



## Fan-supplied Positive-pressure Breath-responsive Respirator



## SE-win User Instructions



300346-02 A  
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## ABOUT SE-win

SE-win is an advanced PC-based software utility designed specifically for the Advanced models of the SE400 range of positive-pressure breath-responsive air-filtering respirators. SE-win is the gateway to a wide range of advanced functionality, including logging of events during use, user-configurable warnings (filter end-of-life, filter-missing, self-test) and real-time monitoring of important parameters (mask pressure, filter resistance, air flow rate and volume).

The SE400 features that are accessible through SE-win do not affect the level of protection of the respirator, but provide enhanced management and monitoring for the user.

These user instructions should be read in conjunction with the *SE400 User Instructions (600006)* or *SE40 User Instructions (100423-01)*.

### Warning

Refer to the SE400 or SE40 user instructions for information on the safe use of the respirator. Incorrect use of the respirator may result in personal injury.

The SE-win software and user instructions can be found on the SE400/SE40 CD-ROM (300345-01), and are also available for download from the S.E.A. website, at [www.theseagroup.com.au](http://www.theseagroup.com.au)

Data cable DC-A is required for connecting the respirator to the serial port of a PC. If no serial port is available, a USB adapter may be used to create a virtual serial port.

## SE-win FUNCTIONALITY

These user instructions describe the operation of the latest version of SE-win, which is also known as “SeWin2”. SE-win has the following functionality:

- Logging and downloading of important data on the operation of the SE400, including the nature of any events and the time they occurred.

The data logger is a powerful tool for analysing the operating patterns of SE400 users in the workplace, and can assist in the development of safer work practices.

Data logs can be downloaded and then printed out and/or saved to a file.

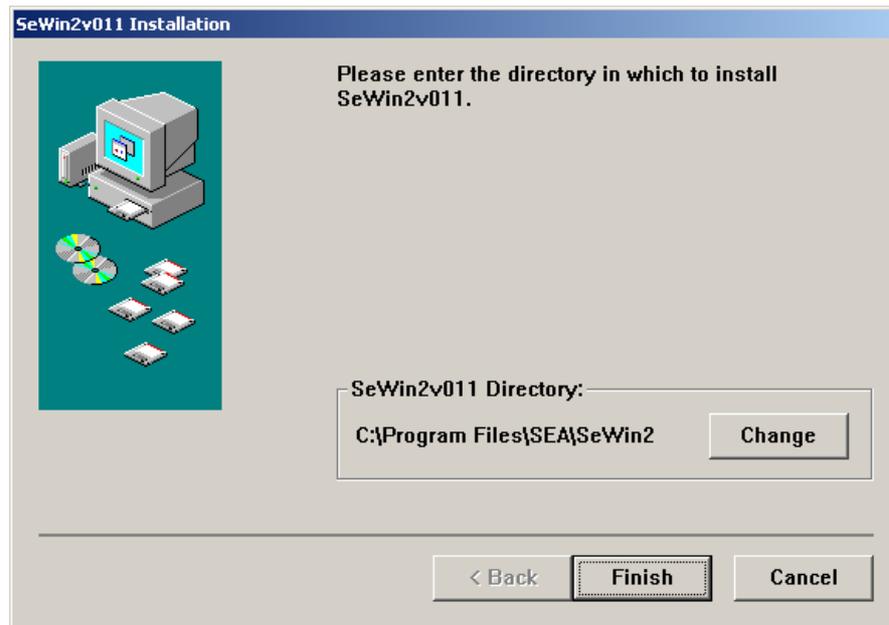
The data logging function can be turned on or off, as can the “data log full” warning.

The events logged are:

- Power on and power off
- Selection of emergency mode
- All alarms and warnings
- Self tests, and whether passed or failed
- Filter life resets
- Data log downloaded
- Enabling and customising the Filter End Of Life (FEOL) function. There are a number of optional filter life modes, and the warning function can be turned on or off (the factory default is OFF).
- Enabling and customising the Self-Test function. There are a number of optional warning modes, and the warning function can be turned on or off (the factory default is OFF).
- Changing time and date settings of the SE400
- Real-time monitoring of various parameters during use while connected to a PC:
  - mask pressure
  - pressure drop across the filters
  - flow rate and volume through the filters

## INSTALLING SE-win

1. Close all applications running on the PC on which SE-win is to be installed.
2. Create a temporary subfolder. Extract file “SeWin2vxxx\_Installation.zip” file to this subfolder (where “xxx” is the current revision of the software). The file can be found on the SE400/SE40 CD-ROM, or downloaded from the S.E.A. website, at [www.theseagroup.com.au](http://www.theseagroup.com.au)
3. Run the extracted file SETUP.EXE. The following dialog will appear. The default installation folder is C:\Program Files\SEA\SeWin2. You may select a different folder by selecting <Change>. To commence installation, select <Finish>.



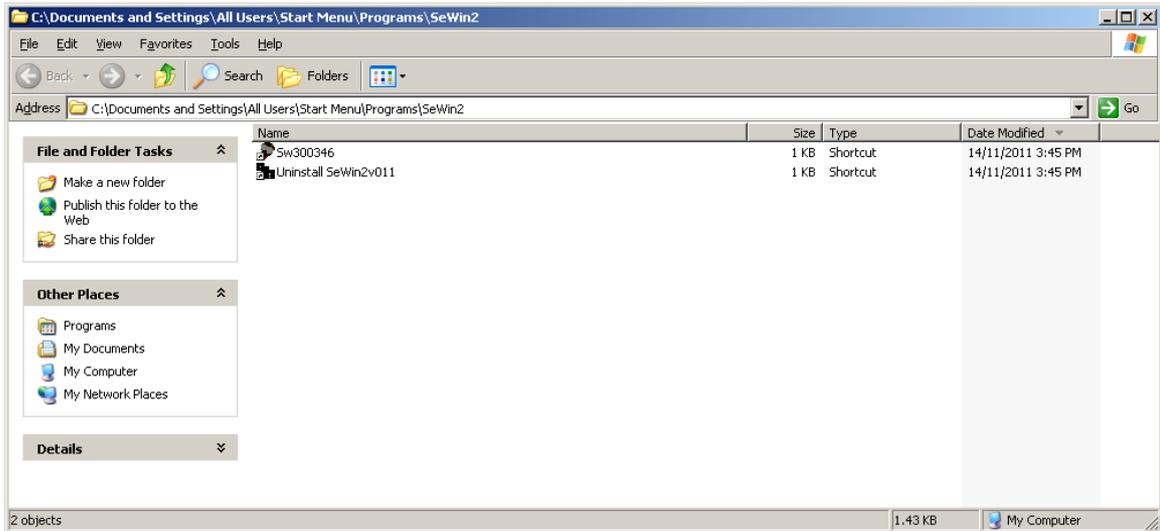
4. The following window may appear temporarily during installation.



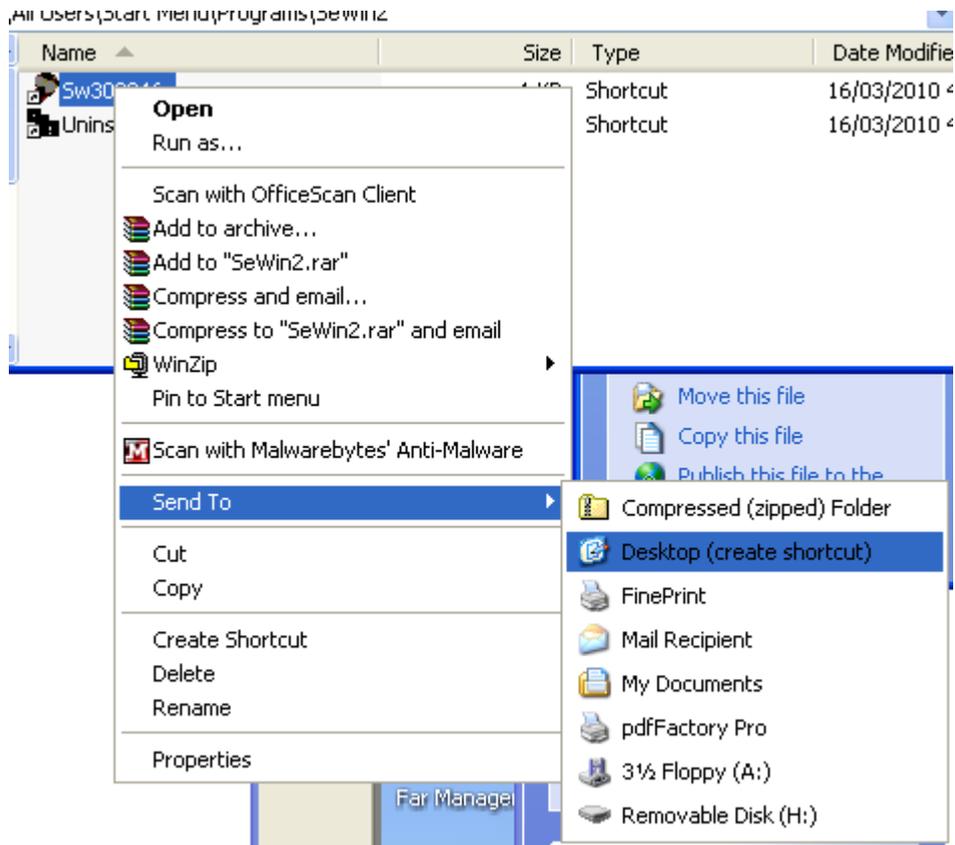
5. The following dialog will appear. Select <OK>. Reboot the PC.



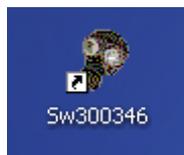
6. SE-win is now installed. The following subfolder will appear.



7. To create a link on your desktop, right-click on file <Sw300346>, select <Send To> and <Desktop (create shortcut)>.



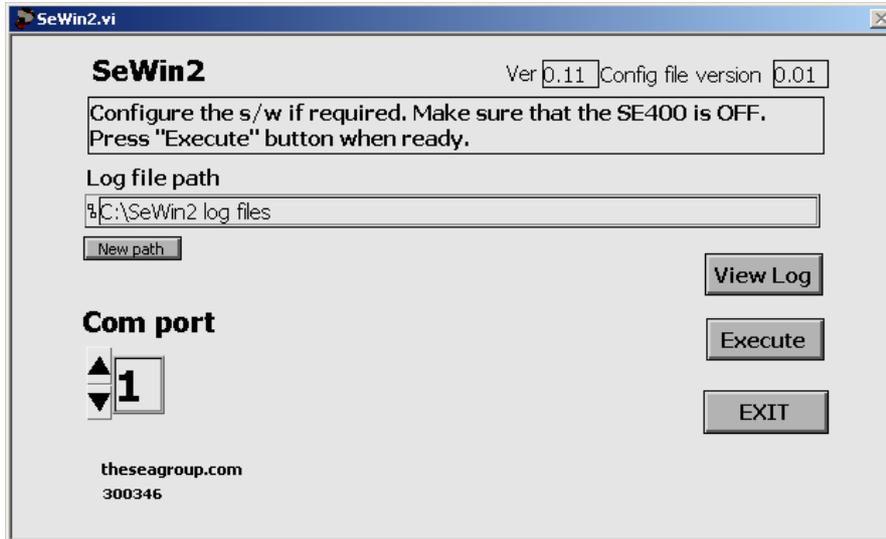
8. Your desktop should now contain an icon like this.



## SETTING UP AND USING SE-win

1. Double-click the icon to run SE-win. The default screen will appear, as shown below.

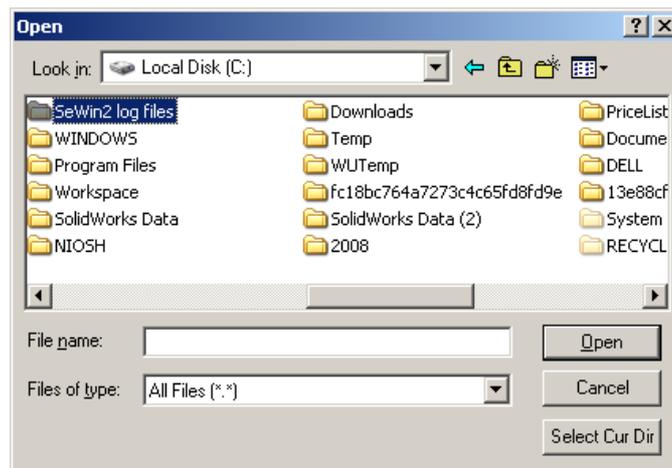
Note: The various SE-win screens have a status display near the top. Processing of actions often takes a few seconds. Wait until the status is “Ready” before requesting the next action.



2. Select the PC serial COM port you wish to use, by clicking the up/down arrows under “Com port”, above.

Note: If a USB-to-serial adapter is used, ensure that the adapter driver has established a virtual COM port.

3. The log file path – the destination folder in which you would like log files to be saved – is displayed in the field under “Log file path”. To select a different path, select <New path>. The following dialog will appear. Select the desired destination folder and select <Select Cur Dir>. The new path will be displayed.

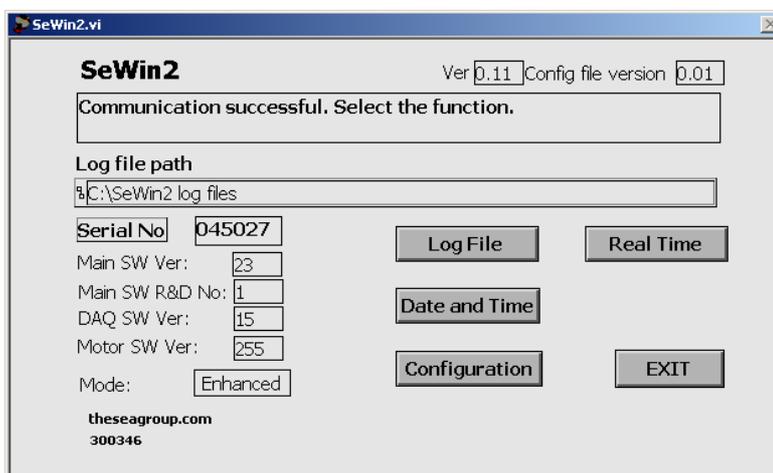


- Using the SE-win data cable (part no. DC-A, supplied with the SE400), connect the SE400 to your PC. Connect to the PC via the serial COM port you selected above. Connect the cable to the SE400 at the connector next to the start button (see arrow below).

Note: If the PC has no serial COM port, connect to a USB port using a commercially available USB-to-serial adapter. Ensure that the adapter is compatible with the PC operating system. Use the com port number allocated by the USB adapter – this can be found under the PC's "control panel".

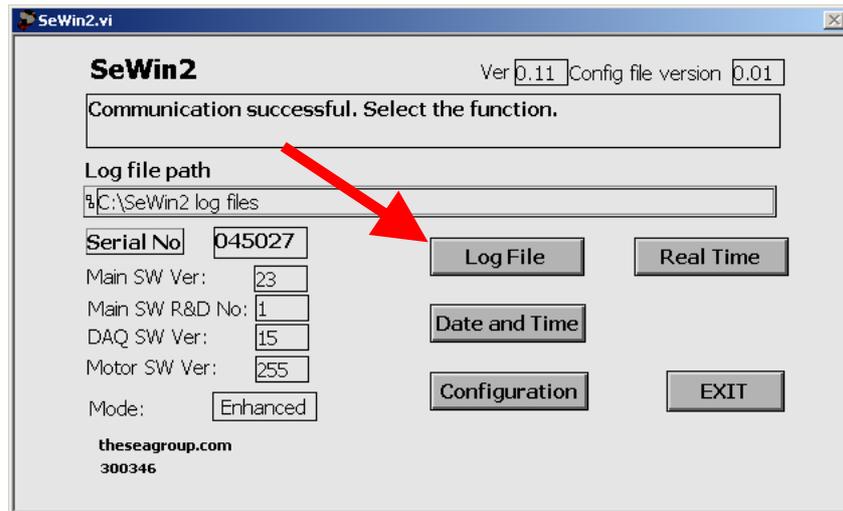


- Fit a charged battery to the SE400. Select <Execute>. SE-win will attempt to establish communication with the SE400. When successful, a single green indicator LED will appear on the SE400. The SE400 serial number and software revisions will be displayed.



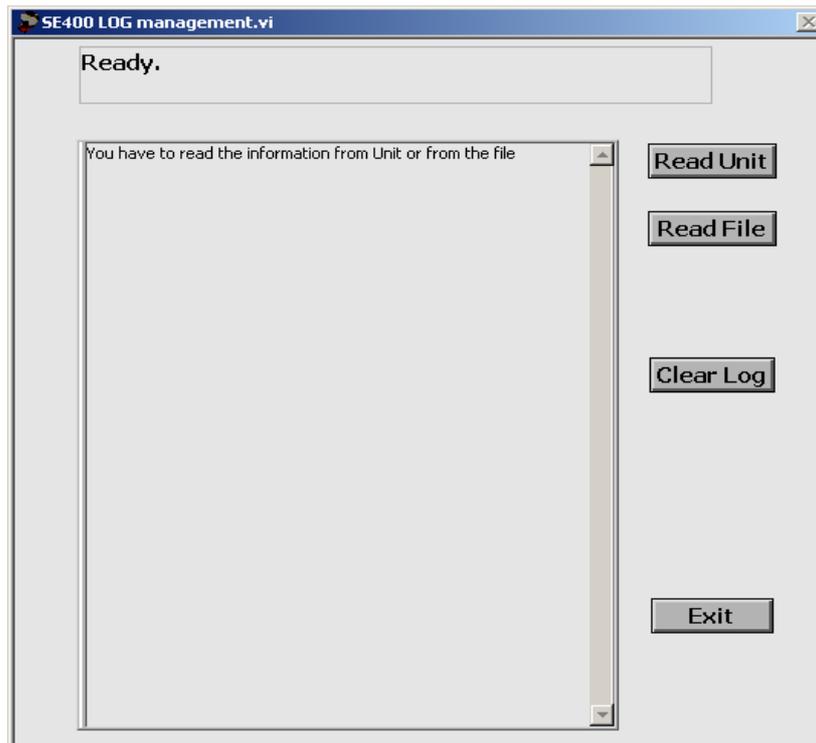
6. From this screen you can:
  - Read, save or clear the SE400 log file
  - Set the SE400 date and time
  - Make changes to the SE400 configuration
  - Operate the real time monitor
  - Exit and return to the default screen

## Log files

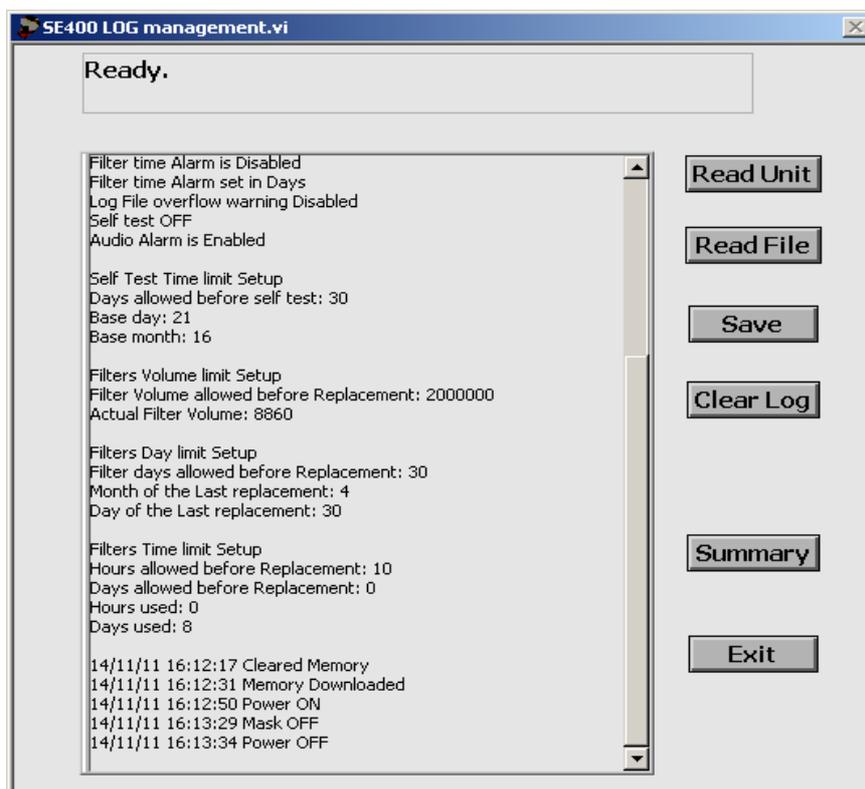
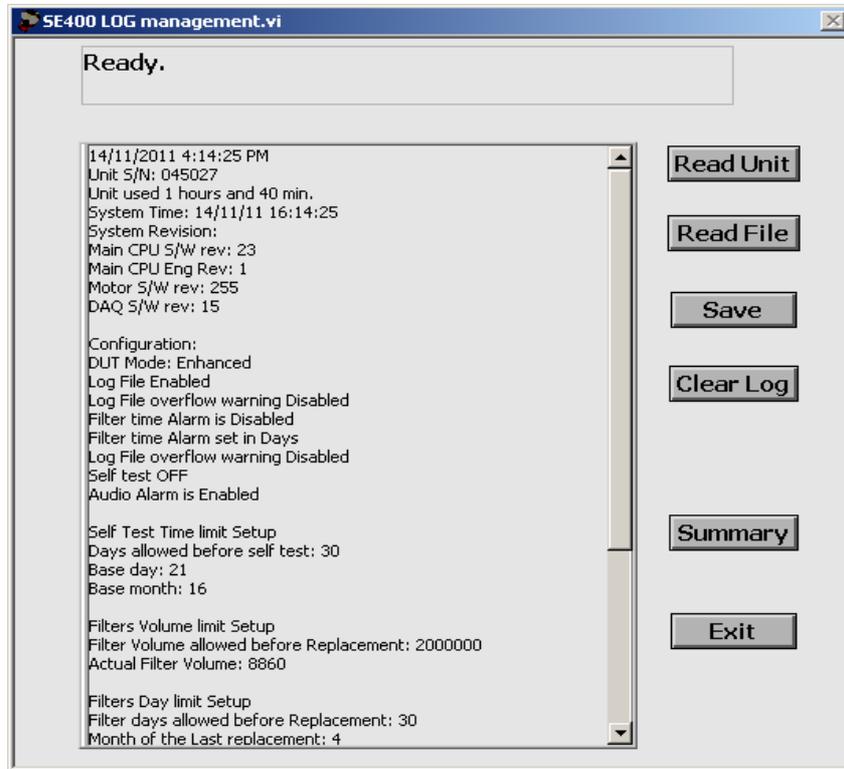


The SE400 has the capability to log events that occur during operation. The log file may be read, saved to PC or deleted.

1. To access log files, select <Log File>. The “SE400 LOG management” screen will appear.

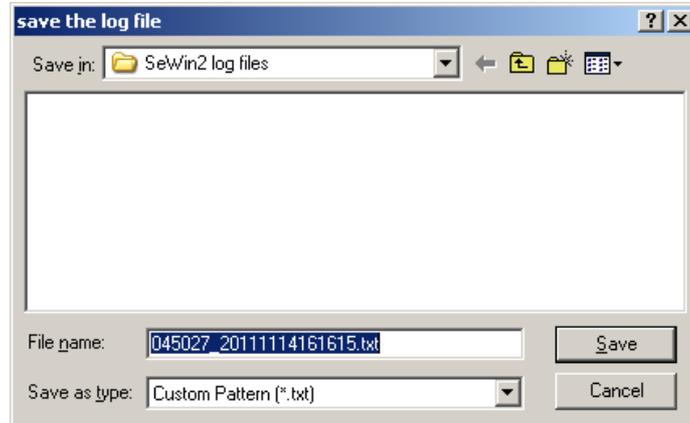


2. To read the log file on the SE400, select <Read Unit>. The log file will be displayed. A sample is shown below. It displays:
  - important information about the SE400 including serial numbers and current configuration settings
  - the log of events currently stored in the SE400's memory (scroll to the bottom of the window using scrollbar).



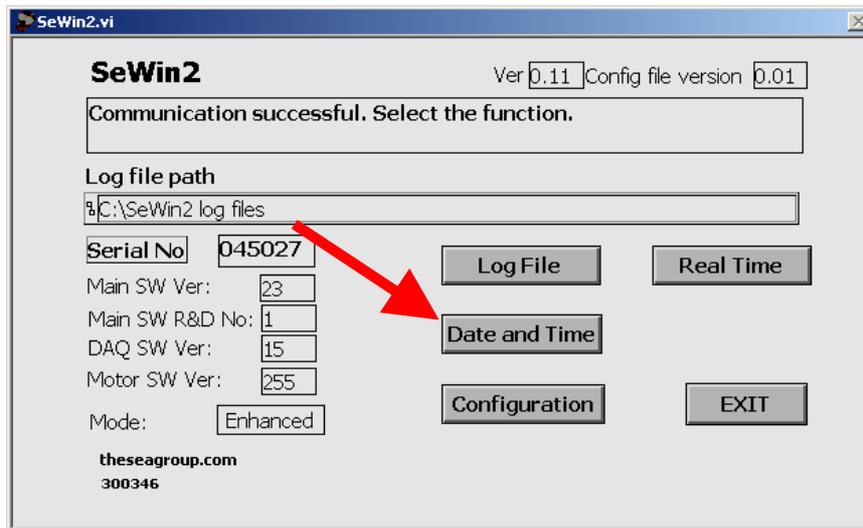
3. From here you can:

- Select <Save> to save the SE400 log file to your PC. A “save as” dialog will appear. The default destination folder will be the log file path you set up earlier, but you can select a different folder now. SE-win generates a default unique filename identifying the SE400 serial number and date/time. You can rename the file at this point if desired.



- Select <Clear Log> to clear the log of events from the SE400.  
Warning: This action will permanently delete the log of events from the SE400. If the data is of value, be sure to save the file to your PC before clearing the log.
  - Select <Summary> to view an event summary of the log. The event summary tabulates the total events for each day in the log, and displays a bar graph of the daily usage time.
  - Select <Exit> to return to the previous screen.
4. You can also read saved log files from the PC. Select <Read file> and select the desired file to read. These files can also be viewed in event summary by selecting <Summary>.

## Date and time



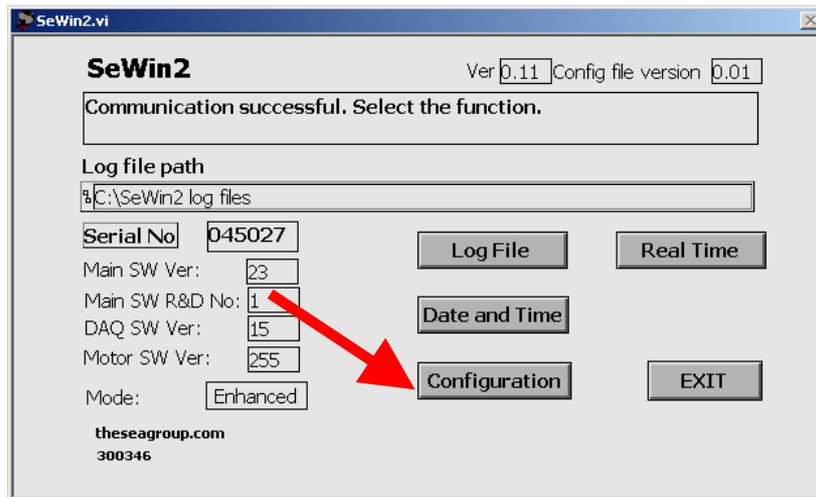
To set the date and time of the SE400:

1. Select <Date and Time>. The following screen will appear. It displays the current date and time settings of both the PC (left side) and the SE400 (right side).



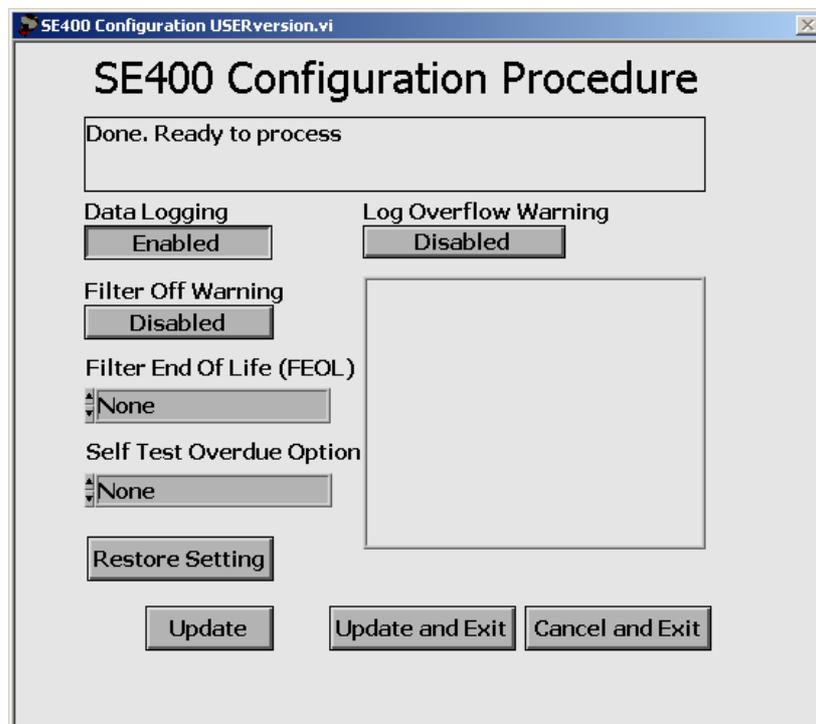
2. To set the SE400 date and time manually, at “Select Date and Time” enter the desired date and time and select <Apply Selection>. Wait for the updated SE400 date and time to be displayed. Select <Exit> to return to the previous screen.
3. To set the SE400 date and time to equal the PC settings, under “Apply PC Settings to SE400” select <Apply>. Wait for the updated SE400 date and time to be displayed. Select <Exit> to return to the previous screen.

## Configuration



To change the configuration settings of the SE400:

1. Select <Configuration>. The following screen will appear. It displays the current configuration settings.
2. Make changes to settings as desired. To save changes, select <Update> or <Update and Exit>.
3. To revert to the most recently saved settings, select <Restore Settings>.



## Data logging

Toggles between <Enabled> and <Disabled>. Default setting is Enabled.  
When disabled, the SE400 will not log events during use.

## Log overflow warning

Toggles between <Enabled> and <Disabled>. Default setting is Disabled. If the on-board data log reaches capacity, the SE400 will provide a warning to the user. See section *Warnings*.

## Filter off warning

Toggles between <Enabled> and <Disabled>. If the SE400 detects a missing filter, it will provide a warning to the user. See section *Warnings*.

## Filter end of life (FEOL) warning

When an FEOL option is selected and the desired limits are entered, the SE400 will provide a warning when the set limits are reached. See section *Warnings*.

Select from the following options:

- None – disables the FEOL warning (default setting)
- Time expire – enter *operating* hours and minutes
- Days expire – enter *elapsed* days
- Volume expire – enter volume of air in litres to pass through the filters
- Time and volume – enter *operating* hours, minutes and litres
- Days and volume – enter *elapsed* days and litres

While enabled, the FEOL function can be reset using the Menu Mode (refer to SE400 or SE40 user instructions). This should be done when the filters are replaced.

## Self test due warning

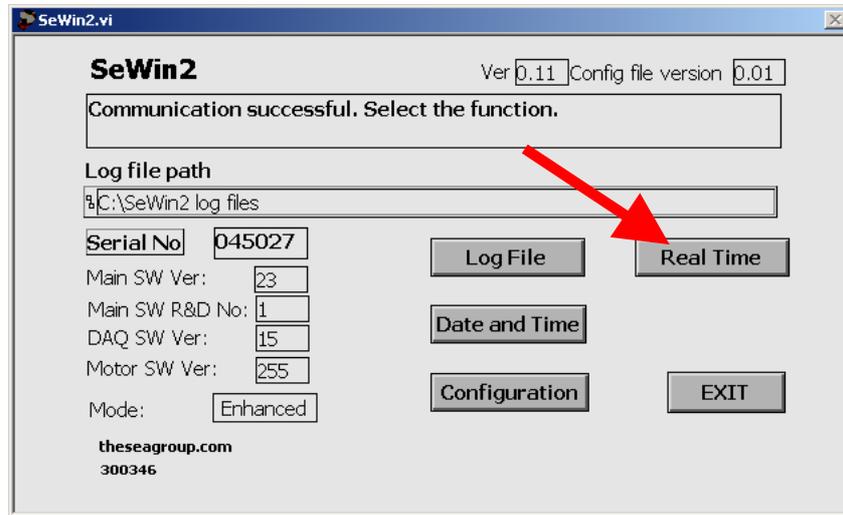
Select from the following options:

- None – disables the self-test due warning (default setting)
- Warning – enter *elapsed* days – SE400 provides warning only. See section *Warnings*.
- Emergency – enter *elapsed* days – SE400 will operate at full blower speed only
- No operation – enter *elapsed* days – SE400 will not start

While enabled, the self-test due function can only be reset by performing a successful self-test. This is done through the Menu Mode (refer to SE400 or SE40 user instructions).

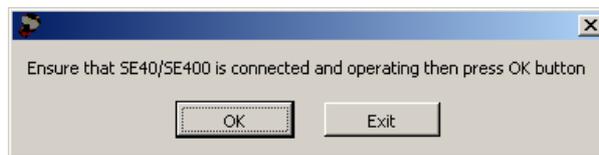
## Real time monitor

With the real time monitor function, you can observe the real-time behaviour of the SE400 during operation while connected to a PC.

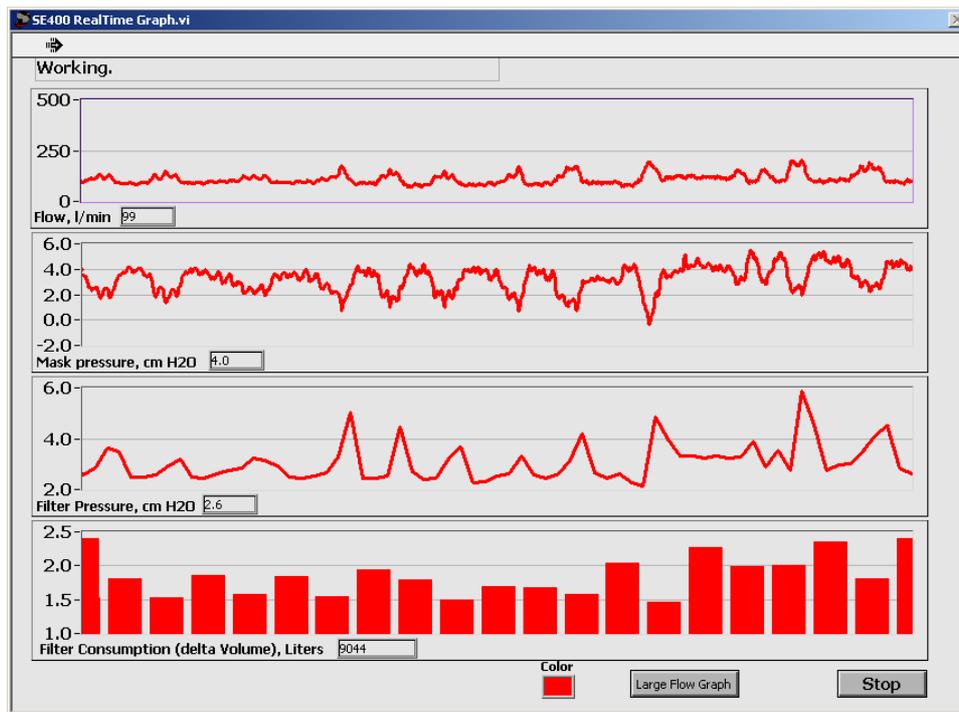


To operate the real time monitor:

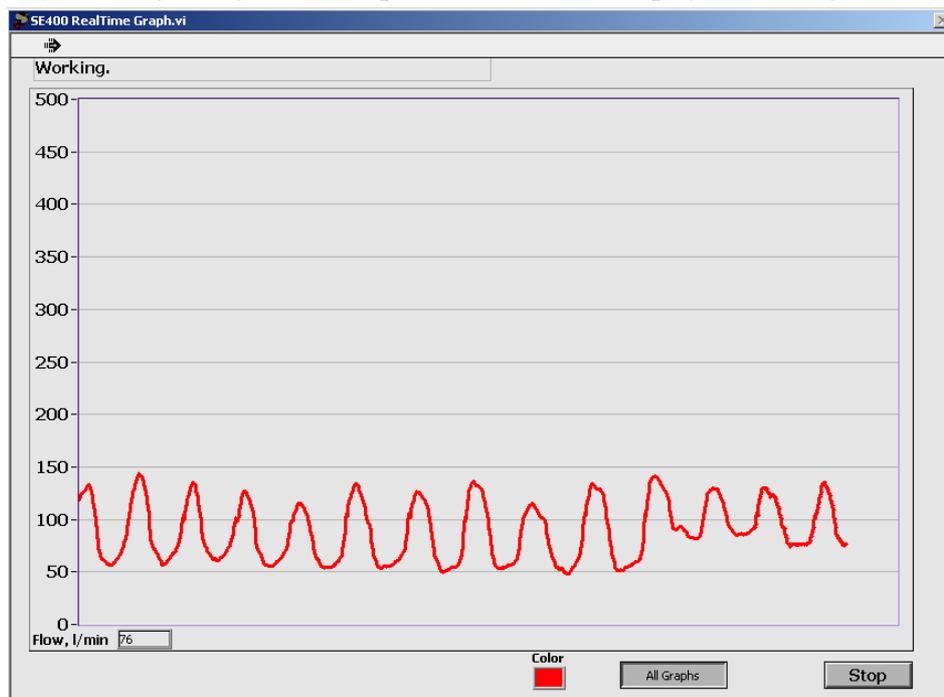
1. A user should don the SE400 and turn it on.
2. Select <Real Time>. The following dialog will appear. Ensure that the SE400 is connected and is operating.



3. Select <OK>. The following display will appear, and each of the four charts will display information in real time:
  - Flow, l/m – instantaneous air flow rate through the filters
  - Mask pressure, cm H<sub>2</sub>O – instantaneous pressure in the breathing zone of the facepiece
  - Filter pressure, cm H<sub>2</sub>O – instantaneous pressure drop across the filters
  - Filter consumption (delta volume), litres – volume flow through the filters over intervals of time. The box displays the total volume of air in litres since the last Filter EOL reset was performed.



4. By selecting <Large Flow Graph> the flow rate is displayed on a larger vertical scale.



## WARNINGS

Depending on the Configuration settings, the following warnings may occur.

Warning light	Status lights and buzzer	Condition	What to do	
GREEN		PWR steady GREEN  Buzzer sounds once per minute	Self-Test required *	See supervisor  Perform Self-Test
GREEN	<b>MOTOR RUNS AT FULL SPEED!</b> 	PWR steady GREEN  Buzzer sounds once per minute	Self-Test required *	See supervisor  Perform Self-Test
GREEN	<b>MOTOR DOES NOT START!</b> 	PWR steady GREEN	Self-Test required *	See supervisor  Perform Self-Test
ORANGE		FILT steady RED  <b>MOTOR SHUTS DOWN!</b>	Missing or faulty filter media detected	Keep respirator on your face. Move immediately to safe area **. Inspect and replace filter media
ORANGE		FILT steady RED Buzzer sounds once per minute	Filter media have expired	Move to safe area ** Replace filter media and reset filter life
GREEN		PWR indicator flashing GREEN	Data log full	See supervisor Download data log

\* The type of Self-Test warning depends on how the SE400 is configured. For more information see section “Configuration”.

\*\* “Safe area” refers to an uncontaminated area.



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