

User's Guide



Version 9.1

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[Chapter 1](#)

Getting Started with Enercom

Enercom is a communications program for your Enerac. It enables you to connect your computer to the Enerac to exchange information.

Running Setup

CD INSTALLATION

1. Insert the installation CD in your CD-ROM drive. The CD should start automatically and a window will appear. If it does not, Click the START button on your Desktop and choose run. Type D:\Startup.exe and Click OK.
2. Click **Install Enercom**. Follow the setup instructions on the screen. The program will install itself to **\Program Files\Enercom**.

DOWNLOADED INSTALLATION

1. Save the Enercom installation package, located on the download page of the website, www.enerac.com, to your desktop.
2. Open the zip file. Extract all files and run the SETUP.EXE installation program.

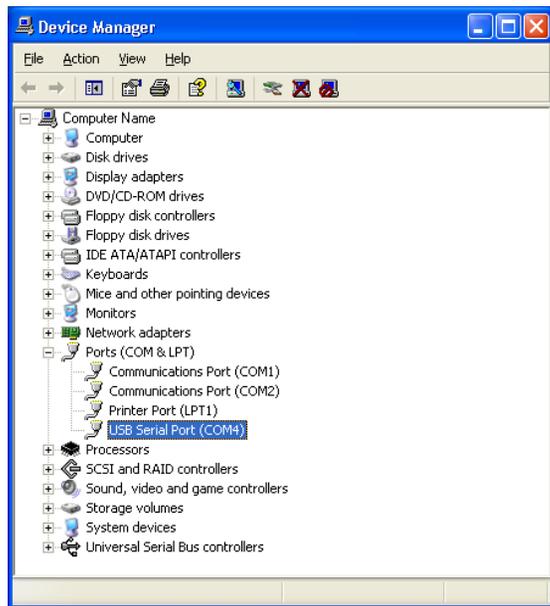
Connection Configuration

Computer COM Ports

- Turn on your Enerac and connect using a USB cable or RS-232 cable or Bluetooth.
- An RS-232 connection is the 9-pin, male DB-9 connector on your computer. It is usually COM1 or COM2. Modern computers are often without an RS-232 connection.
- For USB and Bluetooth connections, you must connect your Enerac *BEFORE* starting the Enercom software. This is because the port does not appear until the device is connected.
- If your Enerac analyzer does not have an integrated USB

port, you can use a USB-to-Serial adapter.

- For USB connections, enter the assigned COM port number in Enercom. Use the Windows Device Manager, to find the COM port number. The Device Manager can be launched by running `devmgmt.msc` from the Windows' **Start, Run** menu. The USB COM port will be listed under the **PORTS** section.



- In Enercom, click on **Add Port** under the **Connections** menu and enter the COM port number.

Wireless Options

Connect a Bluetooth USB adapter or use your computer's internal Bluetooth capability. First, connect to the Enerac in your Bluetooth adapter's software package. Then add the assigned COM port by clicking **Add Port** on the **Connections** menu in Enercom.

Communication Basics

Communication in Enercom uses the serial port of your computer. If the Enerac is connected through a telephone, a modem must be connected to the computer's serial port.

These icons inform you of the communication status



Serial Port available. No modem or Enerac connected.



Serial Port unavailable. It may be in use by another application.



Modem detected.



Enerac connected.



Enerac connected but Enercom option is not available. Contact Enerac, Inc.



Enerac Communication Interrupted.

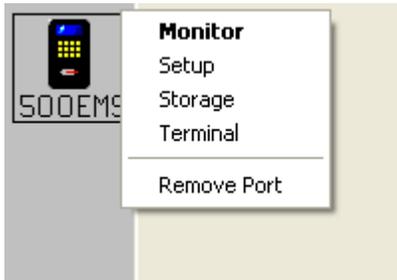
Working with the Enerac

Direct Communication Through A Serial Port:

1. Verify that the Enerac is on and is not displaying any warning messages.
2. Connect your Enerac with a USB or RS-232 cable, or connect through your Bluetooth adapter.
3. Start Enercom.
4. Your Enerac should appear on the screen.



Once you have established a communication link an Enerac icon will appear. Click on the Enerac icon to display the analyzer menu:



Monitor:

Opens the **Monitor** window. All real-time testing, data logging, graphing, and charting is done here. See [Chapter 2](#).

Setup:

Opens the **Setup** window. Set the time & date, temperature & emission units, fuel, and oxygen reference here. See [Chapter 3](#).

Storage:

Opens the **Storage** window. The analyzer's stored data is displayed, in a list. See [Chapter 6](#).

Terminal:

Opens a **Terminal** window for direct communication with the

Enerac. For a complete list of serial port commands, see your Enerac manual.

Communications Troubleshooting

If the Enerac icon does not appear:

- Open the Terminal window and try sending the LOGO? command. That's L O G O ? <ENTER> The analyzer should respond. Model 2000s and 3000's communicate at 1200 baud. All other analyzers communicate at 9600 baud.
- USB users: check that the COM port number is correct and exists in the Windows Device Manager, under PORTS.
- RS-232 users: Do a loopback test: Short Pins 2 & 3 (with a paper clip) on the Enerac end of your serial cable. Type some character in the Terminal window. You should see an echo (ex: "abcd" → "aabbccdd").
- Try a different cable.
- Model 3000 users: check the DCE/DTE switch inside the analyzer, next to the printer.
- All users: Reset the analyzer.

Communication Through A Modem:

1. Verify that the Enerac is on, connected to a telephone line, and is not displaying any warning messages.
2. Connect a modem to the computer and turn the modem on.
3. Start Enercom. If the modem is correctly connected, the modem icon will appear.
4. Click on the modem icon and specify the telephone number where the Enerac is located. (If you use a Pulse Tone system, choose **Pulse**).
5. Click **Call** in the **Modem** dialog box to start the call.

Terminal Window

The Terminal window can be used to send commands to the Enerac. This is useful in troubleshooting communications problems or problems with the analyzer.



- For a list of commands, refer to the analyzer's manual.
- Commands that end with a question-mark (?) inquire a parameter or group of parameters
- Without a question-mark, the command sets the value of some parameter
- Press <ENTER> after each command

Example Commands

```
LOGO?
TIME?
TIME 12:00:00
DATE?
DATE 03/31/09
TEXT?
MODE?
MODE PPM
```

The Monitor Window

The Monitor window continuously monitors the Enerac readings. It also finds the minimum and maximum values, computes the average, and computes the standard deviation of each parameter during the span of a Sample Period.

COMPANY NAME	Current	Min	Avg	SD	Max	Units
05/19/09 12:07:25						
Efficiency	99.3	99.2	No Cal	No Cal	99.3	%
Ambient Temp	76	76	76.	0.	76	F
Stack Temp	76	76	76.15	0.4	77	F
Oxygen	0.0	0.0	0.	0.	0.0	%
Carbon Dioxide	15.6	15.6	15.6	0.	15.6	%
Combustibles	0.03	0.03	0.03	0.	0.03	%
Stack Draft	0.0	0.0	0.	0.	0.0	"
Excess Air	0	0	0.	0.	0	%
Nitric Oxide	0	0	0.	0.	0	PPM
Nitrogen Dioxide	0	0	0.	0.	0	PPM
Oxides of Nitrogen	0	0	0.	0.	0	PPM

The Enerac Grid

The Enerac grid is where the values for the various emission, temperature, and combustion parameters are shown. At the top left, the Enerac's current date and time are displayed. Each parameter is listed in the left column of the grid. The current values for each are located immediately to the right, in the **Current** column. You can show or hide the **Statistical** or **Alarm** data by selecting the check boxes above the Enerac Grid.

All values shown in the Enerac Grid can be copied to the clipboard or printed out at any time. Choose **Copy** or **Print** from

the **File** menu.

Above the Enerac Grid, from left to right, are the **Reset** button, **Sample**, **AutoSave**, and **Purge** options, two time periods, two progress indicators, the current data file, and the **Enerac's Fuel** and **Oxygen Reference**.

The Sample Period

The **Reset Sample Period** button clears the Enerac Grid of **Min**, **Max**, **Avg**, **SD**, and **Alarm Duration** data. It will also restart the **Sample** period.

The **Sample Period** is used to determine the **Min**, **Max**, **Avg**, and **SD** values. The **Min** is the minimum value a parameter has reached during the calculation period, the **Max** is the maximum value for that period, the **Avg** is the current average value of the corresponding parameter, and **SD** is the standard deviation. When the **Sample** period has elapsed, the **Min**, **Max**, **Avg**, and **SD** columns as well as the **Alarm Duration** values are cleared and a new period begins.

If the maximum value of a parameter is exceeded, or the data transmitted is corrupted, Enercom will be unable to calculate the average and standard deviation. In these situations, the word **OVER** or **NO CAL** will appear in the **Current** column. The calculation of the average is aborted for that period, and **NO CAL** will appear in the **Avg** and **SD** columns.

The **Alarm Threshold** contains user set-able values for each of the parameters available. To turn an alarm on or off, move the mouse over the **Alarm Threshold** column and click on the small box that appears.

An alarm condition exists whenever the Alarm is turned on and the **Current** value exceeds the value listed in the **Alarm Threshold** column. The **Alarm Duration** column shows, in minutes and seconds, how long an alarm has been exceeded

during the current period. At the end of the **Sample** period, all values are reset to 0. The values in the **Alarm Duration** column will increment only if an alarm remains activated. The computer can be set to beep or save the Alarm data to a file by making the appropriate selections in the **Alarm Options** window. To change the value of any alarm, move the mouse over the **Alarm Threshold** column and either click the appropriate box, or use the up/down arrows. To create an alarm that is triggered if the **Current** value goes *below* the value listed, insert a less-than sign (<) before the value.

The Enercom software can run in **Sample** mode only, or, if the **Purge** button is depressed, can toggle periodically between **Sample** mode and **Purge** mode. In **Sample** mode, the Enerac's pump is turned on and readings are taken from the Enerac. In **Purge** mode, the Enerac's pump is turned off and no readings are taken until the **Purge** period is over. The pump can be set to turn on a few minutes before the end of the **Purge** period, allowing the gas sample to reach the Enerac's sensors. This setting, called **Sample Delay**, is set in the Commands window. To enter a pump delay value, see [Chapter 3: Turning the Enerac's Pump On & Off](#).

The progress of each mode is shown in two different progress bars located above the Enerac grid. The lengths of both the **Sample** period and the **Purge** period can be set by clicking on the time buttons located next to the progress bars. You can enter the desired **Sample/Purge** period in minutes or hours.

There is also the **Autosave** option which will, if enabled, save data periodically, or save a record of the data after each **Sample** period.

The Tool Bar



Save Data

Clicking this icon will save the analyzer's data to the file. The format in which the data is saved is set up in **Save Selection**. If

both options are selected, data will be saved in log format.



Copy Data

Copies all data displayed in the **Enerac Grid** to the clipboard.



Save Selection

Opens the **Save Selection** window, where the save format and parameters are specified. See below.



Graph

Opens the **Graph** window where the current values are displayed as a bar graph. See Chapter 4.



Plot

Opens the **Plot** window where a plot of the parameters over time can be made. See Chapter 5.



Audio Setup

Opens the **Audio Setup** window. See below.

Fuel

The Enerac's current fuel is displayed in this box. The fuel setting affects the efficiency and calculated-CO₂ values. This setting is also saved with the data. Fuels can be selected and programmed in the **Setup** window. See Chapter 3.

Oxygen Reference

The Enerac's oxygen reference is displayed in this box. The default value is **TRUE**. The oxygen reference affects emissions parameters. See Chapter 3.

Status Bar

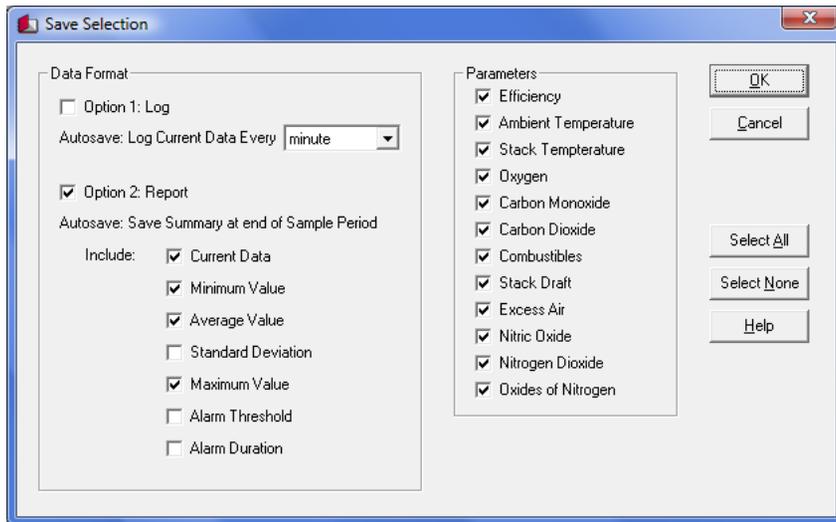
At the very bottom of the main screen is the status bar that is divided into three sections. The first box is a general status display showing either what is currently happening in Enercom or a description of what the mouse is pointing at. For the model 700 & model 3000E the next box will display the status of the

NOX control temperature. It will display either **Below 30°C** (normal) or **Above 30°C**. The box at the far right displays the start time of the current **Sample** period. Clicking on this box will let set the time to start the next sample period. The Enerac will be in **Purge** mode (pump off) until then.

Selecting What to Save



You can specify which parameters to save and choose between two styles: log and report.



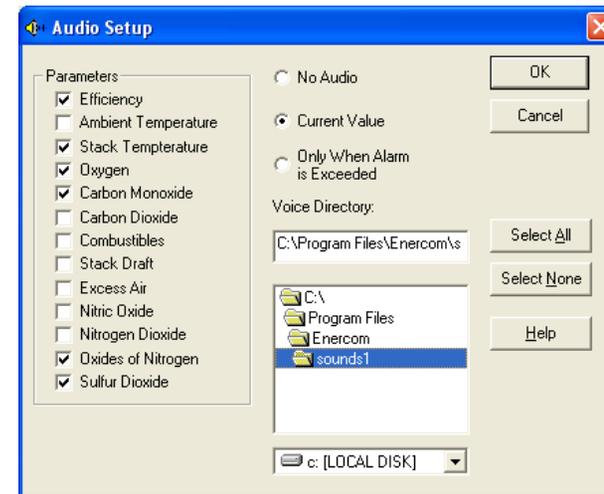
To specify what to save:

- Choose **Save Selection** from the **File** menu, or click the selection icon.
- Select the format. Choose **Log** for spreadsheet style, with each parameter in its own column. If Autosave is selected (on the Monitor window), data is stored at intervals of 10, 15, 30, or 60 seconds.
- Choose **Report** for a summary including statistical and alarm data. Report also saves the **Fuel, Oxygen Reference**, and **Sample Period** start-time and end-time. If AutoSave is selected, a report will be saved automatically at the end of the sample period. Select the columns from the Enerac grid that you want to include.
- Select what parameters you wanted saved. Normally all parameters are saved. Turning off any parameter, will prevent that parameter's data (Current, Min, Ave, etc.) from being saved.

Audio Setup



Enercom can read aloud the parameters through your computer's speakers.



In the **Options** menu, click **Audio...** or click the audio icon.

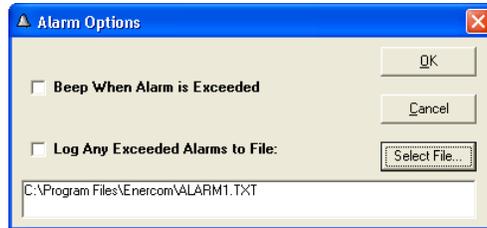
- You can choose which option you want to hear. Enercom will continually read these values to you.
- You can also choose to only hear parameters when they have exceeded the alarm thresholds that you have set for them.
- If you have different voices installed, choose the directory for the voice you wish to use.

Note:

The volume is controlled by the Windows Volume Control. For different voices, contact [Enerac, Inc.](#)

Alarm Options Setup

Whenever the **Current** value exceeds the value listed in the **Alarm Threshold** column, the computer can be set to beep or save the Alarm data to a file by making the appropriate selections in the **Alarm Options** window.

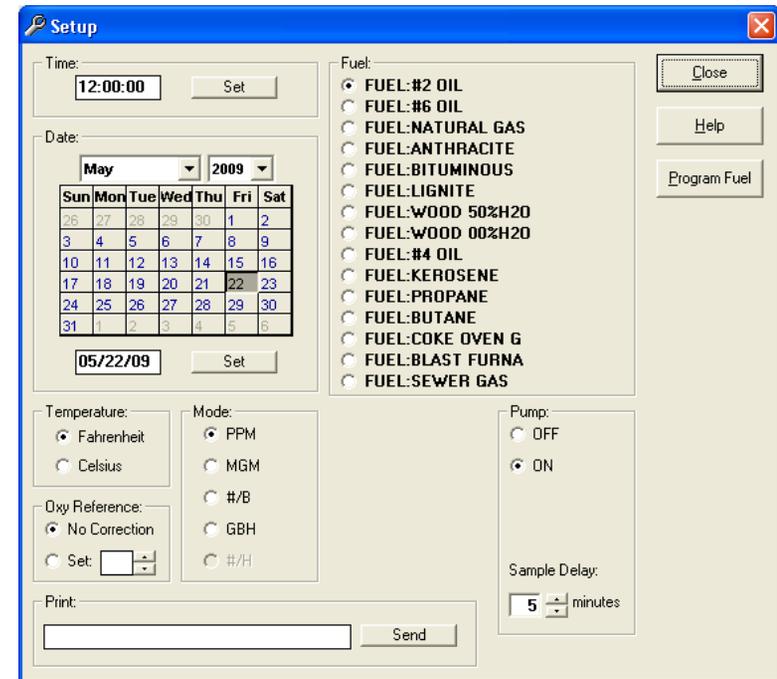


Loading & Saving Settings

Enercom can be configured differently for various applications by loading and saving its settings in separate files. These settings include the **Sample** period, **Purge** period, **Alarm Threshold** values, graph setups, and chart setups. Once you have configured Enercom as you want it, be sure to save the settings by choosing **Save Settings As Default** from the **Settings** menu. If you want to create different configurations, choose **Save Settings As...** and specify a filename.

Analyzer Settings

Commands to configure the Enerac can be sent through the **Setup** window. To show this window, choose **Setup...** from the analyzer menu.



Setting the Enerac's Time and Date

Click in the **Time** or **Date** box and type in the new setting. Next, click the corresponding **Set** button to send the new setting to the Enerac.

Setting the Enerac's Temperature Units

Click on **Fahrenheit** or **Celsius** to change the Enerac's units of temperature, as desired.

Setting the Enerac's Emissions Units

The **Emissions Units** determines the system of units in which emission data will be calculated. The abbreviations are:

PPM - Parts Per Million (volumetric)

MGM - MilliGrams per cubic Meter

#/B - Pounds per million BTU

GBH - Grams per Brake Horsepower-hour

#/H - Pounds per Hour (models 700 & 3000E with velocity option only). CO₂ will be calculated in tons per day

If your Enerac has the Emissions option, you can click on the desired mode to set the Enerac. In #/H mode, Enercom will also calculate cumulative values of CO, NO, NO₂, NO_x, and SO₂ in total pounds, and CO₂ in total tons. Enercom can also display a plot of the cumulative values.

Turning the Enerac's Sample Pump On & Off

Click **ON** or **OFF** as desired.

If you are using Enercom's automatic **Purge** mode, enter the **Sample Delay** here. This is the time it takes the Enerac to respond to the sample gas after the pump has been turned on. This will enable the Enercom software to turn on the Enerac's pump and allow enough time to elapse before the sample period begins.

Setting the Enerac's Oxygen Reference

Default setting is **True** (no correction). Click **No Correction**, or type a number between 0 and 20 (inclusive) and click on **Set**. The Enerac must have the Emissions option available in order for this feature to function. The oxygen reference is applicable only for PPM and MGM modes. Values of CO, NO, NO₂, NO_x, and SO₂ will be adjusted to correspond to an oxygen value specified here.

Setting the Enerac's Fuel

The Commands window also displays the 15 fuels stored in the Enerac. The current fuel can be changed by clicking on the

desired fuel name.

Sending Messages to the Enerac's Printer

Type the desired message inside the box in the **Print Message** frame. Click **Send** to send it to the Enerac. The message will be printed on its four-inch printer if it is available. Up to 90 characters can be typed at a time.

Programming Custom Fuels

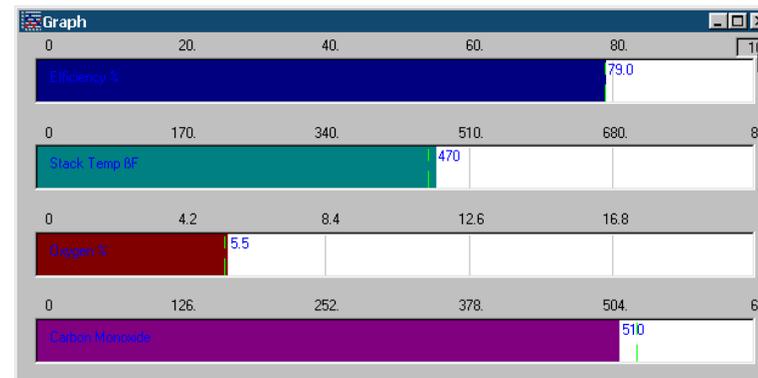
The **Program Fuel** window allows a user to program a custom fuel into the Enerac. To open the **Program Fuel** window, click on **Program Fuel** in the **Commands** window.

To program a custom fuel, you need the ultimate analysis of the fuel in percent by weight and the higher heating value of the fuel in BTU per pound. Type in the percentages of **Carbon**, **Hydrogen**, **Nitrogen**, **Oxygen**, **Sulfur**, **Water**, and **Ash**, and type in the **High Heat Value**. Percentages must add to between 99 and 101. Type the name of the custom fuel, up to 16 characters, in the **Fuel Name** box. Select a position between 1 and 15, where the new fuel will be loaded, replacing the existing fuel. (Only positions 1-10 are available for models 200/400) Click on **Set Fuel** to program the new fuel into the Enerac.

Viewing a Graph



Displays a Graph of each parameter.



To open the graph window:

Click the **Graph** icon on the toolbar. The Graph window will open to show some or all of the current parameters as bar graphs with separate Y-axes. If you are viewing the graphs as horizontal bar graphs, then the 'Y-axis' will actually be horizontal, as pictured above.

Controlling which parameters are displayed:

In the **View** menu, check off the graphs that you want to show. The appropriate information will be displayed in the largest size possible. To show two or more parameters on the same scale, click on the graph of one of the parameters and drag it over to the graph of the other parameter to merge the two together. Enercom will merge the two sets of data and graph them on the same Y-axis scale. To separate data that have been merged, right-click over the appropriate chart and select **Split** from the menu.

Changing the Y-Axis Scale:

The Y-axis scale can be changed by clicking on the top or bottom y-axis label. Choose **Automatic Y-Axis** from the **Edit** menu to return to automatic scales for each parameter.

Setting up a Graph

These options are located in the **Edit** menu:

Automatic Y-Axis:

Select to enable or disable automatic ranges for the Y-Axis. Automatic will adjust itself to show the maximum values (in a given calculation period) on the graph. Manual setting is accomplished by clicking on the actual value shown in the graph window. You will be prompted to enter a new value.

Grid Lines:

Select this feature to show four horizontal lines and labels across each graph.

Horizontal / Vertical Mode:

The orientation of the graphs can be changed by selecting either Vertical or Horizontal.

Copying, Saving, and Printing Graphs

The Graphs can be copied to the clipboard, saved to a file, or printed to a system printer.

To copy, save or print just one graph:

1. In the **Graph** window, click on the graph to save.
2. Choose **Copy**, **Save** or **Print** from the **File** menu.
3. (Save Only) Select a filename and choose **OK**.

To copy, save or print all visible graphs as a single file:

1. Don't select any graphs. (This is accomplished by clicking anywhere on the graph window. Do not click on the actual graphs.)
2. Choose **Copy All Graphs**, **Save all Graphs as One**, or **Print** from the **File** menu

3. (Save only) Select a filename and choose **OK**.

To save all visible graphs as separate files:

1. Choose **Save all Graphs Separately** from the **File** menu.
2. Select a base filename. Enercom will save each graph separately, adding the parameter name to the base filename.

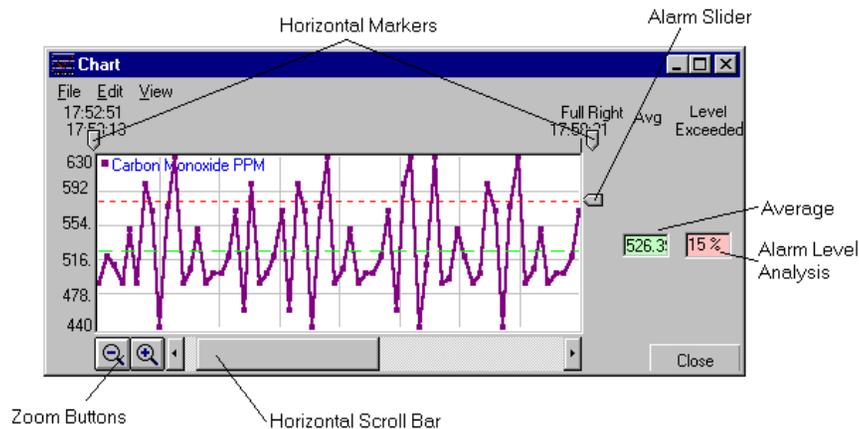
Note:

Enercom saves the picture as a Bitmap (.BMP)



Viewing a Chart

Displays a chart of the parameters over time.



To view a chart:

Click the **Chart** icon on the toolbar. The Chart window will open showing some or all of the current parameters in their own chart. To the right of the charts are two columns of boxes: green and red. The first column, the green column of boxes, is the average value between the two horizontal markers. The red column is the alarm column. It displays the time, either as a real amount in minutes or as a percentage, that each parameter has exceeded the specified **Alarm Value**. The **Alarm Values** are controlled by the **Alarm Slider** to the right of each chart. If visible, a red dotted line across the chart indicates where the value is currently set. The **Alarm Values** are also bounded by the horizontal markers.

Controlling which parameters are displayed:

In the **View** menu, check off the charts that you want to show. The appropriate information will be displayed in the largest size possible. To chart two or more parameters on the same set of axes, click on the chart of one of the parameters you'd like to merge and drag it over to the chart of the other parameter.

Enercom will merge the two sets of data and chart them on the same set of axes. To separate data that has been merged, right-click over the appropriate chart and select **Split** from the menu.

Data Zoom:

Zooming in will expand the points for greater detail. Zooming out will compress the points to fit additional data. This feature is controlled with the zoom buttons, located in the lower left of the window.

Clearing the charts:

Choose **Clear** from the **Edit** menu to clear all chart data. You can have Enercom start a new chart with each new **Sample** period by selecting **Clear** from the **Automatic** submenu.

Note: Closing the Chart window while it is running will NOT result in loss of data; it will continue to monitor the parameters.

Setting up a Chart

These options are located in the **Edit** menu:

Stop / Go:

Use these commands to stop and start the chart feature.

Clear:

Clears all chart data.

Points Every:

Select the delay between successive points from the values listed or type in your own value. Be sure to specify seconds, minutes, or hours.

Note:

If a time interval shorter than approximately 5 seconds is selected, the chart time will depend on the baud rate rather than on the selected time.

Moving Average:

You can smooth out the curves in the charts by enabling this

feature. In **2 Point** mode, each point in the chart will be averaged with the preceding point. You can also take averages of 5 or 10 points at a time.

Automatic:

Check off the following to take place when Enercom has completed a Sample period.

Save:

Saves the visible charts in a file with a Chart-Number.BMP format. The Number starts at 1 and increments each time.

Print:

Prints the visible charts to the system printer.

Clear:

Clears all charts and starts again.

Multiple Drill-Down:

When the Mouse is placed over a chart, the parameter's value at that particular point in time is displayed. By enabling the Multiple Drill-Down feature, all of the visible parameter's values are displayed for that point in time.

Drill Down Follows Trend

When selected, the drill-down values described above will follow the trend of points in each chart as the mouse is moved.

Automatic Y-Axis:

Select this feature to enable or disable automatic ranges for the Y-Axis which will adjust itself to show the maximum and minimum values on the chart. Manual setting is accomplished by clicking on the actual value shown in the chart window. You will be prompted to enter a new value.

Show Parameter Level Analysis as Percentage:

Parameter Level Analysis shows the amount of time a parameter has been above a certain, user-specified level. For example, if the CO level is set at 200 ppm, Enercom will calculate the amount of time elapsed in the current calculation period that the CO reading has been at or above 200 ppm. This data can also be displayed as

a percentage of the total elapsed time.

Zoom:

This feature enables you to choose a custom number of points to display in the charts.

Line Thickness:

This allows you to choose the thickness of the lines in the chart.

Grid Lines:

This option displays vertical lines every minute/hour and four horizontal lines and labels across each chart.

Add Text:

This allows you to add chart titles and other information to the charts. To change font, font size, or other font attributes, right-click on the text box.

Copying, Saving, and Printing Charts

The Charts can be copied to the clipboard, saved to a file, or printed to a system printer.

To copy, save or print just one chart:

1. In the **Chart** window, click on the chart to save.
2. Choose **Copy**, **Save** or **Print** from the **File** menu.
3. (Save Only) Select a filename and choose **OK**.

To copy, save or print all visible charts:

1. Don't select any charts. (This is accomplished by clicking anywhere on the graph window. Do not click on the actual graphs.)
2. Choose **Copy All Charts**, **Save all Charts as One** or **Print** from the **File** menu.
3. (Save Only) Select a filename and choose **OK**.

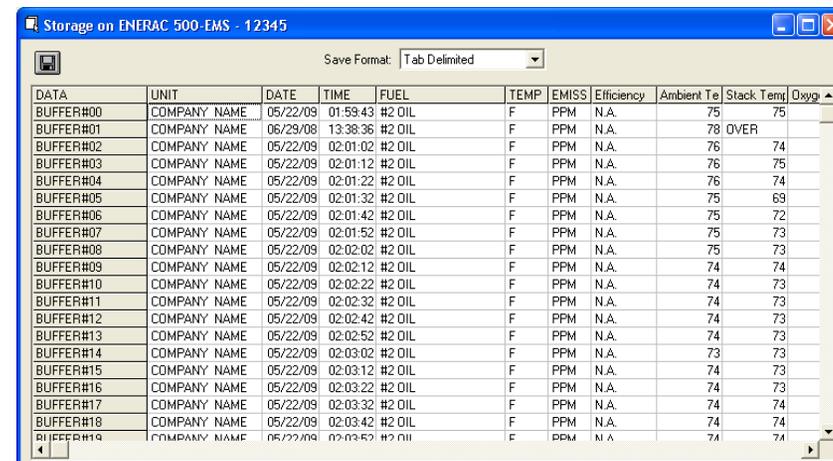
To save all visible charts as separate files:

1. Choose **Save all Charts Separately** from the **File** menu.
2. Select a base filename. Enercom will save each chart separately, adding the parameter name to the base filename.

Note: Enercom saves the picture as a Bitmap (.BMP)

Downloading Stored Data

This window displays the data stored in the analyzer's internal memory. To show this window, choose **Storage...** from the analyzer menu.



DATA	UNIT	DATE	TIME	FUEL	TEMP	EMISS	Efficiency	Ambient Te	Stack Temp	Oxyge
BUFFER#00	COMPANY NAME	05/22/09	01:59:43	#2 OIL	F	PPM	N.A.	75	75	
BUFFER#01	COMPANY NAME	06/29/08	13:38:36	#2 OIL	F	PPM	N.A.	78	OVER	
BUFFER#02	COMPANY NAME	05/22/09	02:01:02	#2 OIL	F	PPM	N.A.	76	74	
BUFFER#03	COMPANY NAME	05/22/09	02:01:12	#2 OIL	F	PPM	N.A.	76	75	
BUFFER#04	COMPANY NAME	05/22/09	02:01:22	#2 OIL	F	PPM	N.A.	76	74	
BUFFER#05	COMPANY NAME	05/22/09	02:01:32	#2 OIL	F	PPM	N.A.	75	69	
BUFFER#06	COMPANY NAME	05/22/09	02:01:42	#2 OIL	F	PPM	N.A.	75	72	
BUFFER#07	COMPANY NAME	05/22/09	02:01:52	#2 OIL	F	PPM	N.A.	75	73	
BUFFER#08	COMPANY NAME	05/22/09	02:02:02	#2 OIL	F	PPM	N.A.	75	73	
BUFFER#09	COMPANY NAME	05/22/09	02:02:12	#2 OIL	F	PPM	N.A.	74	74	
BUFFER#10	COMPANY NAME	05/22/09	02:02:22	#2 OIL	F	PPM	N.A.	74	73	
BUFFER#11	COMPANY NAME	05/22/09	02:02:32	#2 OIL	F	PPM	N.A.	74	73	
BUFFER#12	COMPANY NAME	05/22/09	02:02:42	#2 OIL	F	PPM	N.A.	74	73	
BUFFER#13	COMPANY NAME	05/22/09	02:02:52	#2 OIL	F	PPM	N.A.	74	73	
BUFFER#14	COMPANY NAME	05/22/09	02:03:02	#2 OIL	F	PPM	N.A.	73	73	
BUFFER#15	COMPANY NAME	05/22/09	02:03:12	#2 OIL	F	PPM	N.A.	74	73	
BUFFER#16	COMPANY NAME	05/22/09	02:03:22	#2 OIL	F	PPM	N.A.	74	73	
BUFFER#17	COMPANY NAME	05/22/09	02:03:32	#2 OIL	F	PPM	N.A.	74	74	
BUFFER#18	COMPANY NAME	05/22/09	02:03:42	#2 OIL	F	PPM	N.A.	74	74	
BUFFER#19	COMPANY NAME	05/22/09	02:03:52	#2 OIL	F	PPM	N.A.	74	74	

Click the Save icon to export this data to a text (.TXT) or rich-text (.RTF) file.

Once you have saved the data, you can open it in Microsoft Excel: select Text files (.txt) in the File-Open selection of Excel.

The default format is to save the data delimited with tabs. For other spreadsheets applications, comma delimiters may be required.

If a row appears red, there has been a memory or communication error. Try restarting the storage window.

Viewing Saved Data Files

You can view saved graphs & charts, in BMP format, or saved data & reports in TXT or RTF format.

Current/Time	Efficiency (%)	Ambient Temp (F)	Stack Temp (F)	O2
05/09/09 12:12:10	N.A.	77	OVER	0.1
05/09/09 12:13:00	N.A.	77	OVER	0.1
05/09/09 12:14:00	N.A.	77	OVER	0.1
05/09/09 12:17:09	N.A.	77	OVER	0.1
05/09/09 12:18:00	N.A.	77	OVER	0.1
05/09/09 12:19:00	N.A.	77	OVER	0.1
05/09/09 12:20:00	N.A.	77	OVER	0.1
05/09/09 12:21:00	N.A.	77	OVER	0.1
05/09/09 12:22:29	N.A.	77	OVER	0.1
05/09/09 12:23:00	N.A.	77	OVER	0.1
05/09/09 12:24:00	N.A.	77	OVER	0.1
05/09/09 12:25:00	N.A.	77	OVER	0.1
05/09/09 12:26:00	N.A.	77	OVER	0.1
05/09/09 12:27:00	N.A.	77	OVER	0.1

To view saved data, select **Open Data File...** from the menu. Choose the type of file:

- BMP – Bitmap Files. Charts and Graphs are saved as bitmap files.
- TXT – Text Files. The default format for saving data from the Enerac.
- RTF – Rich Text Files. For presenting data, RTF files add font selection, sizing, and effects to standard text files.

Text Files Toolbar

Use the toolbar buttons to save modifications, copy selected data to the clipboard, print selected data, insert source information, change the column widths, format the text in bold, italic, underline, color, or change the font style and size.

Test Source Identification Window

The Test Source Identification window allows you to enter information about your test to be included in your report.

Test Location

Add Location... Delete

LOCATION NAME: Cola Company FACILITY: Merced, CA APPLICATION: Boiler

REGULATORY AGENCY: CAB PERMIT #: 0013579 PERMIT DATE: 06/01/2008

Test Source

Add Equipment... Delete

EQUIPMENT NAME: CB Boiler #1 MAKE: Clever-Brooks MODEL: CB120 SERIAL #: 22468

FUEL: #6 OIL CAPACITY / HP: 120 USAGE (hrs/day): 16

Tested By

Add Administrator... Delete

COMPANY NAME: Boiler Efficiency Institute COMPANY ADDRESS: 1 Main St TECHNICIAN: Charlie CONTACT: 209-555-1234

Copy to Data File Edit Template

To open this window, choose **Test Sources...** from the main menu, or click on the source icon in the Saved Data File window.



There are three sections:

1. Test Location, identifying the customer, site, and corresponding regulatory information,
2. Test Source, identifying the actual equipment under test, and,
3. Tested By, identifying your company.

Report Generation

Open the Test Source window from the Saved Data File



window by clicking the source icon.

Select the Location Name, Equipment Name and Company Name from the drop-down list, or enter new information.

Click **Copy to Data File** to insert the test source information into the open data file.

If you do not want to use all the fields in your report, or if you want to customize the order and appearance of the fields, use the **Edit Template** button. The fields in the template file are denoted with a \$ symbol before the corresponding field name.