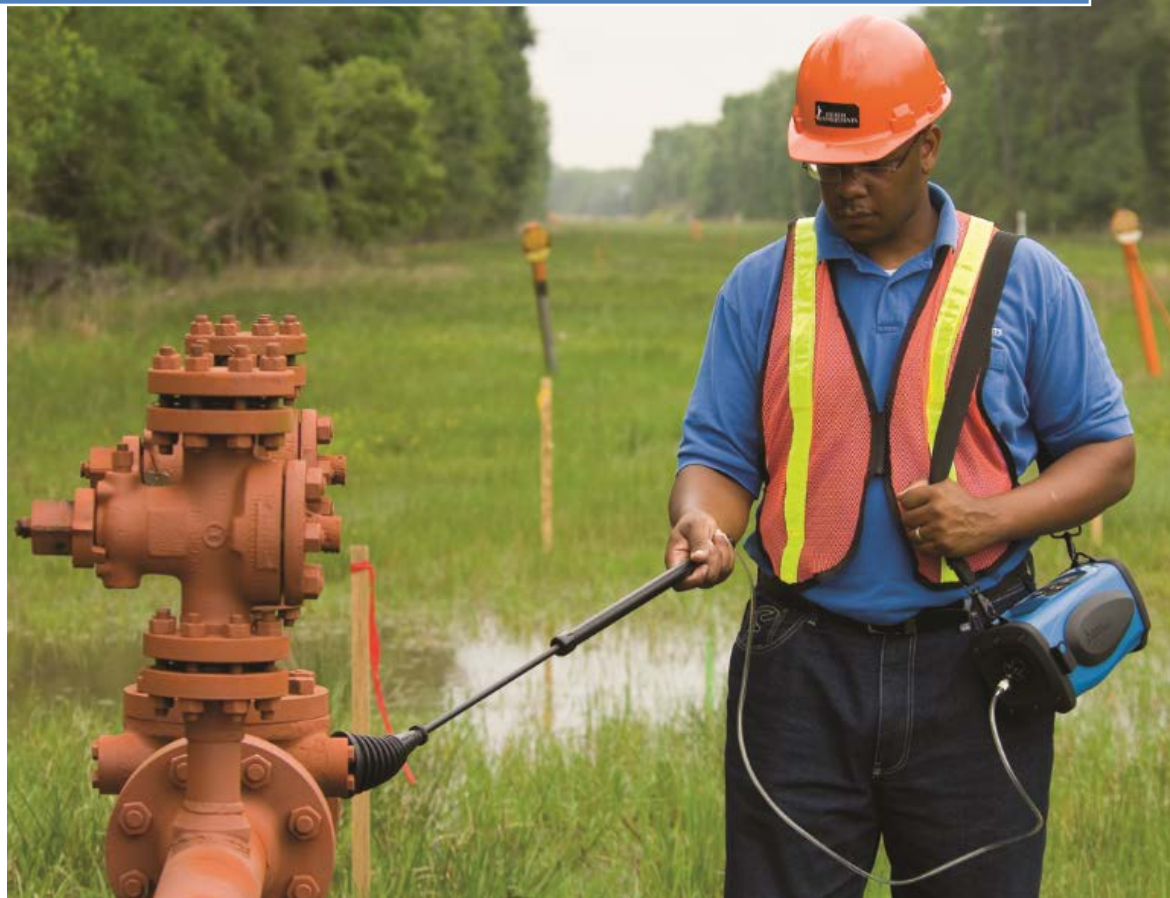




DP-IR™ Self-Test Log User's Manual



Heath Consultants Incorporated
9030 Monroe Road
Houston, TX 77061
www.heathus.com

REV C

DP-IR Self-Test Log User's Manual

March 4, 2015 Revision C

Version: 1.2.1

Overview:

The DP-IR Self-Test Log program is for use with the Heath DP-IR instrument. The program will download the Self-Test log from a DP-IR instrument. The user can then review the data and save the data to a file. A saved file can then be opened with a spreadsheet program for further use as needed.

System Requirements:

- PC running OS 32-Bit Windows XP, 7, or 8.1
Note: Has been verified to operate on OS 64-Bit Windows 7
- Serial Com port or USB to serial port adaptor or Bluetooth module (if DPIR has the Bluetooth option installed)
- Serial RS232 cable (standard cable with male, female connectors)

Installing Program:

- Run the install program; DPIR_SelfTest_Setup

Installed Files and Folders:

The setup program will install the program and files in default folder
c:\Program Files\Heath Consultants\DPIR.

When the program first runs, it will create a new folder for storing data files:
C:\DPIR Data Logs\

A shortcut will be placed on the desk top and in the Start\Programs

Connecting the DPIR to the PC:

Note: The RS communication option is preset.

To connect the DPIR to the PC using the RS232 interface:

- Connect a RS232 serial cable to the DPIR and to the PC
- Turn ON the DPIR and allow for countdown to end
- Select the RS communication option in the DPIR menu
- Start the DPIR Self-Test Log program

Note: If your computer has only USB ports (now common on laptops) then a USB to RS232 converter must be used. Be sure to set the com port to 1, 2, 3, or 4.

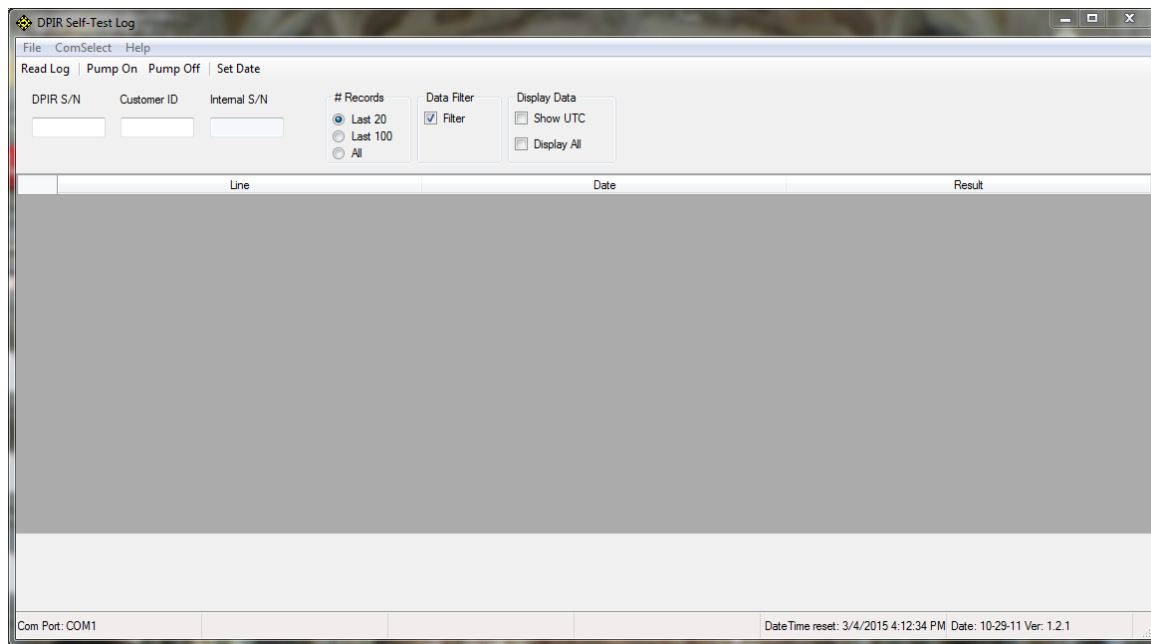
To connect the DPIR to the PC using Bluetooth:

- Turn ON the DPIR and allow for countdown to end

- Select the BT communication option in the DPIR menu
- Start the DPIR Self-Test Log program

Note: The program will try to open a COM port 1-6. If it can't open a COM port, an error message is displayed in the lower message panel. The user can then select a specific COM port to use from a list shown by clicking on the "ComSelect" button located at top left of program.

Using DPIR Self-Test Log program:



1. Launch the program through the desktop or Start Menu.
2. The user can enter the DPIR serial number and a customer specific ID if desired. The internal serial number is automatically read and displayed.
3. Choose the amount of records to download.
4. Choose the "Filter" option if you do not want to view any partial record. (see **Note 1 & 2** below) This option will show the result of each Self-Test along with a date and time.
5. Choose the "Show UTC" if you want to display time in Universal Coordinated Time. Otherwise the time is displayed in local time. (see **Note 2** below)
6. Choose the "Display All" if you want to display additional Self-Test parameters. Otherwise just the date and results are displayed. (see **Note 2** below)
7. Click the "Read Log" button. It will take up to 60 seconds to download the full log history. (see **Note 1** below)
8. The data will then be displayed in the log table.

**** **Note 1** ****

Be sure to **not** run a self-test for at least 60 seconds after clicking the “Read Log” button. Doing so may result in a partial creation of a Self-Test record.

**** **Note 2** ****

When the “# of Records” is selected and only the “Filter” box checked, the extracted data time will be in local time zone military time. With the “Show UTC” box checked, the time will also be in military time, but also in GMT (Greenwich Mean Time).

Set the Current Date and Time:

Should the date and time become off, it can be reset (GMT). This Date & Time will appear at bottom right corner of the Self-Test Log program in Greenwich Mean Time form.

1. Click “Set Date”.

Save the DPIR Self-Test Log:

To save the log file

1. Click “File”->”Save”.
2. In the pop-up Window “Save Self-Test Records”: enter a file name; select a file type (CSV file format is the default); and select a location to save the file.
3. Click “Save”.

View previously stored DPIR Self-Test Logs:

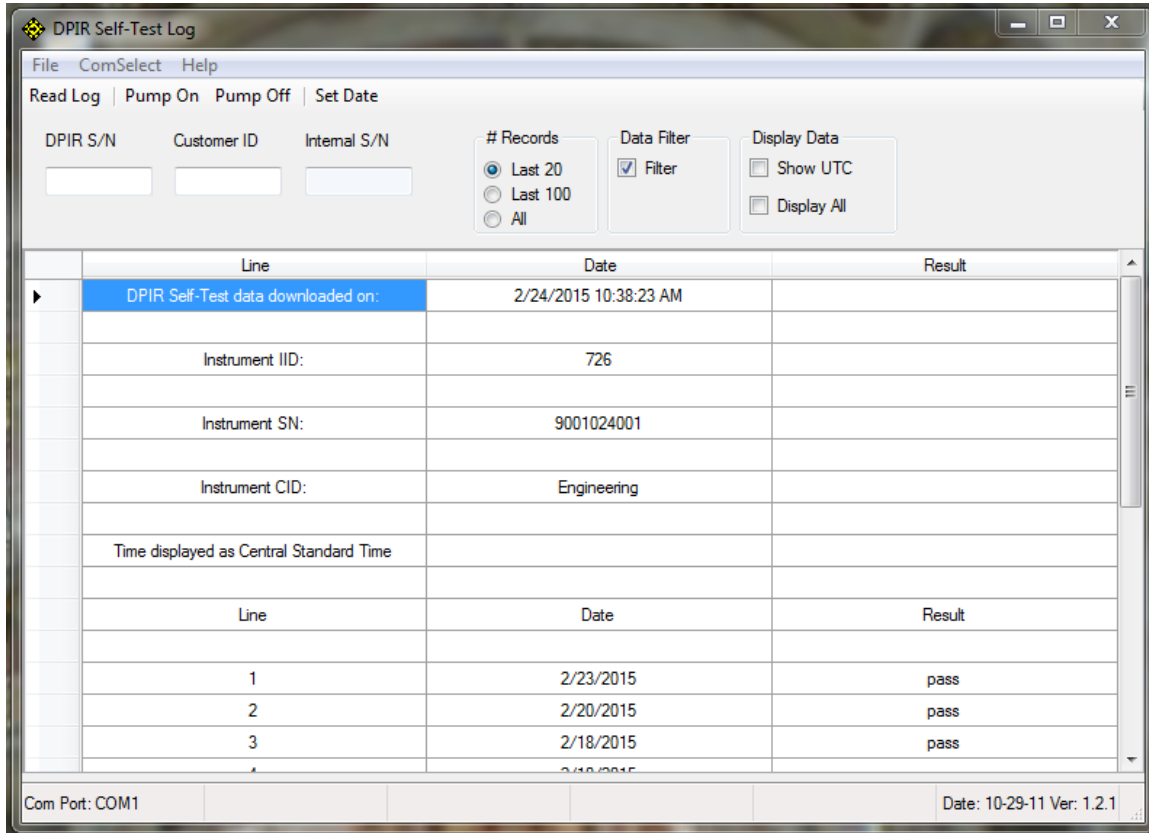
To view a saved log on the computer while not using the DPIR Self-Test Log program

1. Go to the location where the file was saved.

To view a saved log using the DPIR Self-Test Log program

1. Click “File”->”Open” at top left corner of program.
2. In the pop-up Window “Open Self-Test Records”, select the desired file. Click “Open”. The data will then appear within the body of the program.
3. To close the current log, click “File”->”Close”.

Example:



Print the DPIR Self-Test Log:

To print a previously saved log, go to the location where the file was saved. You may open the log using a spreadsheet application and print from that application.

Example:

DPIR Self-Test data downloaded on: 2/24/2015 11:18:00 AM				
Instrument IID: 726				
Instrument SN: 9001024001				
Instrument CID: Engineering				
Time displayed as Central Standard Time				
Line	Date	Time	Result	
1	2/23/2015	13:29:16	pass	
2	2/20/2015	13:45:31	pass	
3	2/18/2015	13:11:07	pass	
4	2/10/2015	11:37:24	pass	
5	2/3/2015	06:37:00	pass	
6	2/1/2015	19:44:08	pass	
7	12/15/2014	10:55:29	pass	
8	12/12/2014	15:10:36	pass	
9	12/11/2014	15:36:43	pass	
10	12/11/2014	09:14:51	pass	
11	12/9/2014	13:58:37	pass	
12	12/9/2014	13:55:21	pass	
13	12/9/2014	13:51:41	pass	
14	10/14/2014	11:04:33	pass	
15	10/14/2014	11:00:45	pass	
16	10/14/2014	09:11:00	pass	
17	10/9/2014	15:44:53	pass	
18	10/6/2014	15:50:01	pass	

Self-Test Log Data Format:

The following data fields are stored and reported as a result of a self-test:

- **Line:** sequential recorded number created by the log program. An asterisk (*) by the number indicates that the record may be corrupted.
- **Date:** The date of the self-test.
- **Time:** The time (in GMT) of the self-test.
- **Lo_gas V:** The voltage level of the Lo_gas detection channel. Use full indicator of the zero voltage level. If gas is present during the test, this value will be high.
- **Hi_gas V:** The voltage level of the Hi_gas detection channel.
- **Light Lev V:** The voltage level of the light level detection channel.
- **Last PPM Corr:** The PPM correction value prior to the self-test.
- **New PPM Corr:** The PPM correction value after the self-test.
- **Result:** Self-test pass or fail result.
- **% Gas Coef:** % Gas correction coefficient.

The screenshot shows the 'DPIR Self-Test Log' application window. At the top, there are menu options: File, ComSelect, Help. Below the menu is a toolbar with buttons for 'Lead Log', 'Pump On', 'Pump Off', and 'Set Date'. The main area contains a table with columns: Line, Date, Time Central Standard Time, Lo_gas V, Hi_gas V, Light Lev V, Last PPM Corr, New PPM Corr, Result, and % Gas Coef. The table lists 15 records (Line 0001 to 0015). Record 0015 is highlighted in red, indicating a failed test. The bottom status bar shows 'Com Port: COM1', 'Date/Time reset: 4/17/2014', 'Date: 10-29-11', 'Ver: 1.2.1', and the system clock '10:52 AM'.

Line	Date	Time Central Standard Time	Lo_gas V	Hi_gas V	Light Lev V	Last PPM Corr	New PPM Corr	Result	% Gas Coef
0001	4/17/2014	09:21:47	0.27	0.02	4.02	24.00	-11.00	pass	104.00
0002	3/21/2014	13:35:59	0.25	0.02	3.90	-3.00	24.00	pass	104.00
0003	11/11/2013	14:31:44	0.24	0.02	4.02	20.00	-3.00	pass	104.00
0004	11/11/2013	13:31:34	0.22	0.02	3.86	0.00	20.00	pass	104.00
0005	11/6/2013	12:12:29	0.24	0.02	3.94	66.00	0.00	pass	104.00
0006	11/6/2013	12:01:00	0.22	0.02	3.84	127.00	66.00	pass	104.00
0007	10/2/2013	08:31:35	0.24	0.02	3.98	29.00	0.00	pass	104.00
0008	10/2/2013	08:16:26	0.22	0.02	3.90	-22.00	29.00	pass	104.00
0009	10/1/2013	16:19:44	0.22	0.02	4.10	3.00	-22.00	pass	104.00
0010	10/1/2013	16:17:07	0.22	0.02	4.08	-7.00	3.00	pass	104.00
0011	10/1/2013	15:27:24	0.22	0.02	3.96	3.00	-7.00	pass	104.00
0012	10/1/2013	08:26:31	0.20	0.02	3.82	-21.00	3.00	pass	104.00
0013	9/30/2013	15:20:20	0.18	0.02	3.86	0.00	-21.00	pass	104.00
0014	10/2/2013	14:14:26	0.20	0.02	4.00	0.00	-11.00	pass	104.00
0015	9/26/2013	04:10:50	0.45	0.06	3.84	127.00	0.00	fail	104.00

END of DOCUMENT