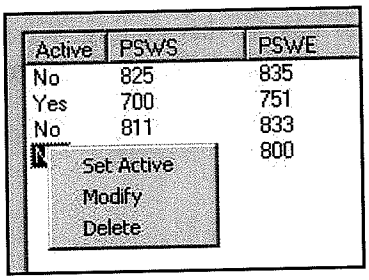


Figure 40. FBG Left Mouse Button Pull-Down Menu.

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To modify an existing grating, highlight the appropriate grating in the list and either click Modify Grating or left-click and select Modify. The Modify Grating submenu shown in Figure 41 is similar to the Add New Grating submenu. Modify the correct parameters for the grating and click Modify. The new parameters will appear in the grating list.

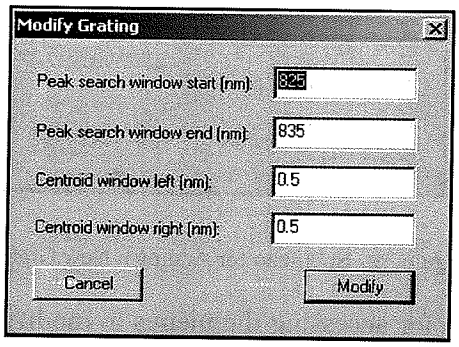


Figure 41. Submenu for Modifying the Parameters of an Existing Grating.

To delete an existing grating, highlight the appropriate grating in the list, and either click Delete Grating or left-click and select Delete. The grating will no longer appear in the grating list.

To select one of the gratings as the active grating, highlight the desired grating in the list, and either click Set As Active Grating or left-click and select Set Active. The word Yes will appear in the Active column next to the proper grating in the list. If another grating was already set to active, the word No will appear next to that grating. When the desired grating is configured and active, click OK to accept the configuration and return to the User Interface Screen.

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LPG Algorithm Configuration

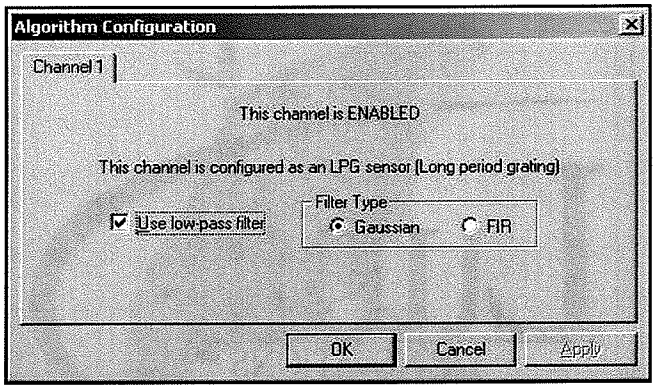


Figure 42. Algorithm Configuration Submenu for an LPG Sensor.

Figure 42 shows the Algorithm Configuration submenu for an LPG sensor. The only configuration option available is a low-pass filter that is activated by checking the box Use low-pass filter. If activated, the user must choose between a Gaussian or FIR filter. Click Apply to accept the selection, or click OK to accept the selection and return to the User Interface Screen.

Obtaining the Software Version

To open the window that contains the software version information, select About > Version from the pull-down menu in the top right corner of the User Interface Screen. This software will open the window shown in Figure 43. The version number is located in the text at the bottom of the window. To close the window, click OK.

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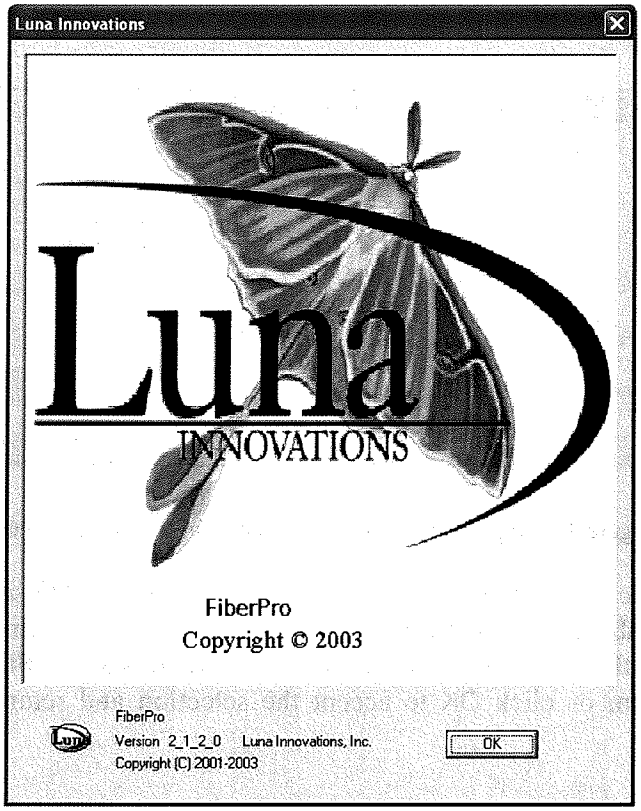


Figure 43. User Interface Software Version and Copyright Window.

Setting the Graph Window Options

Before acquiring data, the user may want to set some plotting parameters from the User Interface Screen. These parameters are set by selecting the Graph Windowing Options button on the User Interface Screen. When selected, the submenu shown in Figure 44 appears. First, the user should enter the 'size' of the Display window in seconds. The value entered determines the amount of data displayed in the plot window. The default value is 10 seconds. An Averag-

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ing window may also be specified by checking the option box, and entering a value in the menu box. This value determines how many data points are averaged together and displayed as a single point in the plot. Averaging will lower the noise floor of the data, at the cost of accuracy. The default is to not average the data. If averaging is selected, the default value is 0.1 seconds. Click OK to accept the plotting parameters and return to the User Interface Screen.

Note: When the averaging window button is selected and the user is logging an output file it is important to remember that the data being logged is not the average of, but is the real data.

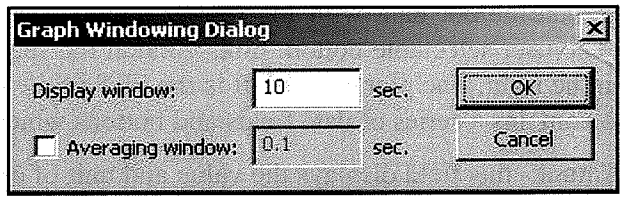


Figure 44. Graph Windowing Options Submenu.

Acquiring Data

To confirm that the FiberPro instrument is ready to acquire data, verify that the following steps are complete:

- the computer is powered on and functioning properly,
- the FiberPro instrument is connected to the computer, powered on, and functioning properly,
- the User Interface Software is installed and running,
- the sensor is properly defined in the sensor database,
- the sensor is attached to Channel 1 and the channel is enabled,
- a compatible sensor is properly connected to the FiberPro instrument,
- the Power / Gain / Offset settings are properly tuned,

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- the sensor algorithm is properly configured,
- the analog output, if needed, is properly configured, and
- the graph windowing options are selected.

To begin processing, click the menu button Start processing, and data acquisition will begin. Figures 45-47 provide a snapshot of the data from each type of sensor during data acquisition. Once processing starts, the data will continue to stream across the plot window until processing stops.

The top plot contains the output data with the proper algorithms and windowing options applied to the data. The user selectable bottom plots contain the spectrum data. For an EFPI sensor, this plot is on the right. The plot on the left is the FFT of the spectrum data. The User Interface Screen also contains a series of data fields and buttons which are explained below:

- Current measurement - this field displays the value and unit of each data point as it is acquired.
- Display channel - this pull-down list displays the channel number over which data is being acquired and displayed. Because the FiberPro 2 is currently a single-channel device, this field always displays Channel 1. When using the MUX this window will display which of the 8 MUX channels the user selects to view, please refer to section 5.
- Seconds remaining - this field will display INDEFINITE if the user selected the Indefinite option in the Sampling Dialog submenu. If the user selected a finite Capture length from this submenu, then the Seconds remaining field will display the time remaining in seconds until data acquisition will end.
- Throughput - this field gives the average data rate over the entire data set which is recalculated with each new data point.
- Graph windowing options - this button was discussed previously in the Section entitled "Setting the Graph Window Options" on page 54.
- Zero measurement - this button is used primarily with strain sensors, but may also be used with relative gap sensors. If the user clicks on this button during data processing, the software takes the current data point and sets it to zero. It will also adjust the value

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for the Zero gap that was entered in the Sensor Configuration submenu based on the current measurement value. All data points acquired after that point will be measured relative to the zero measurement point. This feature allows the user to set an accurate reference point on which all subsequent measurements are based.

- Stop - this button ends data acquisition and processing.
- Spec Out - this check box enables the user to view Spectrum and FFT information in a graphical representation shown in the bottom half of Figure 45 below.

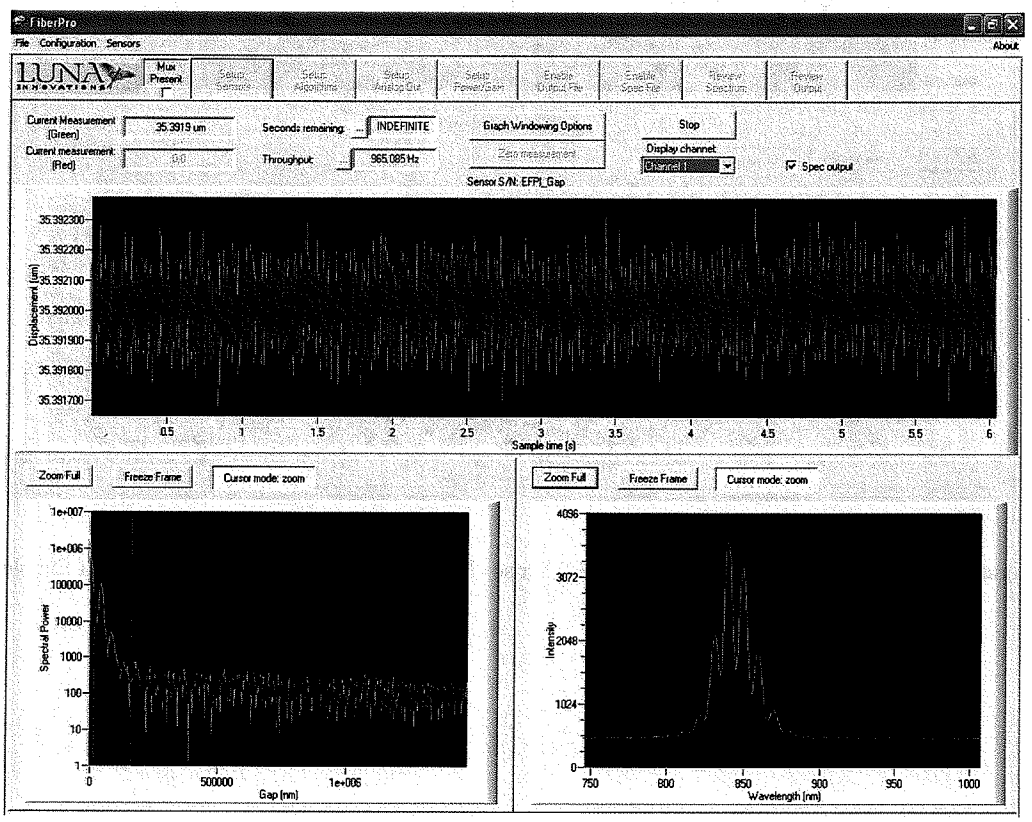


Figure 45. Snapshot of the Data from an EFPI Sensor During Data Processing with Spec Out Enabled.

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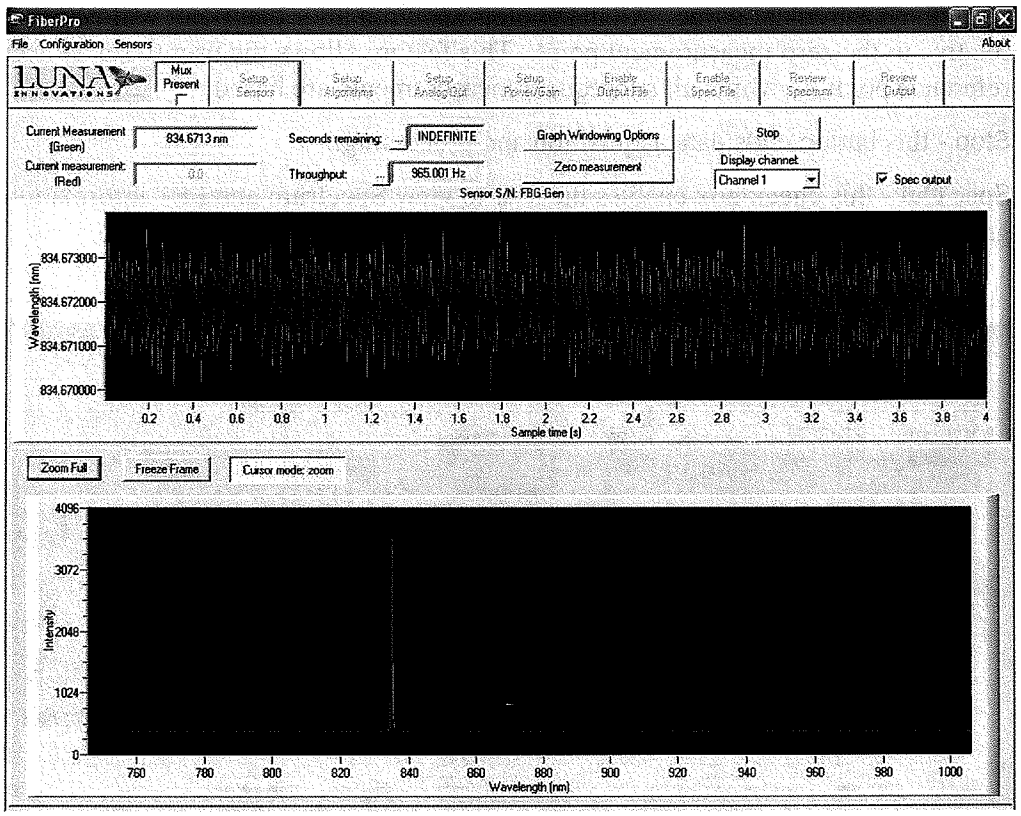


Figure 46. Snapshot of the Data from an FBG Sensor During Data Processing with Spec Out Enabled.

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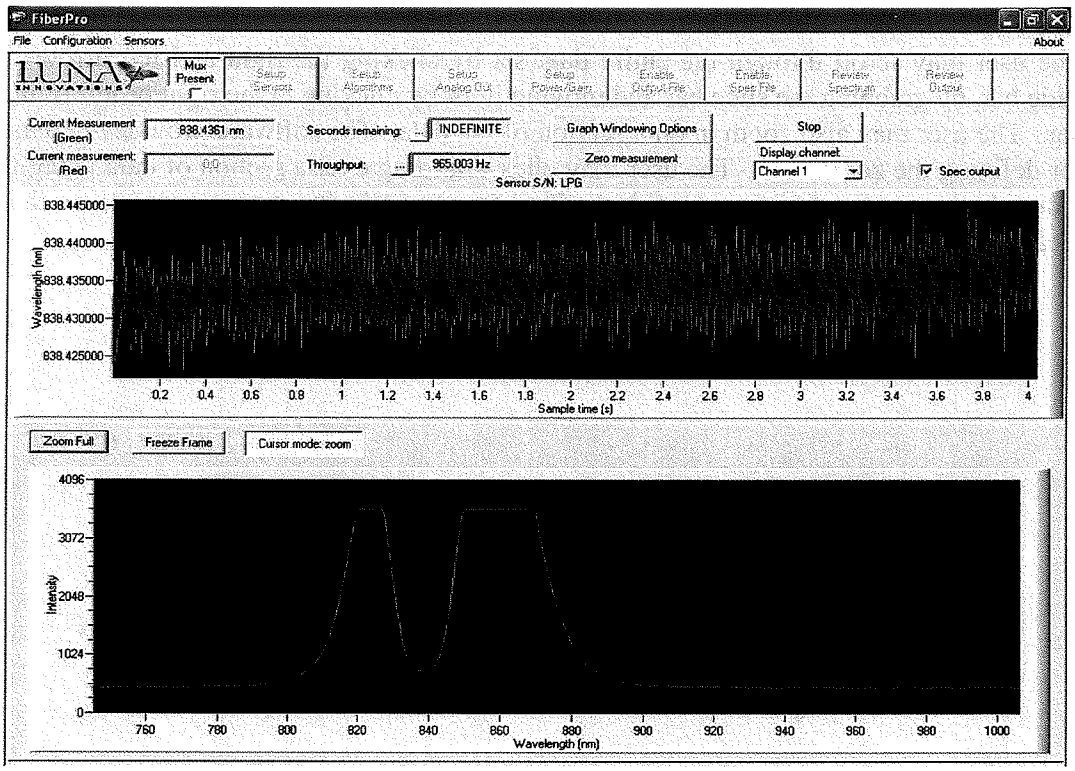


Figure 47. Snapshot of the Data from an LPG Sensor During Data Processing with Spec Out Enabled.

Reviewing Output Data

When the Enable output file option is selected on the User Interface Screen, the software saves the acquired data to the specified output data file. This data file may be loaded and reviewed at any time from the User Interface Screen. To select an output data file for reviewing, either select File > Review output from the pull-down menu or click the Review output button on the User Interface Screen. A standard file dialog box will appear, and a saved output file with the

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extension **.out** should be selected. Once the data is loaded, a plot containing the first 10 seconds of data on Channel 1 will appear in the Review Output Data screen. Figure 48 shows the window with a data set loaded.

The user may scroll through the entire data set by clicking the right and left arrows on the slide bar, by grabbing the slide bar and moving it, or by clicking to the right or left of the slide bar. The user may also zoom in on a section of the data. The software provides two methods for defining the zoom area. The user may click-and-drag over a section of data using the left mouse button, or the user may specify the Start time and Window size in seconds for the zoom area. To view the actual data points, select the option Show data points.

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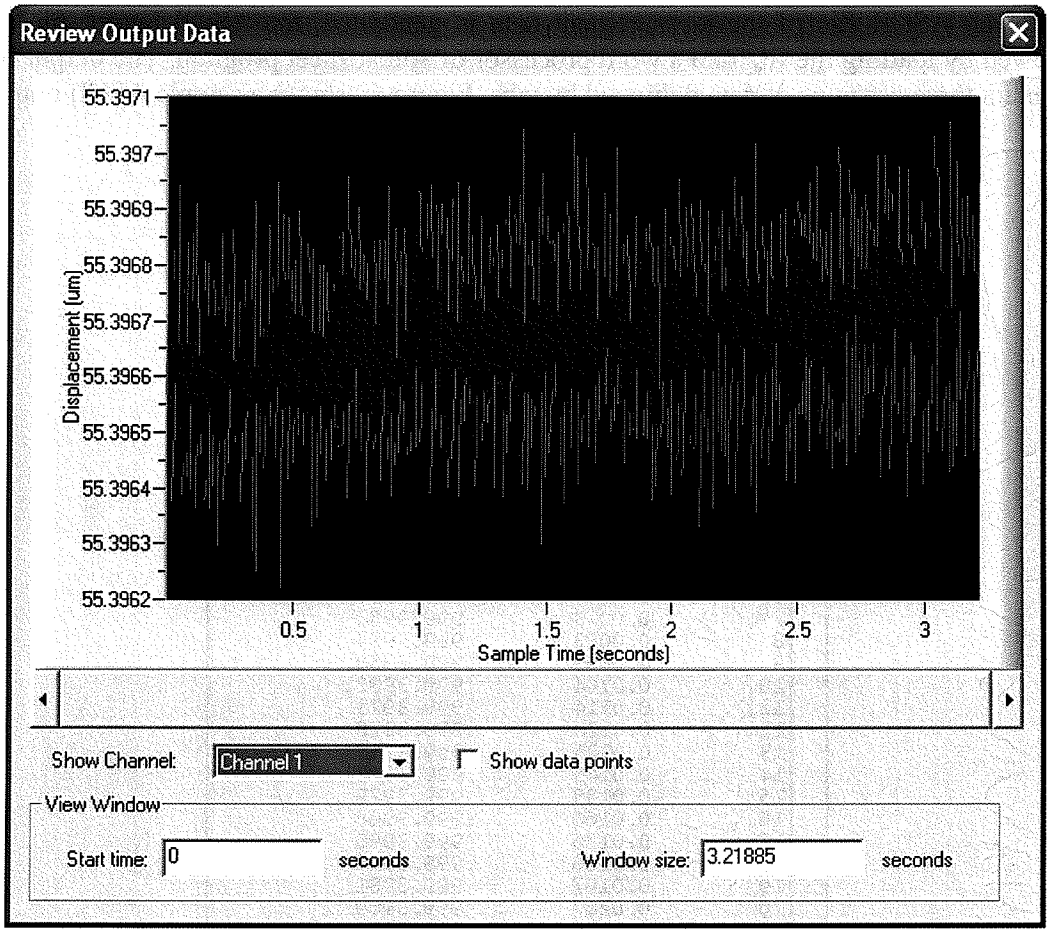


Figure 48. Review Output Data Window.

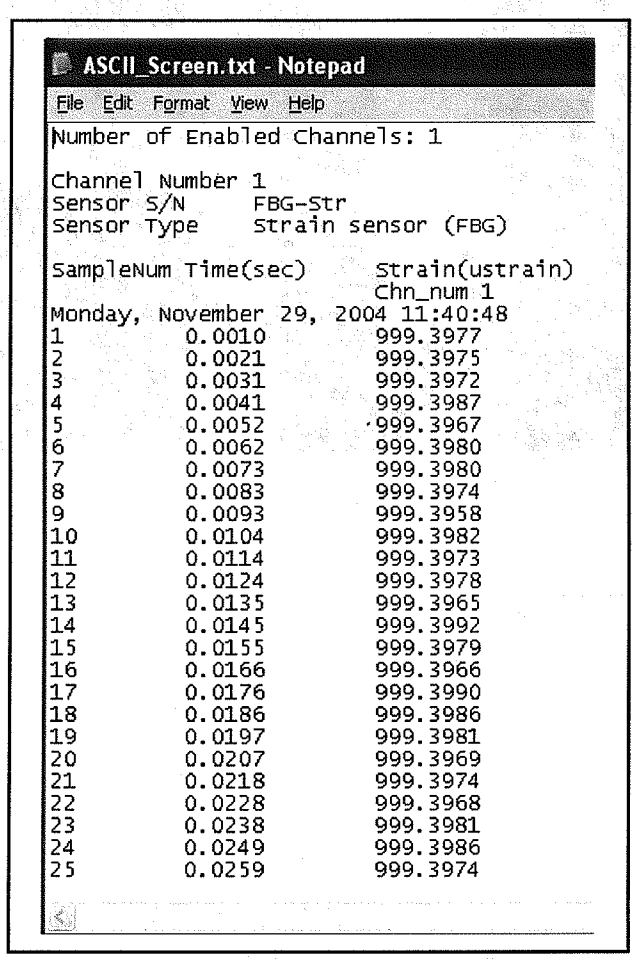
The data is automatically saved to an ASCII file for import to a word processor or spreadsheet program when the "Enable Output" button is selected.

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Viewing an ASCII Output File

After an ASCII file of the measurement data is generated, the ASCII output file may be viewed by loading the file into a word processor or spreadsheet program. The output file will contain three columns of data delimited by tabs. Figure 49 shows a sample ASCII output file.



ASCII_Screen.txt - Notepad

File Edit Format View Help

```
Number of Enabled Channels: 1

Channel Number 1
Sensor S/N      FBG-Str
Sensor Type     Strain sensor (FBG)

SampleNum Time(sec)      Strain(ustrain)
                         Chn_num 1
Monday, November 29, 2004 11:40:48
1          0.0010          999.3977
2          0.0021          999.3975
3          0.0031          999.3972
4          0.0041          999.3987
5          0.0052          999.3967
6          0.0062          999.3980
7          0.0073          999.3980
8          0.0083          999.3974
9          0.0093          999.3958
10         0.0104          999.3982
11         0.0114          999.3973
12         0.0124          999.3978
13         0.0135          999.3965
14         0.0145          999.3992
15         0.0155          999.3979
16         0.0166          999.3966
17         0.0176          999.3990
18         0.0186          999.3986
19         0.0197          999.3981
20         0.0207          999.3969
21         0.0218          999.3974
22         0.0228          999.3968
23         0.0238          999.3981
24         0.0249          999.3986
25         0.0259          999.3974
```

Figure 49. Format of the ASCII Output Data File.

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Col 1: SampleNum - This column contains the sample number of each data point.

Col 2: Time(sec) - This column contains the sample time in seconds of each data point.

Col 3: Strain (ustrain) - This column contains the measurement data. The column heading indicates the type of measurement with the unit of measurement in parentheses.

Reviewing Spectrum Data

The user may review or post process a spectrum log file saved from a previous measurement. The review option allows the user to change the sensor type and configuration algorithm, and then view each frame of the new spectrum data. The post process option allows the user to change the configuration algorithm, and then generate a new output data file.

Viewing a Spectra Log

To load and review a spectrum log file, either select File > Review spectrum log from the pull-down menu or click on the Review spectrum button. A standard file dialog box will display all files with the extension **.ffd**, and a spectrum log file name should be selected or entered. Once the spectrum data is loaded, the program will open the Review Spectra Log screen with the first frame of data as shown in Figure 50. To view the next frame of data, click the right arrow button on the slide bar below the spectrum plot. Use the slide bar to quickly move forward and backward in time through the frames. The Sample time indicates the time stamp for each frame.

To change the sensor type, select a Sensor type from the pull-down list. To change the configuration algorithm, click the menu button Configure Algorithm. The Algorithm Configuration submenu that appears will differ based on the type of sensor selected, but will be one of the submenus shown in Figures 36-38.

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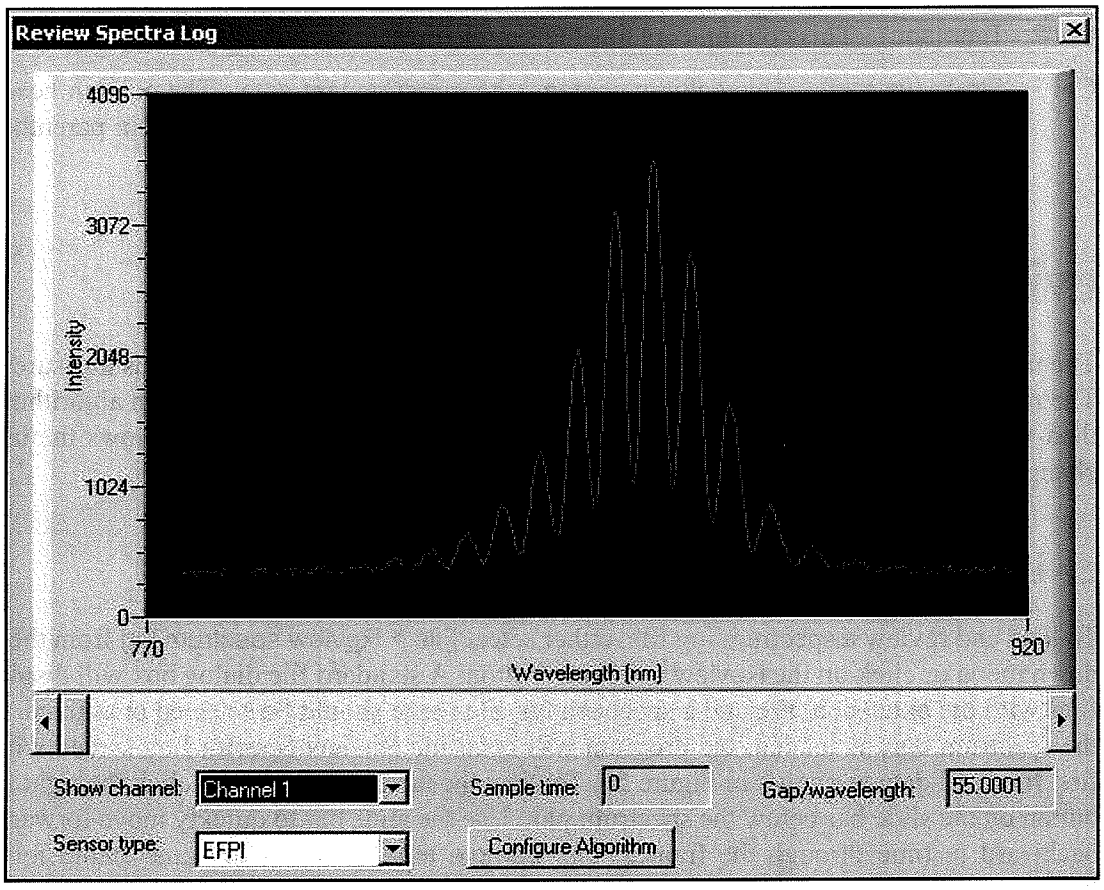


Figure 50. Sample Spectrum Log File Screen for an EFPI Sensor

Manipulating the Spectrum Plot

When reviewing the saved Spectrum Plot, the user may change some of the plotting parameters and zoom options to get a better view of the spectrum data. The user may select a portion

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of the plot to zoom in on, as in Figure 51, by clicking and dragging the left mouse button. To zoom back out to the full spectrum plot, right click and select Zoom Full.

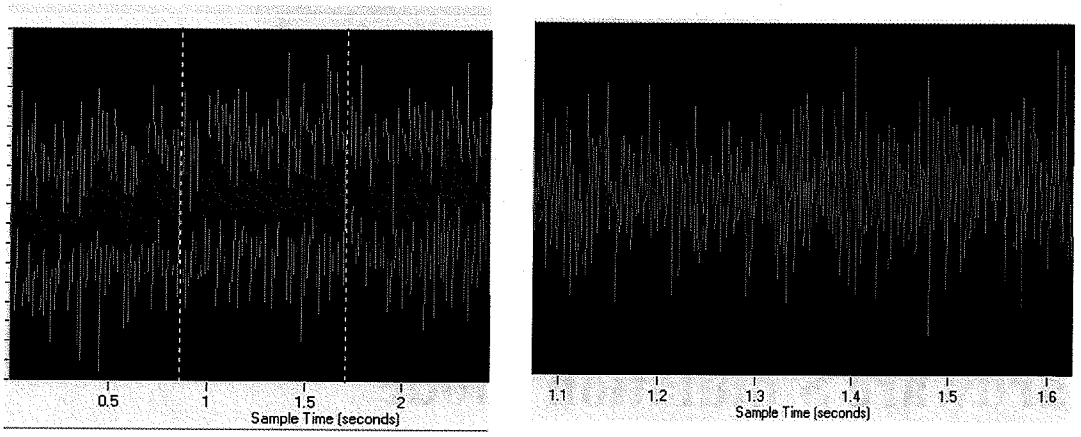


Figure 51. Zoom Area of the Spectrum Plot.

Processing a Spectrum Log

To load and process a spectrum log file, select File > Process spectrum log. A standard file dialog box will display all files with the extension **.ffd**, and a spectrum log file name should be selected or entered. Once a spectrum log file is selected, another file dialog box will appear asking for an output file name with the extension **.out**. Once an output file name is selected, an Algorithm Configuration menu will appear. Again, the type of Algorithm Configuration menu will vary based on the type of sensor that was used when the original spectrum log file was generated, but will be one of the submenus shown in Figures 36-38. The user will select the appropriate algorithm parameters, and click OK to begin processing. A progress bar will appear as in Figure 52. The user may stop processing at any time by clicking the Stop button.

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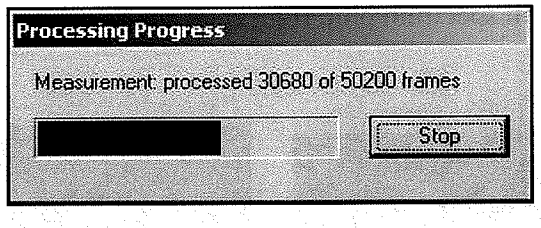


Figure 52. Spectrum Log Processing Progress Bar

4

When processing completes, a new output data file is generated. This new file may be loaded and reviewed using the Review output option on the User Interface Screen.

Hardware Simulation Mode

Certain functions of the User Interface Software will run without being connected to the FiberPro 2 instrument. This mode of operation is the Hardware Simulation Mode. When the User Interface Software first starts, it checks for the presence of the FiberPro 2 instrument. If the software does not detect the FiberPro 2 hardware, the dialog box shown in Figure 53 appears.



Figure 53. Dialog Box for Entering Hardware Simulation Mode

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If the user selects Yes, the software enters the Hardware Simulation Mode User Interface Screen shown in Figure 54. If the user selects No, the software will shutdown and exit.

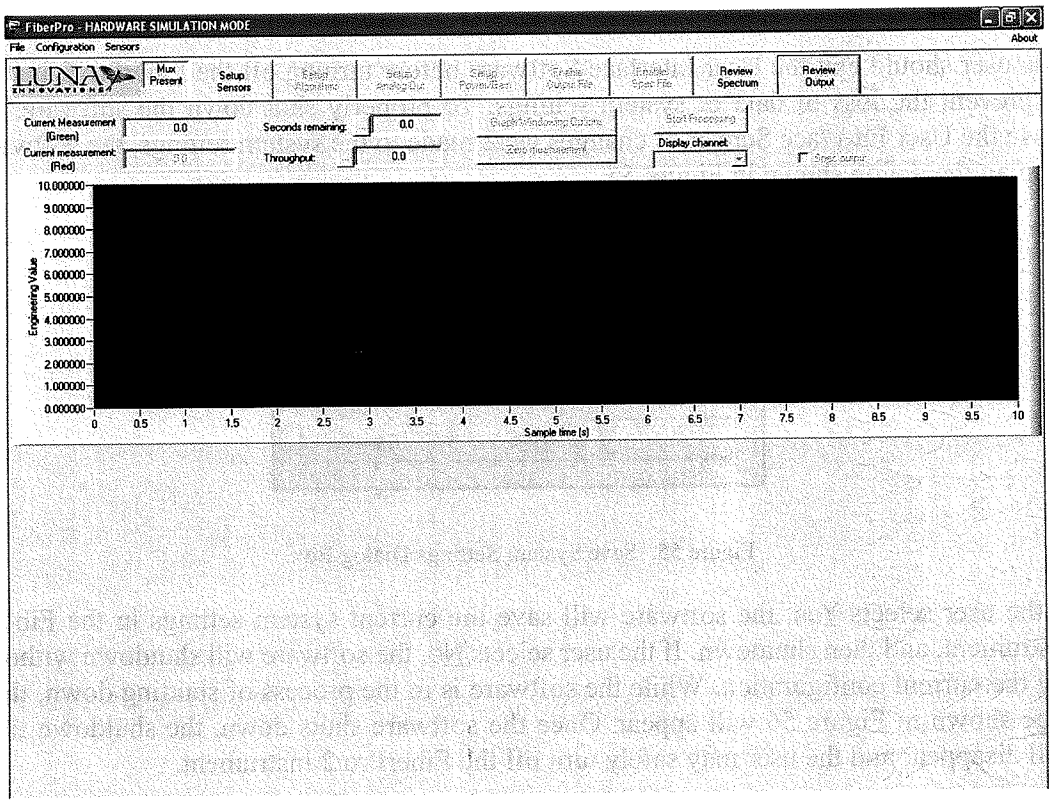


Figure 54. User Interface Screen for Hardware Simulation Mode

In Hardware Simulation Mode, the sensor-dependent and hardware-dependent functions in the menus are disabled. These options are Setup Algorithms, Setup Analog Out, and Setup Power/Gain. The Hardware Simulation Mode is useful when the FiberPro 2 instrument is not available for reviewing output data files, and reviewing/processing spectrum log files. The steps for reviewing an output data file and reviewing/processing a spectrum log file are exactly the same in simulation mode as discussed previously, refer to pages 62 - 67.

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Exiting the Software

The user should exit the User Interface Software before turning off the FiberPro 2 instrument to prevent the loss of data or system settings. To properly shut down the software, simply close the User Interface Screen. If changes were made to the system settings, the software will display the dialog shown in Figure 55.

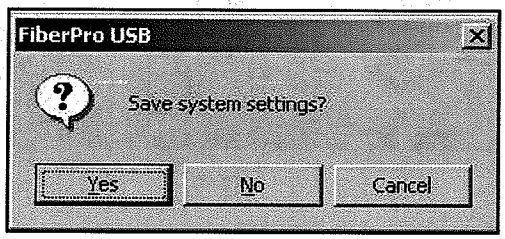


Figure 55. Save System Settings Dialog Box.

If the user selects Yes, the software will save the current system settings in the FiberPro 2 instrument, and then shutdown. If the user selects No, the software will shutdown without saving the current configuration. While the software is in the process of shutting down, the message shown in Figure 56 will appear. Once the software shuts down, the shutdown message will disappear and the user may safely turn off the FiberPro 2 instrument.

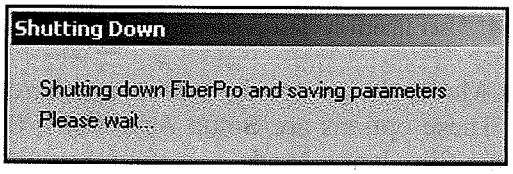


Figure 56. Software Shutdown Message.

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MUX8 Channel Expansion Module



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Luna Innovations currently offers an Eight Channel Expansion Module (MUX8) for the FiberPro 2 system. The MUX8 allows connection of up to 8 sensors to one FiberPro 2 with one channel active at a time. The FiberPro 2 system can scan through all eight MUX channels at one of three user selectable speeds that varies from 3.5 to 16 Hz. If only one MUX channel is being used the data rate will be 965 Hz. *Contact a Luna Innovations Applications Engineer at support@lunainnovations.com, Voice: 540-552-5128, or FAX: 540-951-0760 for more information.* There are three buttons that are located under the "Throughput" menu when "MUX Present" is selected. See Figure 57 below.

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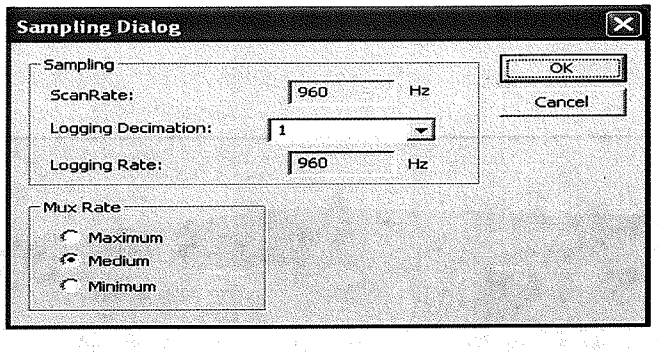


Figure 57. MUX8 Throughput menu.

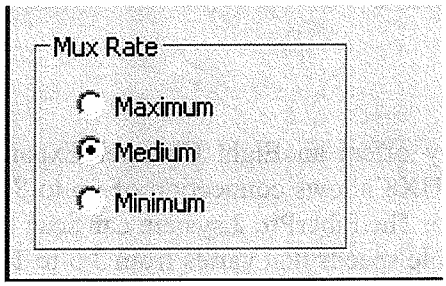


Figure 58. Zoomed in MUX8 Throughput menu.

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MUX8 Front and Rear Panels

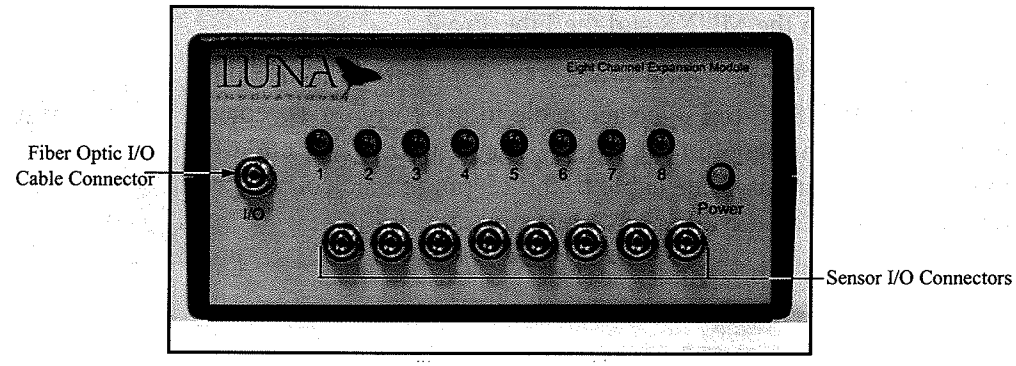


Figure 59. MUX8 Front Panel

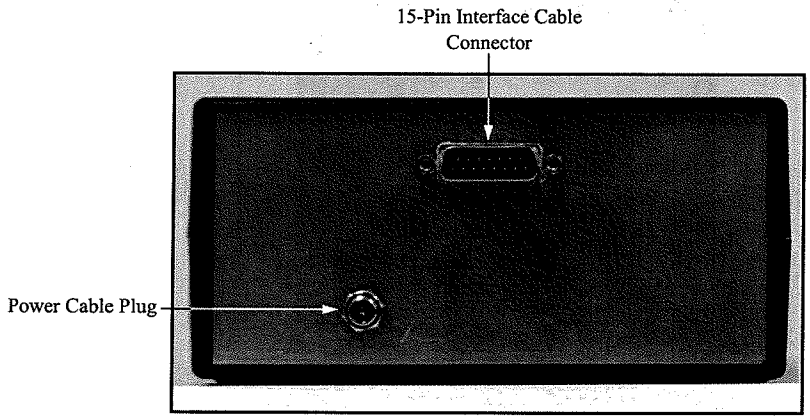


Figure 60. MUX8 Rear Panel

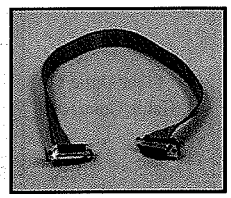
Figures 59 and 60 show the front and rear panels, respectively, of the MUX8 and their connectors. All indicator lights and all fiber optic connections are located on the front panel. The power and interface control connections are located on the rear panel.

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Installation and Setup

The MUX8 should be connected to the FiberPro 2 instrument prior to powering on the FiberPro 2 unit. Figure 61 shows the rear panel connections, and Figure 62 shows the front panel connections between the MUX8 and the FiberPro 2.

1. Begin the MUX8 installation process by connecting the female end of the MUX8 15-pin interface cable to the 15-pin male connector on the rear panel of the MUX8. Connect the male end of the MUX8 15-pin interface cable to the 15-pin female connector on the rear panel of the FiberPro 2 instrument.



5

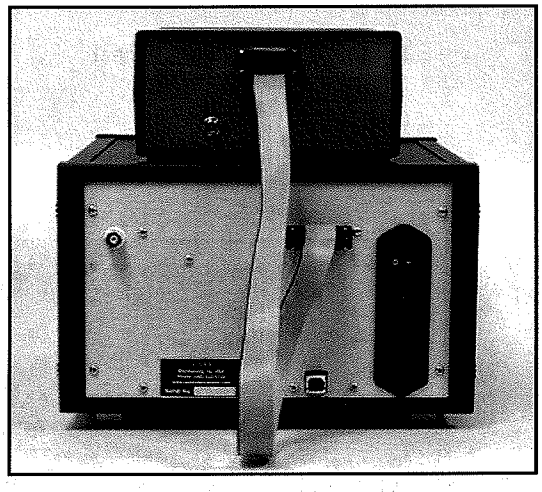
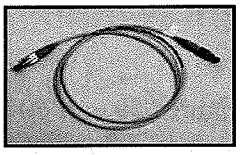


Figure 61. FiberPro 2 and MUX8 Rear Panel Connections

2. Connect the MUX8 fiber optic cable to the "I/O" port on the front panel of the MUX8, and to the "Sensor I/O" port on the front panel of the FiberPro 2 instrument. Refer to Chapter 3 for instructions on properly connecting FC fiber optic connectors.



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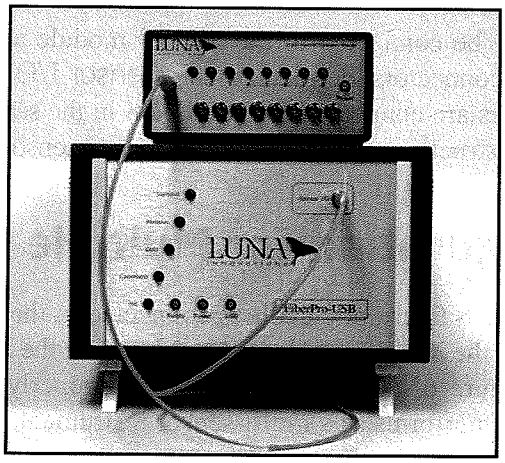
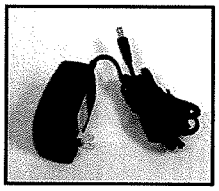


Figure 62. FiberPro 2 and MUX8 Front Panel Connections

3. Verify that the power switch on the rear panel of the FiberPro 2 is in the OFF, "0", position before connecting the MUX8 power cable. Connect the MUX8 power cable. **The yellow "Power" indicator LED on the front panel of the MUX8 will not come on at this time**. Although the MUX8 has a separate power cable, power on/off is controlled by the FiberPro 2 power switch via the 15-pin interface cable.



Once the MUX8 is properly connected to the FiberPro 2, complete the instructions for assembling the FiberPro 2 system. When the FiberPro 2 instrument is powered on, the MUX8 will also power up, and the yellow "Power" indicator LED on the front panel of the MUX8 will illuminate. If the "Power" light does not come on, verify that the FiberPro 2 is powered on, the MUX8 is properly connected to the FiberPro 2, and the MUX8 power cable is plugged in. If the "Power" light still does not light up, contact Luna Innovations Technical Support.

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Connecting Sensors

Up to eight sensors may be connected to the MUX8 module at one time. The MUX8 front panel contains eight FC connectors identical to the "Sensor I/O" connector on the front panel of the FiberPro 2. Sensors are connected to the MUX8 in the same manner as the FiberPro 2. Refer to Chapter 3 for instructions on properly connecting sensors.

Software Configuration for Multiple Sensors

In the hardware, the MUX8 fiber optic cable is connected to the FiberPro 2 at the "Sensor I/O" port. In the software, the MUX8 is selected by checking the MUX present box on the user interface screen. See figure 63. Once the software is properly configured for multi-sensor operation, the FiberPro 2 performs as a multi-sensor instrument.

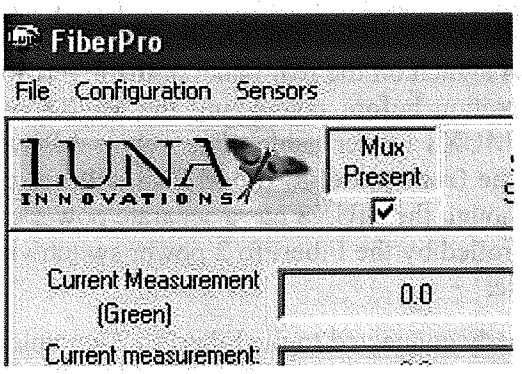


Figure 63. MUX Present Check Box

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Sensor Configuration

Once the MUX Check Box has been selected. The user will need to configure each MUX8 channel that will be used. Configure each channel from the Setup Sensors Menu on the user interface main page or the Sensor Drop down menu. Figure 64 shows this menu.

Note: Each MUX8 channel needs to have a unique sensor serial number for proper operation.

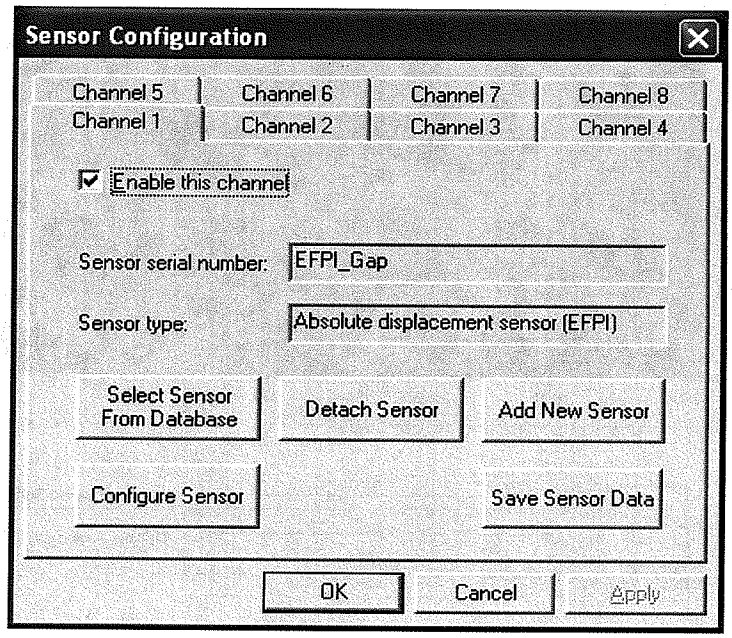


Figure 64. MUX Sensor Configuration Menu

By using the tabs at the top of the MUX Sensor Configuration Menu the user can cycle thru all the channels and configure those channels needed. This menu works in the exact same manner

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as discussed in Chapter 4. Please refer to the section titled "Sensor Configuration" in Chapter 4 for a detailed description on this operation.

Power, Gain, and Offset Configuration.

Next the user will have to set the Power, Gain, and Offset for each of the active MUX channels. Figure 65 shows the "Set Up Power/Gain/Offset" menu.

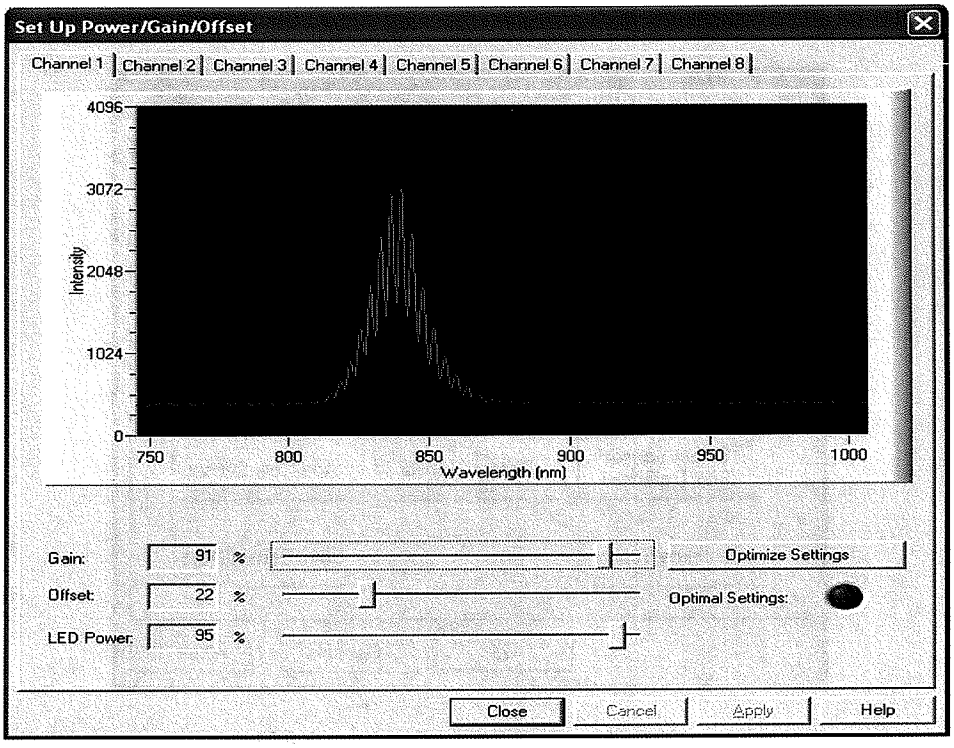


Figure 65. Power / Gain / Offset Menu

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The user should refer to Chapter 4 and the section titled "Configuring the Source and A/D Converter" for a detailed description on setting the power, gain, and offset of each channel.

Algorithm Configuration

Once the proper channels on the MUX8 are configured, sensor-specific algorithms must be selected for each sensor attached for the MUX8. From the User Interface Screen, select Configuration > Set up Algorithms or click Setup Algorithms to open the Algorithm Configuration submenu shown in Figure 66.

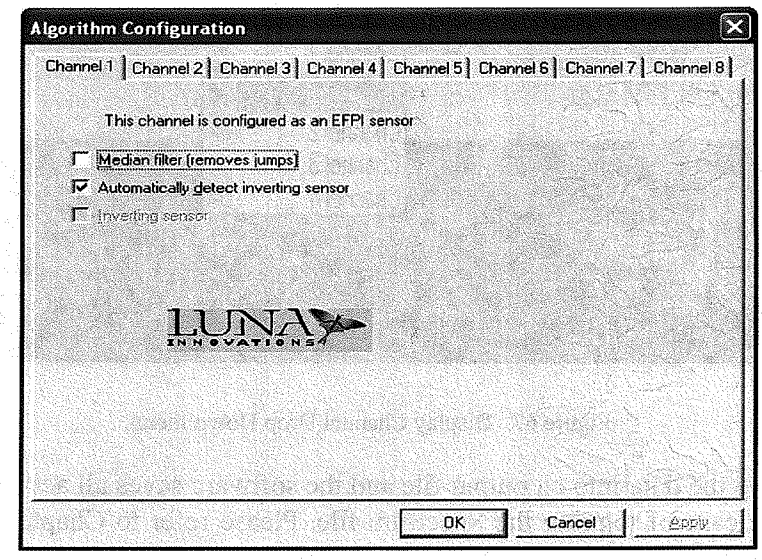


Figure 66. Algorithm Configuration submenu.

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Data Acquisition, Output, and Review

During data processing, the FiberPro software behaves as a single channel system. The data displayed in the Acquiring Data window is determined by the "Display Channel" drop menu on the main user interface screen as shown in Figure 67. By using this feature the user selects which MUX8 data channel is viewed.

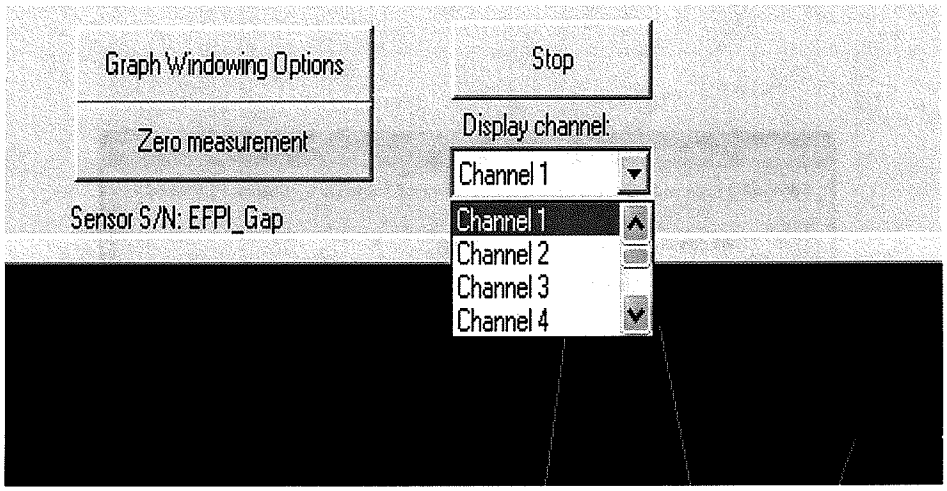


Figure 67. Display Channel Drop Down menu.

The user can log the data into an output file and the software saves all active channels. This is also true in the case of logging the Spectrum file. Please refer to Chapter 4 and the section titled "Reviewing Output Data" for a detailed description on enabling these options.

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Analog Output

The Analog out option is also available when using the MUX8 expansion. The user may select only one channel of the available active channels. Figure 68 displays both when the channel drop menu is closed and open to show your choice of active channels. Please refer to Chapter 4 and the section titled "Analog Out Configuration" for more details on this option.

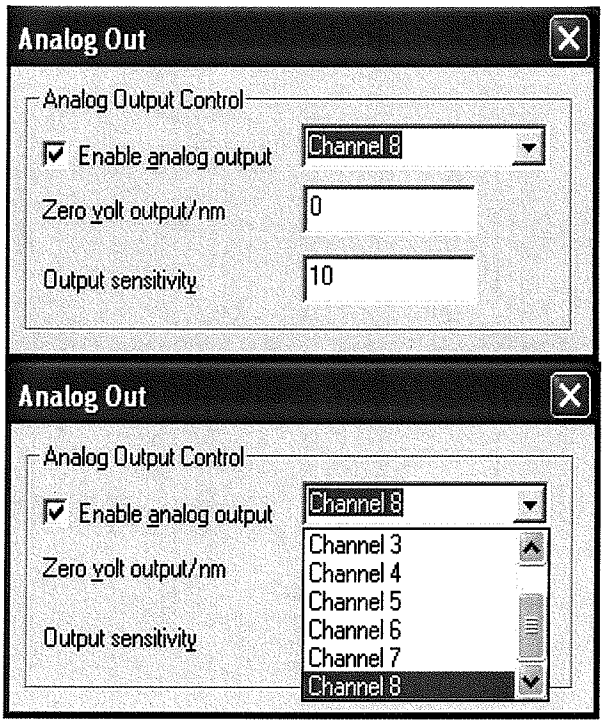


Figure 68. Analog Output Configuration menu.

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Technical Support

If you experience any problems using the FiberPro 2 system, please contact Luna Innovations Technical Support:

2851 Commerce St. SE
Blacksburg, VA 24060 USA
Phone: 540-552-5128
FAX: 540-951-0760
E-mail: support@lunainnovations.com
Web: www.lunainnovations.com

Technical Support hours are 8:00 a.m. - 5:00 p.m. EST, Monday - Friday. All product returns must be performed according to the procedures listed in the Section "Repair Return Procedure" on page 83.

6

General Information

Luna Innovations is dedicated to providing our customers with the highest level of product support and assistance. Every effort was taken to make this manual complete and the instrument easy-to-use. If any inconsistencies or errors are found in this manual, or if you find the instrument difficult to use, please contact Luna Innovations Technical Support at 540-552-5128.

Warranty

Luna Innovations warrants the FiberPro 2 to operate within specifications under normal use for the period of one year from the date of receipt by the purchaser. Any repairs performed to the FiberPro 2 by Luna Innovations during the warranty period are guaranteed for the balance of the one-year system warranty.

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While performing under the warranty, at its option, Luna Innovations will repair or replace any FiberPro 2 returned to Luna Innovations within the one-year warranty period. The FiberPro 2 warranty is applicable as long as the warrantor's examination discloses that the product is defective due to workmanship or materials, and the defect was not caused by misuse, neglect, accident, or abnormal conditions or operations. This warranty is void if the unit enclosure is opened by anyone other than a Luna Innovations employee.

The purchaser is responsible for all shipping, transportation, and insurance charges relating to the return of the FiberPro 2 to Luna Innovations for action under this warranty. Luna Innovations assumes responsibility for all shipping, transportation, and insurance charges relating to the return of the FiberPro 2 to the purchaser as long as the warranty for the returned FiberPro 2 is still valid.

This warranty supersedes all other warranties, expressed or implied, including, but not limited to, any implied warranty of performance, fitness, or adequacy for any particular purpose or use. Luna Innovations shall not be liable for any special, incidental, or consequential damages, whether in contract or otherwise.

Special Agreements

Luna Innovations offers extended product support through special agreements for installation, training, enhancements, and on-site repair. Contact your Luna Innovations Sales Representative for additional details on special agreements.

Documentation Discrepancies

Luna Innovations is dedicated to providing our customers with the highest quality fiber optic-based measurement instrumentation. To achieve this goal, we are continually improving and updating our existing product line. We make every effort to keep our product support literature updated as our product lines are improved. If it is believed that a discrepancy may exist in this manual, please contact Luna Innovations Technical Support, and an updated manual will be promptly shipped to you.

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Repair Return Procedure

DO NOT RETURN A PRODUCT TO LUNA INNOVATIONS WITHOUT FIRST OBTAINING A RETURN MATERIAL AUTHORIZATION (RMA) NUMBER FROM LUNA INNOVATIONS CUSTOMER SERVICE.

Luna Innovations will repair or replace any product under warranty at no charge to the purchaser; however, the purchaser is responsible for all shipping, transportation, and insurance charges relevant to the return. All in-warranty products will be returned to the customer with transportation prepaid.

For Luna Innovations products in need of repair after the warranty period has ended, the customer must provide a Purchase Order Number prior to repair initialization. The purchaser will be billed for parts, labor, and shipping.

If you believe that your product is in need of maintenance or repair:

1. First contact Luna Innovations Technical Support at 540-552-5128 (Voice), 540-951-0760 (FAX), or support@lunainnovations.com (E-mail).
2. Please be prepared to provide the Luna Innovations Service Representative with the serial number and software version of the product and a brief description of the defect or failure. The serial number is located on the rear panel of the instrument. The software version may be obtained by selecting About > Version from the User Interface Screen of the User Interface Software. For more information on obtaining the software version, see the Section entitled "Obtaining the Software Version" on page 54.
3. If Luna Innovations is unable to solve your problem where the instrument is located, you will be issued a Return Material Authorization (RMA) number for your repair.
4. Ship the product needing repair to:

   Luna Innovations, Inc.
   2851 Commerce St. SE
   Blacksburg, VA 24060
   Attn.: RMA # *(your_RMA_number)*

Return shipments must be prepaid. Luna Innovations will not accept C.O.D. or Collect Return Shipments. Airfreight is recommended for return shipments. Whenever possible, the original shipping container should be used for the return shipment. If a substitute carton is

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used, it should be rigid, and packed such that the product is surrounded with a minimum of four inches of excelsior or similar shock-absorbing material. In addressing the shipment, the RMA number must be displayed on the *outside* of the container to ensure proper acceptance by Luna Innovations.

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Specifications

Instrument and Processor Specifications

Model #:	**FiberPro 2**
Physical Dimensions:	10.5" x 9.75" x 6 3/8" (including feet)
Weight:	7 lbs. 13 oz.
Operating Temperature:	10-40°C
Storage Temperature:	-40-60°C
Vibration (Operating):	1.0 g_{RMS} from 5 Hz to 500 Hz
Number of Channels:	1
Scan Rate:	960 Hz
Displacement Resolution:	1 nanometer
Strain Resolution:	1 microstrain
Optical Wavelength:	840 +/- 5 nanometers
Digital Input/Output:	USB 2.0

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Power Requirements:	100-240 VAC, 2.0 A, 50/60 Hz
Measurements Modes:	Strain, Absolute Displacement, Relative Displacement, Absolute Pressure, Differential Pressure, Temperature, and Moisture.
Connectors:	PC/FC Connectors
Power -on Warm-up Period:	30 minutes
User-Supplied CPU Requirements:	2.5 GHz Pentium® 4, Windows® XP®(Srv Pak 1) 512 MB / 333 MHz RAM 533 MHz Front Side Bus Speed Dedicated Video Memory at 32 MB USB 2.0 Communications Port 1 Gig dedicated hard disk space
User-Supplied Display Requirements:	Recommended display is 17" viewable, capable of 1280 x 1024, 16-bit resolution.
Optional Accessories:	MUX8 Eight-Channel Expansion Module, Application-specific Sensors and Adapters

All specifications are subject to change without prior notification.

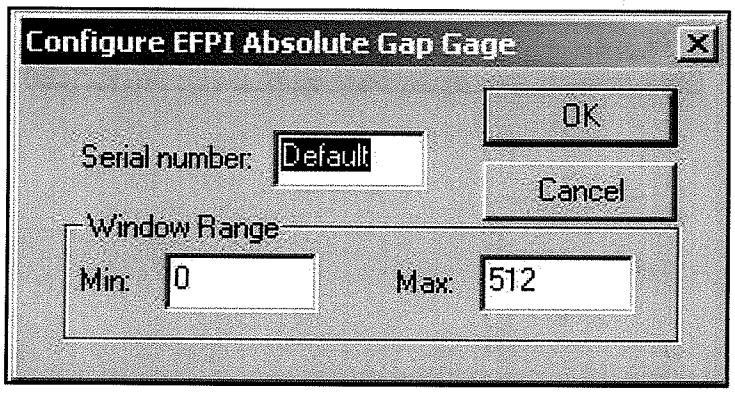
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Sensor-Specific Algorithm Configuration Submenus

The following pages contain the Algorithm Configuration submenus for each type of sensor supported by the FiberPro 2 instrument.

EFPI Absolute Gap Sensor

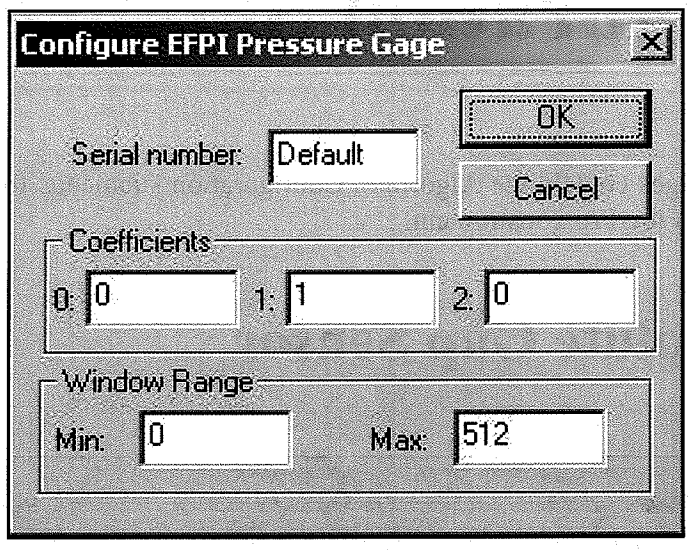


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EFPI Pressure Sensor

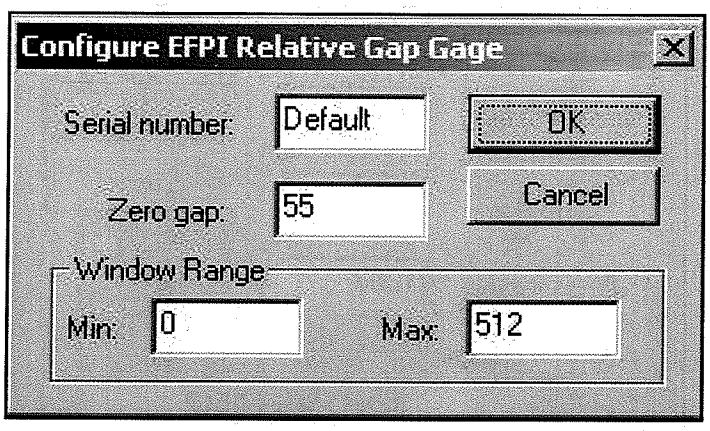


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EFPI Relative Gap Sensor

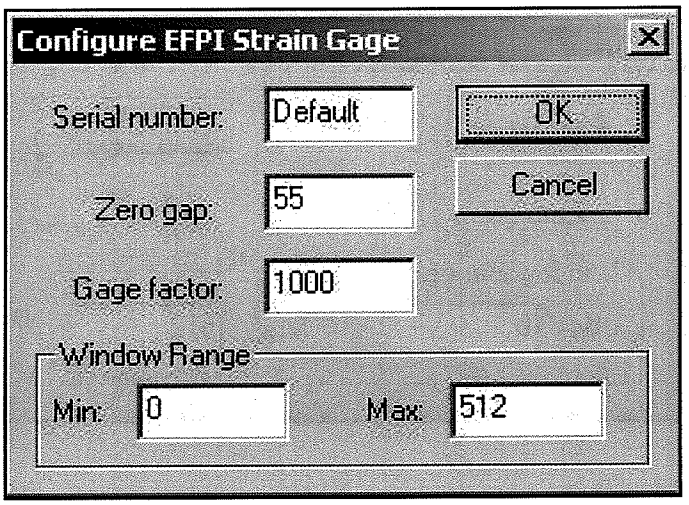


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EFPI Strain Sensor

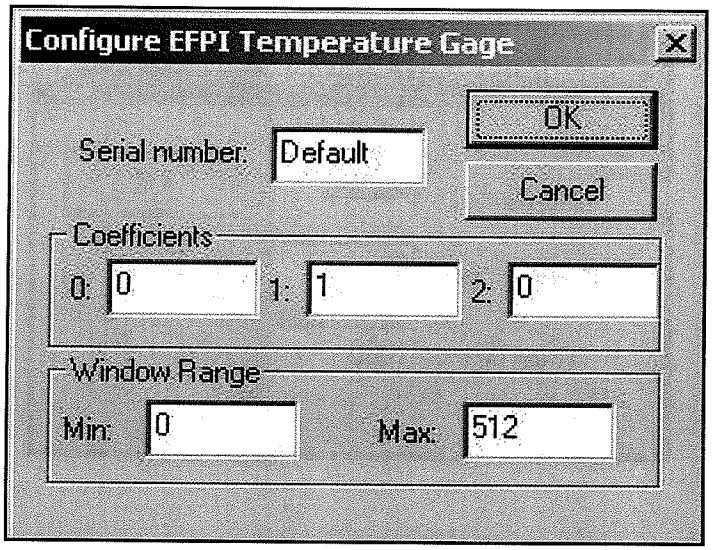


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EFPI Temperature Sensor

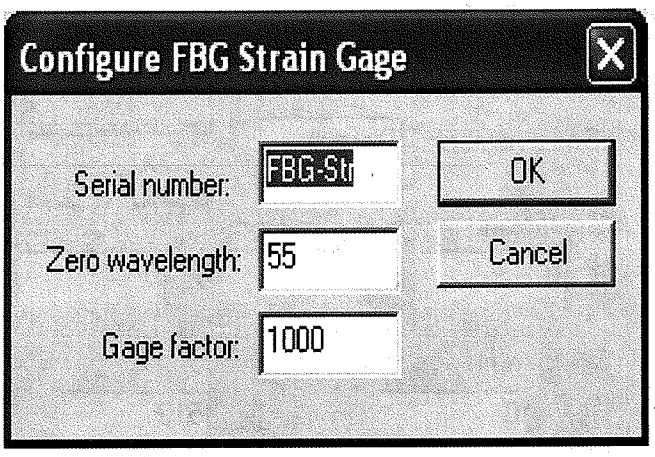


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FBG Strain Sensor

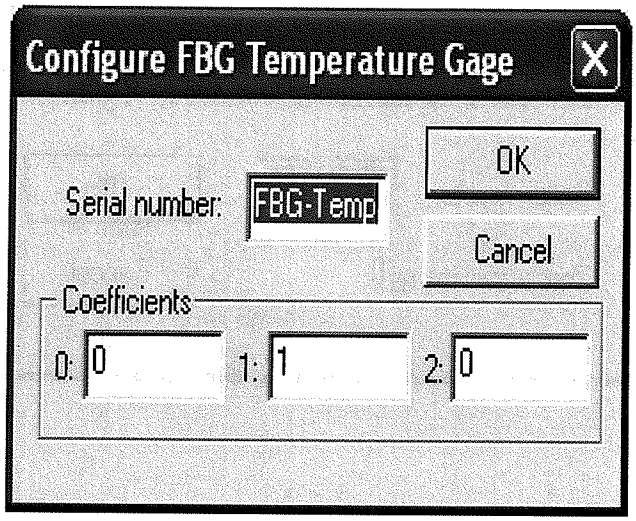


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FBG Temperature Sensor

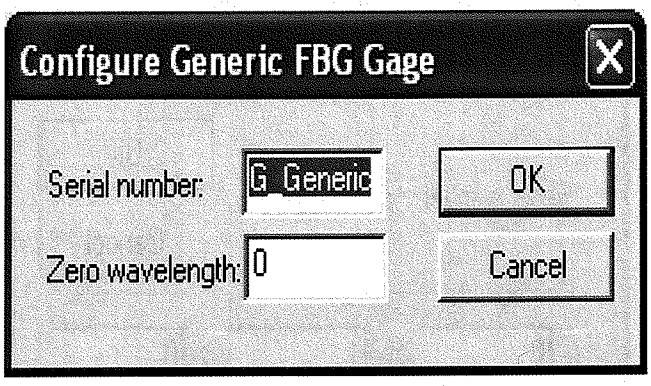


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Generic FBG Sensor

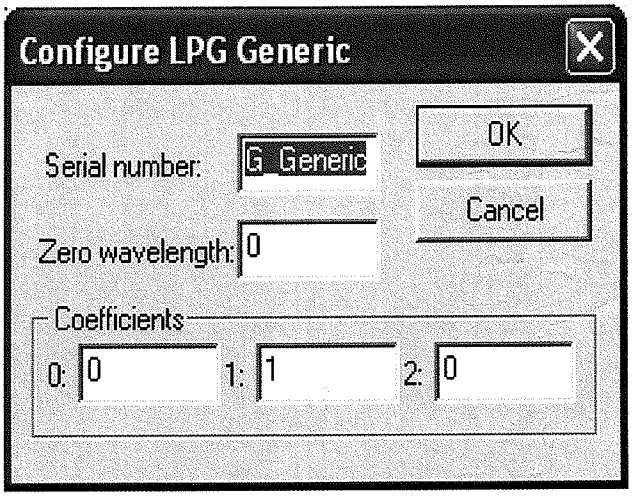


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LPG Generic Sensor



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