Data Acquisition Software

SP-840052 Software Instruction Manual



1295 Morningside Ave., Unit 16-18 Scarborough, ON. M1B 4Z4 Canada Phone: 416-261-4865 Fax: 416-261-7879

Environmental Measurement Instruments

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License Information

Your software is licensed for one machine only. If you require additional copies, a site license may be purchased from SCIGIENE Corporation. You may not transfer make copies for distribution to others. You may not reverse engineer, disassemble, translate, or in any way derive from this software any source code form.

System Requirements:

Win 95 or higher operating system, 486 PC or higher with at least one serial port, RS232 Cable (SP-840054 sold separately),

Features:

- Up to 16000 sample readings with real-time clock memory.
- Programmable sample interval from 1 second to 3,600 seconds
- Unit displayed with changing setting
- User-defined maximum (High) and minimum (Low) alarm setting.
- Provides further analysis by downloading data to a 3rd party software program. Data is saved in a text format (.txt) and can easily imported into spreadsheets, databases or word processing programs.
- Includes one CD Rom and this operation manual.

Software Installation:

- Connect the RS232 cable to the computer's com port.
- Insert the CD Rom into the computer.
- Click the Install Software button and follow the directions.

• When the installation is complete exit the program and restart your computer.

• Start the software and configure the com port settings (Fig. 2, Page 5).

General Operating Instructions:

• Start the software. The following screen example (Fig. 1) shows the screen's appearance before the manometer is connected. The readings in the lower blocks indicate 0.00 and "Undefined" as the title.



• Connect the RS232 cable to the computer's serial port and connect the Manometer to the cable.

Fig.2



Com Port Settings

- Click "Com Port" (Fig. 2) on the menu bar, or press Alt + C simultaneously to enter Com Port settings.
- Set up the RS232 port and related settings (Baud rate, Data bits, Parity and Stop bits, Com Port).
- Click OK to save the setting, then click Exit. Click Cancel to exit without saving

The following example (Fig. 3) shows the lower blocks of the screen with the manometer connected. The word "Pressure" is shown in the left block and indicates differential pressure data log-ging. The reading is shown with the unit of "PSI". The right block shows "Undefined" with a zero (0.00) value.



Using High/Low Alarms

Click the Alarm SW button to activate the alarms (Fig. 5). Set your alarm limits using the up or down arrows. If the reading exceeds the high or low limits, the corresponding alarm button will turn red.

Statistics

Click "Statistics" on the menu bar, or press ALT + T to view and print a statistic histogram (Fig. 4). Click EXIT to close.

00-, 10 0.8 0.6 0.4 0.2 0.0 0.2 0.4 0.6 0.8 1.0

0

PRESSURE

Maximum

Minmium

Mean

Std.Dev

Maximum

Minmium

Std.Dev

6

Mean

CHANNEL 2

-0.1

-0.1

-0.1

0.0

0.0

0.0

0.0

0.0



15-15

10-

05-

4



Fig.5

On the left side of the screen, there are 3 setting for data logging (Fig. 5): Logger Setting, Recording Setting and Y OFFSET.

Logger Setting

Select **Sample Data** settings: 4000, 80000, or 16000 records.

Select **Sample Rate** in Seconds: 1 to 3600. If the reading is out of range, a pop-up warning will appear on the screen.

Recording Trigger Setting

Click **Start** or Alt+S to start recording Click **End** or Alt+E to stop recording. Clicking **Exit** closes the program.

Display Control

Y OFFSET(DIV): There are 5 ranges: -5, -2, 0, 2, and 5.

Y GAINS(DIV): There are 7 settings: 1, 2, 5, 10, 50, 100 and 200.



The above example (Fig. 6) shows the Y OFFSET as "0" and Y GAINS as "50." The Y range indicates from 0, 50, 100, 150, etc. in increments of 50.



By selecting Y OFFSET as "-5" and Y GAINS as "50, the Y range indicates from -250, -200, -150, -100, -15, 0, 50, 100, 150, 200, etc, in increments of 50 (Fig. 7).



The above screen (Fig. 8) shows Y OFFSET as "0" and Y GAINS as "50". The Y range indicates from 0, 50, 100, 150, etc. in increments of 50.



The above screen (Fig. 9) shows Y OFFSET as "0" and Y GAINS as "100". The Y range indicates from 0, 100, 200, 300 etc. in increments of 100.

Display Range

Using the Display Range, you can control which records you view on the screen. There are 5 ranges: 0.5K (500), 1K, 2K, 4K, and 8K. The below screen (Fig. 10) shows the display range indicator on "2K" The record numbers that will be displayed range from 0000 to 1999 for a total of 2,000 (2K) records.



Open an Existing File

- Click Retrieve File on the tool bar.
- Click on the desired File name, then click OK.
- The number of retrieved records will be displayed. (Fig. 11).
- All files are in the .txt format.





Saving Files

• Click Save File on the menu bar.

• Save the data with a new name by clicking Save File and typing a new name as the file name.

• The record number, date, time, and PSI data are saved as a text (.txt) file.

• After saving the file, additional analysis can be performed using 3rd party software.

Using Data with 3rd Party Software

• In your software program, select file, open, then select "All Types" or "Text" from the "Files of type" box. Find the file you saved. Choose the "Tab delineated" file.

• You can now work with the data as you would any other data file in your program. Use the "Save As" selection to save the data in the new format. Consult the 3rd Party

Software instructions for more information.

Data Format

Baud Rate: 2,400 bits/sec. Data Bits : 8, Stop Bit : 1 PXXXX P-XXXX E1OL: Error msg - the logging data exceeds max. pressure range. E2UL: Error msg - the logging data exceeds min. pressure range.

Print Options

• Click Print Graph on the tool bar, or ALT + P on the keyboard.

• The following (Fig. 12) is an example of the print option screen. Click Properties to change printers. You can also change paper specifications from this option screen.

mnt		_		
Printer Info				
Name: HP D	eskJet S40 Printer		-	Properties
Status: User i	intervention required; 0 do	cument(s) wai	ting	
Type: HP D	eskJet 540 Printer			
Where: WLAE	1\HP			Eject page after printing
Comment:				☐ Print to file
Comment: Graphics Options —				F Print to file
Comment: Graphics Options — <u>W</u> idth:	Entire paper	 ♥ \$1 		□ Print to file □ Force black & white
Comment: Graphics Options — Width: Height:	Entire paper Proportional to width	 ♥ \$1 ♥ \$1 		Print to file Force black & white Stals to segment
Comment: Graphics Options — Width: Height: Horizontal offset:	Entire paper Proportional to width Centered	 ↓ \$1 ↓ \$1 ↓ \$0 		Print to file Force black & white Stals to Arguin Visible area only

WARRANTY

Opening the meter to expose its electronics will break the waterproof seal and void the warranty.

For warranty information or service, contact your Distributor:

Scigiene Corporation

Tel.416-261-4865 Email: support@scigiene.com

The defective unit must be accompanied by a description of the problem and your return address.



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