Pub. No. 3629

REGULATEURS EUROPA

Member of the
Heinzmann Group

REGULATEURS EUROPA

Member of the
Heinzmann Group

Viking Vision 3.5
User Guide

Publication 3629

Pub. No. 3629

REVISION HISTORY

Revision	Date	Description	Author
1	May 2010	Original	MMB

Pub. No. 3629

CONTENTS

COPYRIGHT NOTICE

TITLE PAGE

REVISION HISTORY

CONTENTS

INTRODUCTION

PROGRAM REQUIREMENTS

TERMINOLOGY

ABBREVIATIONS

PROGRAM INSTALLATION
- Viking Vision Installation
- Adobe Acrobat Reader Installation

RUNNING VIKING VISION FOR THE FIRST TIME
- Configuring Viking Vision

SCREEN LAYOUT
- Menu Bar Area
- Button Area
- Menu Area
- Grid Area
- Connection Area
- Tool Tips Area
- Navigation Area
- Application Information Area
- Alarm Log Area
- Canvas Area
- Stop Button Area

CONNECTING TO VIKING

PARAMETER ORGANISATION

DISPLAY OF PARAMETERS IN DISPLAY MODE

DISPLAY OF PARAMETERS IN EDIT MODE

EDITING PARAMETERS
- Graphical Editing

EDIT WARNING MESSAGES

RELOADING PRESET VALUES INTO VIKING
- Setting Working Parameters To Their Working Preset Value
- Setting Working Preset, High And Low Range To Their Factory Values

RETRIEVING PARAMETERS FROM VIKING

SAVING PARAMETERS FROM VIKING TO FILE

LOADING PARAMETERS FROM FILE TO VIKING

ALARMS

PRINTING

STOP BUTTON

GRAPHICS CANVAS
- Creating A New Canvas Page
- Saving A Canvas Page
- Renaming A Canvas Page
- Deleting A Canvas Page
- Loading A Canvas Page
- Navigating Around The Canvas Pages
- Adding Graphics To The Canvas Page
- Moving The Position Of The Graphic
- Removing A Graphic From The Canvas Page
- Changing The Type Of Graphic Parameter Representation

SECURITY
- Setting The Password Level
- Changing Passwords
- Viewing Parameter Password Levels
- Changing Parameter Password Levels
- Changing Sub-Menus Parameter Password Levels

BOOTSTRAP LOADING
- Setting The Viking Ready For Loading
- Setting Viking25 To Bootstrap Mode
- Loading The Software Into The Viking
- Bootstrap Loader Errors

KEYBOARD INTERFACE

FAULT FINDING

CUSTOMER SUPPORT

LICENSE AGREEMENT

INTRODUCTION

Viking Vision is a PC based tool which has been developed to allow easy access to adjustable parameters and status information in the Viking product range.

Viking Vision offers the following features to the user:

- All parameters are grouped and presented in a tree structured menu.
- Parameters can be edited and displayed graphically.
- Status information can be displayed graphically.
- Alarms are displayed and logged in chronological order of event with the ability to be reset.
- Parameter and alarm information can be printed in a number of different formats.
- Parameters can be downloaded from one Viking and stored or loaded into another unit.
- Information can be presented graphically on up to 256 user defined canvas pages.
- Sounds can be allocated to particular events (e.g. alarms).
- Uploading of application software into Viking products.

To support all of these features Viking Vision has been made highly configurable. This allows for customisation of the program's features for an individual contract or operator's needs. Each contract or application has its own unique Contract Configuration File (CCF) which is loaded into Viking Vision. The CCF file contains the settings required to configure the presentation and adjustment of data. (An optional Parameter file (PAR) can be used to store parameter values from the application.)

PROGRAM REQUIREMENTS

Viking Vision has been designed to allow operation from either desktop or notebook computers with the following minimum specification:

- Intel Pentium II 233 processor
- 64MB RAM
- 1024 x 768 screen resolution (high colour – 16 bit)
- Windows 98 SE, Windows ME, Windows 2000, Windows NT, Windows XP, Windows Vista, or Windows 7
- One free RS232 port or USB to RS232 adapter port (for comms to Viking)
- One parallel or serial port (if alarm printing is required)
- Soundcard and speakers (if sounds are required)
- 60MB hard disk space
- Mouse or other pointing device

TERMINOLOGY

The following terminology has been used in this manual:

- [ ] refers to the path of a file or files on the computer
  e.g. [c:\] refers to the root directory on the C drive,
  [d:\my files] refers to the directory 'my files' on the D drive.

- *Menu>* refers to a menu/menu item contained within the program
  e.g. *Menu>Embedded>Connect* refers to the 'Connect' function from the 'Embedded' menu at the top of the screen.

- Area refers to a menu Area of the screen
  e.g. Button Area refers to the section of screen containing the mode selection buttons.

- Mode refers to the mode in which the program is operating
  e.g. Edit mode refers to the program state as one which allows editing of menu parameters.

ABBREVIATIONS

The following abbreviations have been used in this manual:

- PC personal computer
- CD compact disk
- RAM random access memory
- MB megabyte
- PAR file parameter file
- CCF file contract configuration file

PROGRAM INSTALLATION

Viking Vision Installation

Insert the CD marked 'Viking Vision 3' into the CD / DVD drive of the computer. Press the 

button and select 'Run'. Type in [x:\setup.exe] where 'x' is the drive letter allocated to your CD / DVD ROM drive and press return.) Follow the instructions on the screen.

In addition to the Viking Vision program, you should be in possession of a CCF file for the Viking/s you intend communicating with. This file may be copied and stored on the computer in any location.

Note: It is recommended that the CCF file is stored in its own directory on the drive. If a PAR file is to be used, it should also be copied into the same directory as the CCF file.

If you have received any graphic DLL files, these should be copied into the directory [\bin] which resides in the Viking Vision directory that was created during program installation.
In order to access help within the program, Adobe Acrobat Reader should be installed onto the computer (see section titled Adobe Acrobat Reader Installation for details of how to do this.)

Adobe Acrobat Reader Installation

A copy of Adobe Acrobat Reader (release 4.05) Installer is stored on the Viking Vision CD in [\Acrobat Reader Installer]. This may be used to install the reader program onto the computer in any location.

Alternatively an existing installed copy of the program may be used, in which case a new installation is not necessary. Note: if an existing version is used then it should be version 4.05 or later.

If a later release of the Acrobat Reader is available, it is suggested that it is installed onto the computer and used in place of release 4.05.

Installation of the program from CD can be initiated by:

- running the program [\Acrobat Reader Installer\ rs405eng.exe] from Windows Explorer

or

- pressing the 

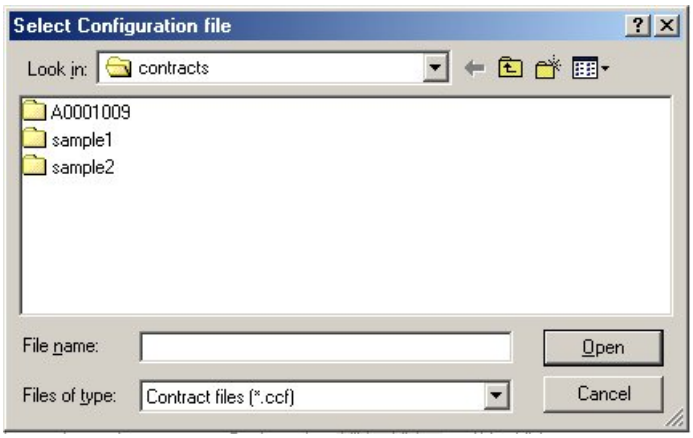
button, selecting 'Run' and typing in [x:\Acrobat Reader Installer\ rs405eng.exe] where 'x' is the drive letter allocated to your CD ROM and press return.

In ether case the installation instructions on the screen should be followed.

RUNNING VIKING VISION FOR THE FIRST TIME

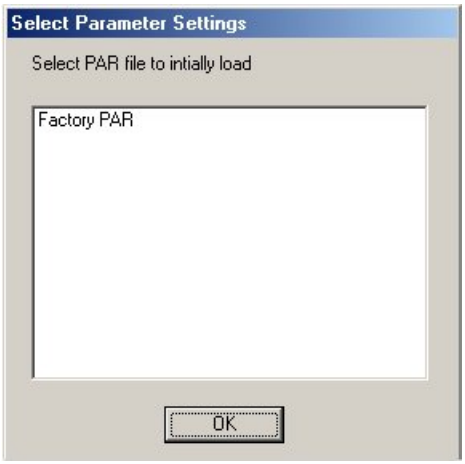
Ensure that the Viking Vision cable is connected between the Viking and a serial port on the computer. Make a note of the computer serial port number.
Viking Vision can be started by double clicking on the desktop icon or alternatively, by clicking the Start button and selecting the icon in the 'Programs' section of the menu that appears.

When started, a dialogue will prompt you to select the CCF file that is to be used for this Viking. The appropriate file must be selected from a directory on the computer. When a selection has been made the Open button should be clicked.



A second dialogue will prompt you to select a PAR file. One must be selected from the list shown on the screen and then the OK button should be clicked.

Note: if only the 'Factory PAR' PAR file is available then it should be selected.



Viking Vision will now continue onto the main screen.

Configuring Viking Vision

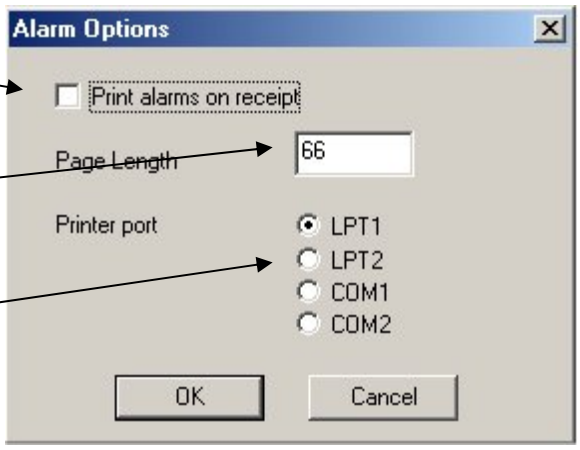
When Viking Vision is run for the first time, the program needs to be configured. This process is detailed below:

1. Select *Menu>Options>Alarm print*. The following dialogue will be displayed associated with the printing of alarms as the program receives them. When the settings have been configured click OK

Enable/disable printing of alarms as they arrive by ticking this box

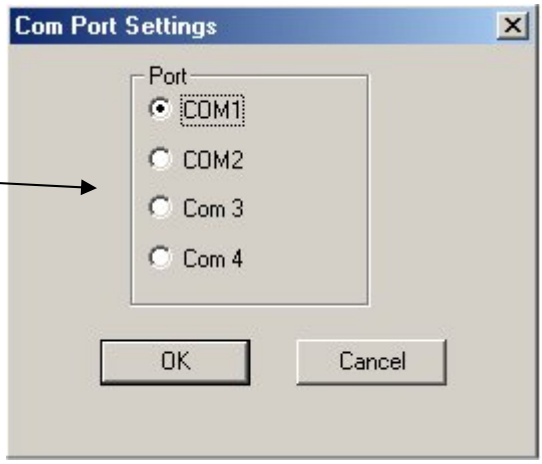
Set the length of the printer page

Select the printer port which will be used to print out alarms



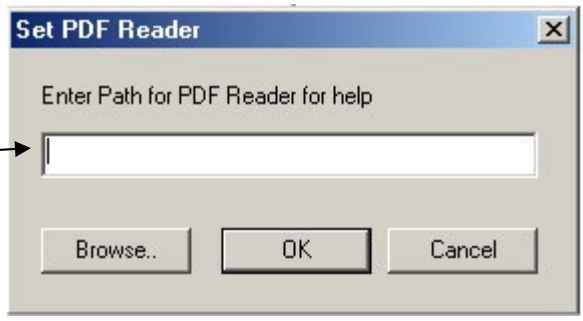
2. Select *Menu>Options>Port*. The following dialogue will be displayed associated with the communications to the Viking. When the settings have been configured click OK

Select the serial port which will be used to communicate with the Viking



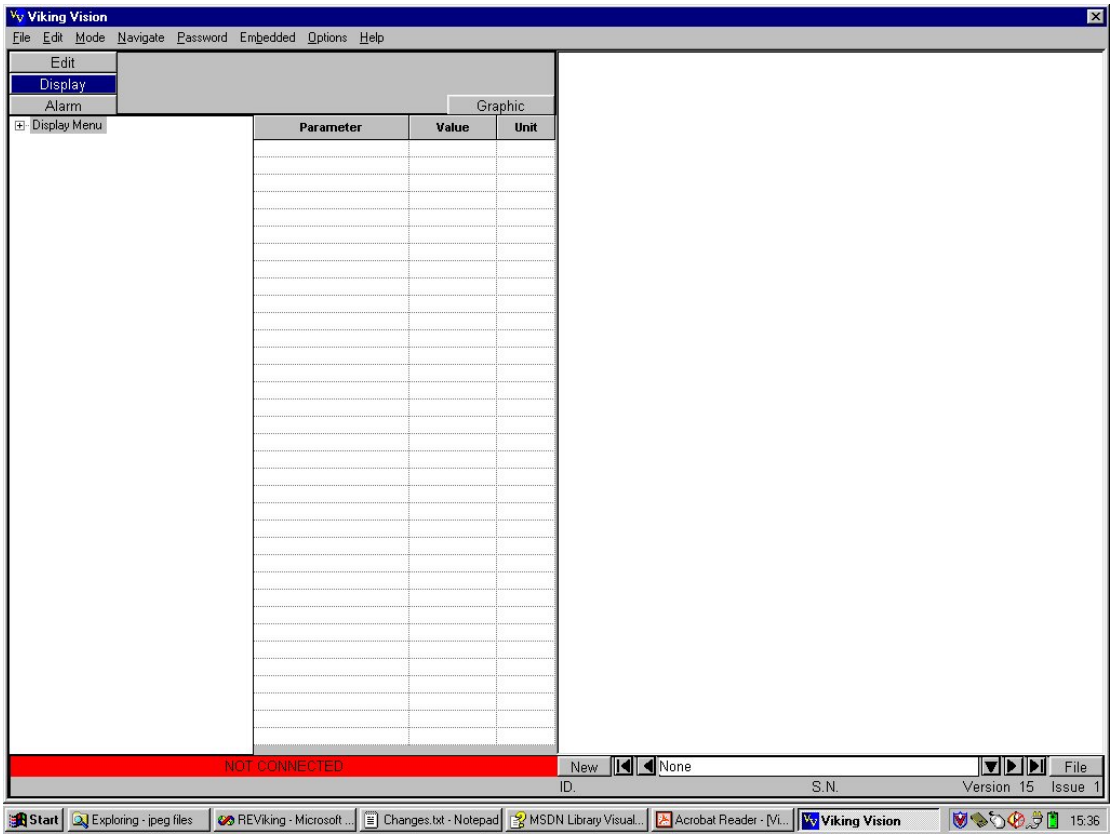
3. Select *Menu>Options>PDF Reader*. The following dialogue will be displayed associated with the location of Adobe Acrobat Reader. When the settings have been configured click OK

Enter the complete path for the Adobe Acrobat Reader program. This may be selected by either typing it in directly or clicking the Browse.. button and then selecting the program directly from the computer's directory structure



SCREEN LAYOUT

Viking Vision has been designed to present a common screen layout to the user whether editing parameters, viewing status information or looking at alarms. When the program is first run a screen similar to that shown below should appear:



This can be broken down for description into the following areas:

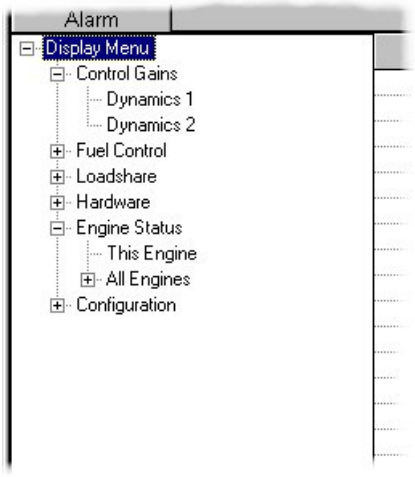
1. Menu Bar Area

   The menu bar allows access to the various program functions.

2. Button Area

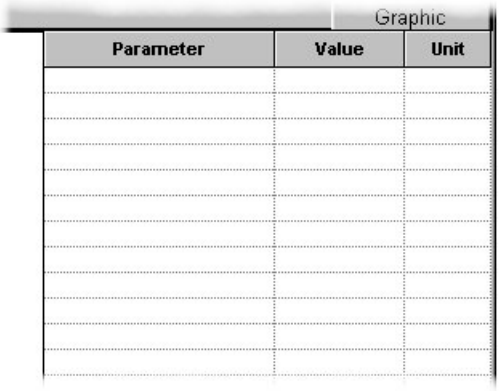
Buttons are presented that allow direct movement into any one of the three modes of operation – parameter Edit, status Display and Alarms and also fast access to graphics canvas and alarm functions.

3. Menu Area



All editable, status or alarm parameters are presented in a menu tree format. This allows parameters of a similar type to be grouped together

4. Grid Area



Each parameter within a menu will appear in the grid area. If any menu contains more parameters than the grid can show, a scroll bar will automatically appear.

5. Connection Area

The connection area displays one of two indicators – either a red panel with the words 'NOT CONNECTED' to indicate that communications between Viking Vision and Viking are not established, or a green panel with the words 'CONNECTED' to indicate that communications are established.

6. Tool Tips Area

This area will display simple help information or tips associated with the cursor position on the screen.

7. Navigation Area

This area allows control of the graphics canvas when in either Edit or Display modes of operation.

8. Application Information Area

Information about the specific application can be viewed in this area including identification, serial number and Viking software release status.

9. Alarm Log Area

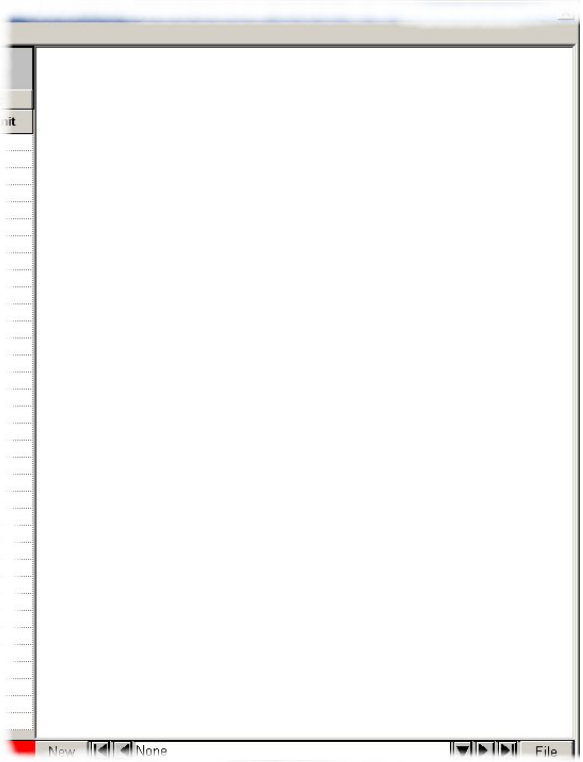
Alarms are displayed in chronological order of status change in this area.

The area also doubles as the Canvas Area when in Edit or Display modes of operation.

10. Canvas Area

Parameters can be placed and displayed in graphical form onto one of 256 canvas pages in this area.

The area also doubles as the Alarm Log Area when in Alarm mode of operation.



11. Stop Button Area

The stop button area is used to alert the user when new alarms occur.

The stop button is configured for each contracts requirements.

If it is present then clicking the button can be used to stop the engine from within Viking Vision.

If it is not present the window area is used as an extended alarm warning area and will flash when alarms are present.

If alarms are not present the window will contract to just show the title bar.

The Stop Button Area will appear in front of other programs when they are run on the computer at the same time as Viking Vision.

CONNECTING TO VIKING

The Viking Vision Communications Cable must be connected between the Viking and the Viking Vision computer prior to connection. Also ensure that the Viking is powered.

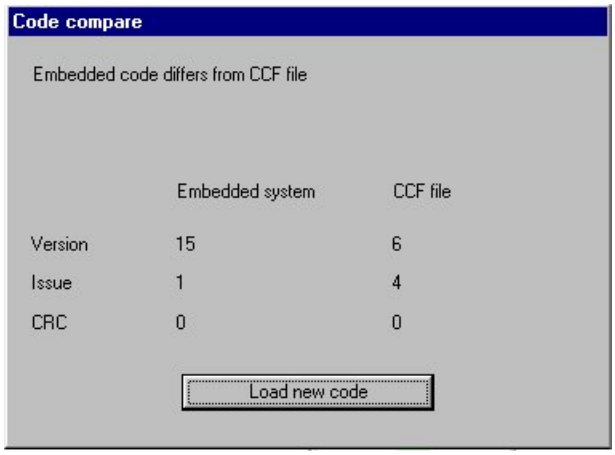
Run the Viking Vision program and select the CCF and PAR file allocated for the Viking as described in Running Viking Vision For The First Time.

Select *Menu>Embedded>Connect*. This initiates the communications process.

The version and issue of software will be checked between the Viking and Viking Vision to ensure that the correct CCF file is being used.

If differences are seen then a warning is displayed. If an incorrect CCF file has been chosen then the Load New Code button allows for exiting and starting with the correct file. If incorrect code is loaded the Load New Code button allows for bootstrapping the correct software into the Viking.

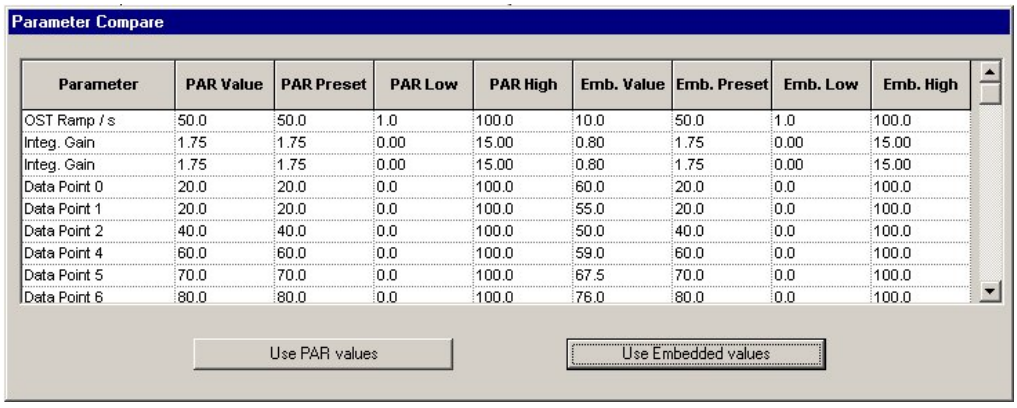
Note: the CRC value is always 0.



If communications are not established correctly then a warning will be shown.

Assuming that communications are healthy, information about each parameter will be obtained from the Viking by Viking Vision. This may take some time according to the number of parameters used in the specific application. A message will be displayed indicating that the process is in progress.

Once all the information has been retrieved, Viking Vision will check that the values for preset , high and low ranges for each parameter match those defined in either the 'Factory PAR' or specifically chosen PAR file according to the one that was loaded.



The columns marked PAR. indicate the value from the PAR file, those marked Emb. are the values from the Viking (embedded system).

A choice is presented that gives the option to continue with those already in the Viking 

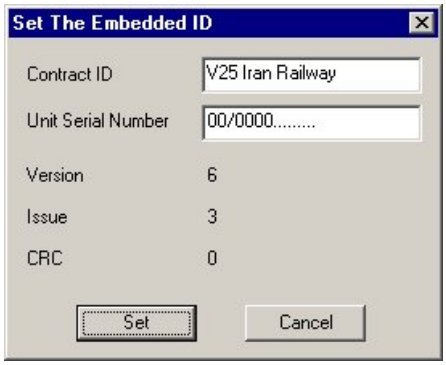
or to load into the Viking those from the PAR file 

.

Once this process is complete, the Connection Area will display the following:

It is now possible to set the contract identification to the embedded system. Click the Edit mode button 

and select the *Menu>Embedded>Set ID* option. This will display the Set The Embedded ID dialog. This shows the current embedded system values for the contract indentification.



It is now possible to set the Contract ID and the Unit Serial Number for the embedded system. When the details have been added clicking Set will save the values to the embedded system.

A dialog will then be shown warning of the need to perform a full save to retain the newly set contract identification.

PARAMETER ORGANISATION

Parameters within the Viking have been grouped into a tree-like structure so that similar types of parameters, or parameters associated with a certain function appear together in sub-menus. This is similar to the storage structure of files in folders on a computer's hard disk drive.

The Menu Area on the left-hand side of the screen shows the parameter menu structure. Just as the menu controls ⊞ and ⊟ are used to expand and contract file menus within Microsoft Windows Explorer, they are used in Viking Vision to expand and contract parameter menus in the same manner.

E.g. in the example on the right above, the menus marked with a ⊞ to the left-hand side can be expanded to show their own sub-menus. Those marked with a ⊟ are already expanded and can therefore only be contracted.

Again, refering to the example to the right above, 'Display Menu' is described as the root or top-level menu just as [C:\] might be on a hard disk drive. In the case of Viking Vision there are three root menus: 'Display Menu', 'Edit Menu' and 'Alarm Menu'.

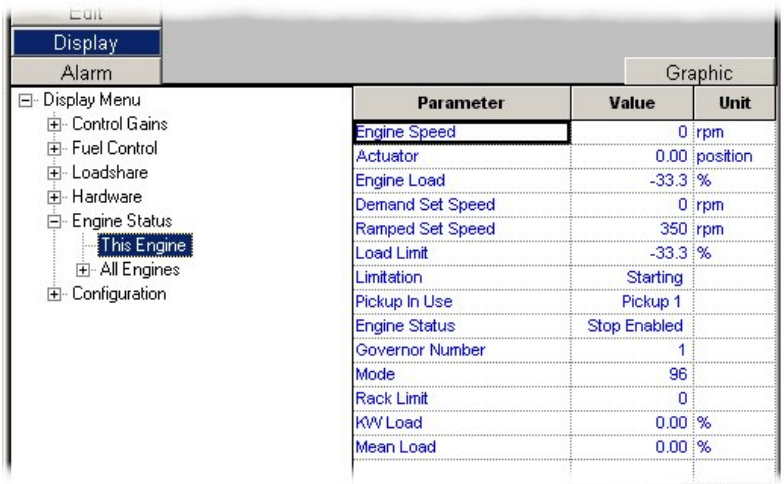
The dark blue menu highlighting shows the menu which is currently selected.

DISPLAY OF PARAMETERS IN DISPLAY MODE

In order to view status parameters, Display mode must be entered. This can be done by clicking the Display button in the Button Area. Alternatively, *Menu>Mode>Display* can be selected.

Once in Display mode, the Menu Area on the left-hand side of the screen can be used to select the menu containing the parameters to be viewed.

If a menu is selected that contains parameters, the parameters will appear in a grid in the Grid Area.



The example above shows the display of parameters contained within the menu 'This Engine' in the Grid Area. The parameter's name, value and unit are displayed.

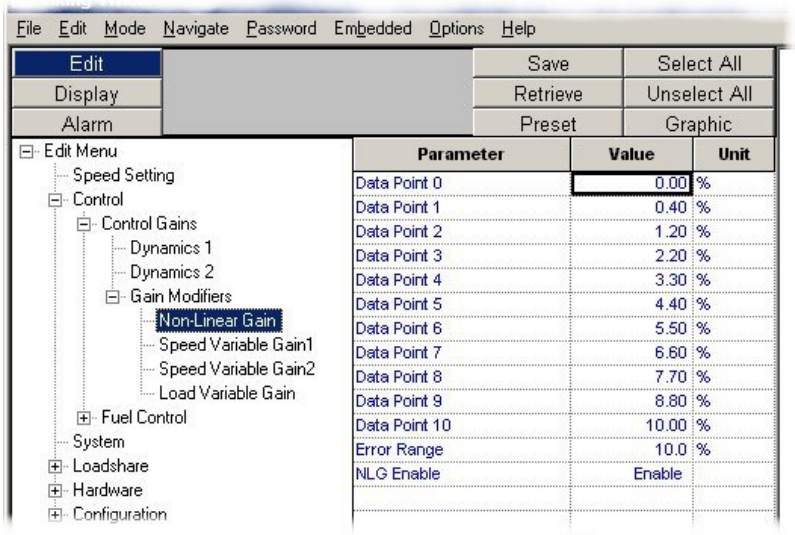
Each parameter value is updated at one-second intervals.

DISPLAY OF PARAMETERS IN EDIT MODE

In order to edit control parameters, Edit mode must be entered. This can be done by clicking the Edit button in the Button Area. Alternatively, *Menu>Mode>Edit* can be selected.

Once in Edit mode, the Menu Area on the left-hand side of the screen can be used to select the menu containing the parameters to be edited.

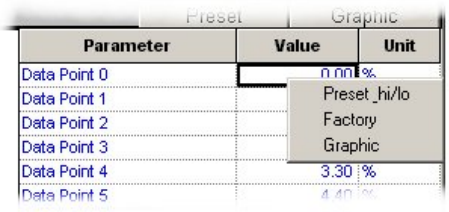
If a menu is selected that contains parameters, the parameters will appear in a grid in the Grid Area.



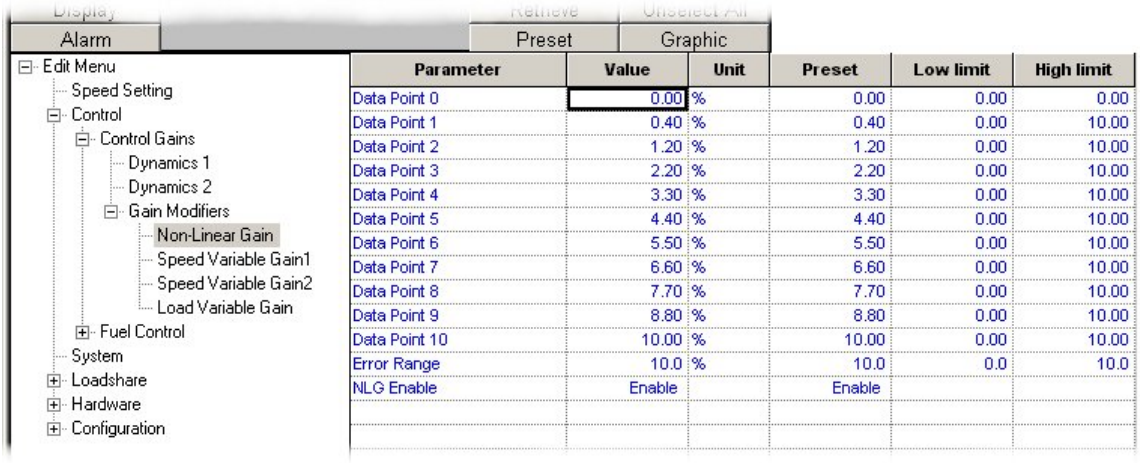
The example above shows the display of editable parameters contained within the menu 'Non-Linear Gain' in the Grid Area. The parameter's name, value and unit are displayed.

Each parameter has a normal working preset, high and low limit as well as a factory high and low limit associated with it. The factory values are set at Regulateurs Europa and are not editable. The normal working values are editable and can be adjusted to suit the application as long as their values stay within the ranges set by the factory values. Viking Vision will automatically limit the value of any parameter such that it remains within the factory setting range.

In order to view the normal working values select a parameter value by right-clicking on the grid in the column marked 'Value' on the parameter line. A number of options will be displayed.



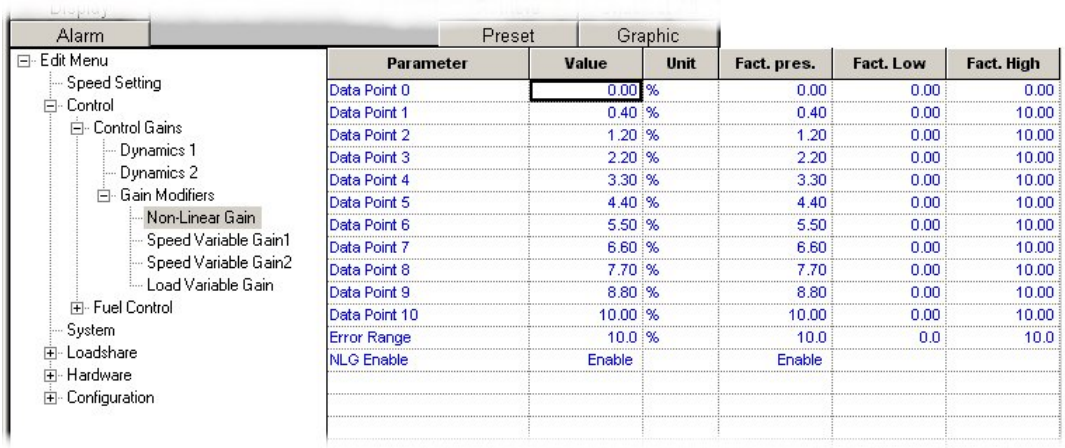
If 'Preset hi/low' is chosen or *Menu>Edit>Expand Table>Preset & hi/low* is selected, then the following should be displayed:



Parameter	Value	Unit	Preset	Low limit	High limit
Data Point 0	0.00	%	0.00	0.00	0.00
Data Point 1	0.40	%	0.40	0.00	10.00
Data Point 2	1.20	%	1.20	0.00	10.00
Data Point 3	2.20	%	2.20	0.00	10.00
Data Point 4	3.30	%	3.30	0.00	10.00
Data Point 5	4.40	%	4.40	0.00	10.00
Data Point 6	5.50	%	5.50	0.00	10.00
Data Point 7	6.60	%	6.60	0.00	10.00
Data Point 8	7.70	%	7.70	0.00	10.00
Data Point 9	8.80	%	8.80	0.00	10.00
Data Point 10	10.00	%	10.00	0.00	10.00
Error Range	10.0	%	10.0	0.0	10.0
NLG Enable	Enable		Enable		

It can be seen that three more columns appear showing the editing range and preset value for the parameter. Each of the four values shown for every parameter is available for edit.

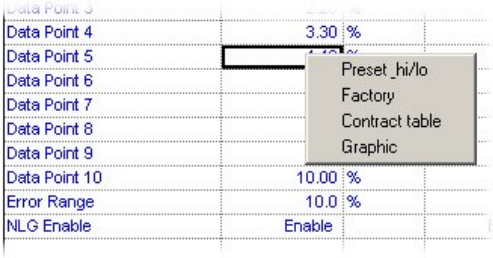
If 'Factory' is chosen or *Menu>Edit>Expand Table>Factory* is selected, then the following should be displayed:



Parameter	Value	Unit	Fact. pres.	Fact. Low	Fact. High
Data Point 0	0.00	%	0.00	0.00	0.00
Data Point 1	0.40	%	0.40	0.00	10.00
Data Point 2	1.20	%	1.20	0.00	10.00
Data Point 3	2.20	%	2.20	0.00	10.00
Data Point 4	3.30	%	3.30	0.00	10.00
Data Point 5	4.40	%	4.40	0.00	10.00
Data Point 6	5.50	%	5.50	0.00	10.00
Data Point 7	6.60	%	6.60	0.00	10.00
Data Point 8	7.70	%	7.70	0.00	10.00
Data Point 9	8.80	%	8.80	0.00	10.00
Data Point 10	10.00	%	10.00	0.00	10.00
Error Range	10.0	%	10.0	0.0	10.0
NLG Enable	Enable		Enable		

Again, three extra columns appear showing the factory values, however these are not editable.

In both of the last two cases, selecting either *Menu>Edit>Expand Table>Contract* or by right-clicking on the grid in the column marked 'Value' on the parameter line and then selecting 'Contract' will return the Grid Area to its normal format.



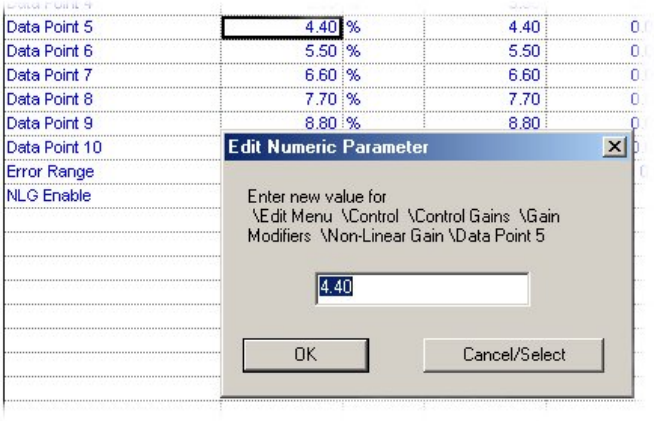
EDITING PARAMETERS

Each parameter can be edited assuming that the correct password has been entered into Viking Vision (see section Security).

Each of the four values (normal working value, preset, high and low limit) can be edited for each parameter by first left-clicking on the value and then selecting a new value. If a range is exceeded then a warning message will be displayed.

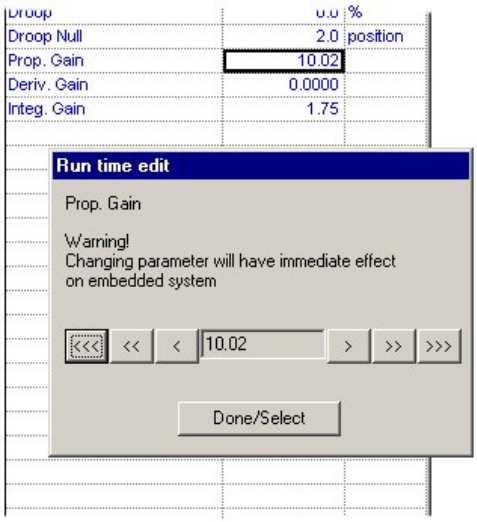
A new value can be entered in a number of different ways according to the type of parameter:

If the 'Edit Numeric Parameter' dialogue to the right appears then a new value can be entered directly into the box and then OK button can be clicked. This has now altered the value in Viking Vision, but the value needs to be sent through to the Viking. This is done by clicking the Save button in the Button Area.



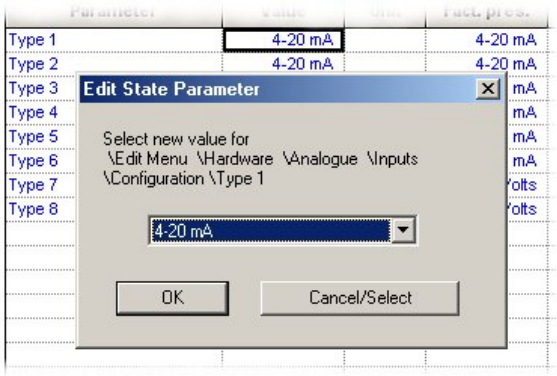
If the 'Run Time Edit' dialogue to the right appears then the value can be edited in realtime (i.e. editing has immediate effect).

The › and ‹ buttons will scroll the parameter value up and down by an amount equal to its least significant digit. The ›› and ‹‹ buttons will scroll the parameter value up and down by an amount approximately equal to a twentieth of its maximum value. The ››› and ‹‹‹ buttons will scroll the parameter value up and down by an amount equal to a tenth of its maximum value. When editing is complete Done/Select button should be clicked.

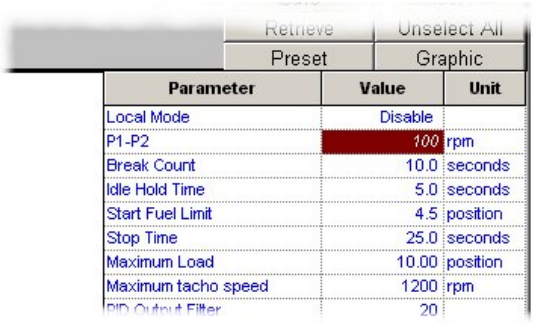


There is no need to click the Save button as the editing has already had immediate effect.

If the 'Edit State Parameter' dialogue to the right appears then a new value can be selected from the list presented when the ▼ button is clicked. Once selected, the OK button can be clicked. This has now altered the value in Viking Vision, but the value needs to be sent through to the Viking.

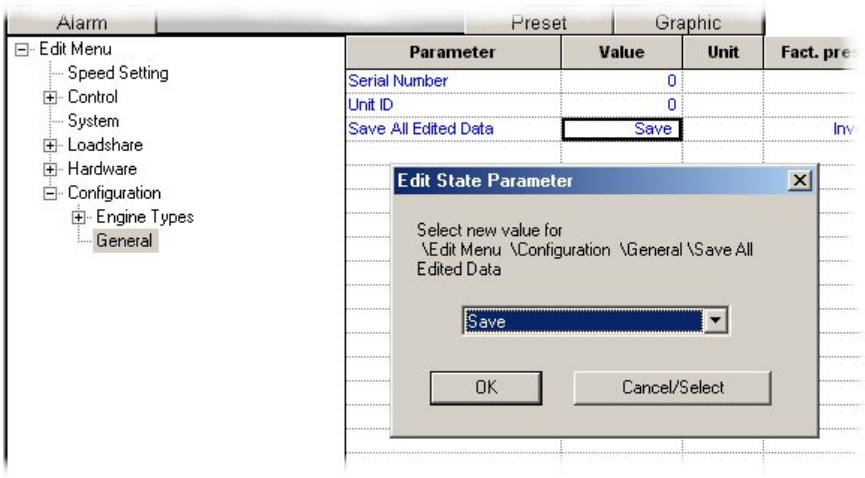


In order to indicate that the value has changed but not yet sent through to the Viking, the parameter in the Grid Area will be highlighted.



Saving to Viking is done by clicking the Save button in the Button Area.

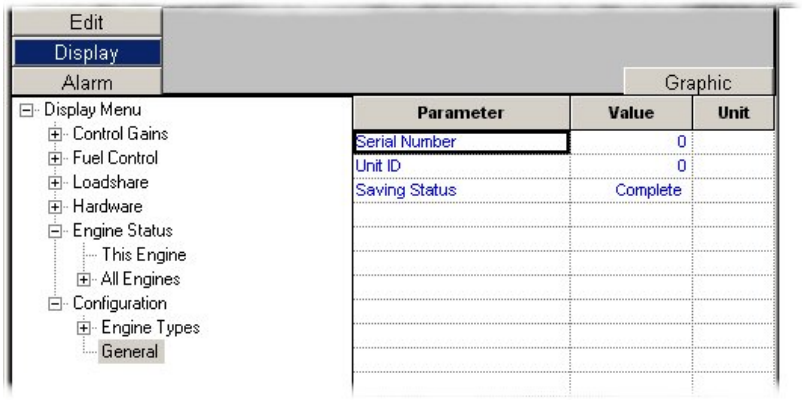
When using either of the three methods for adjustment described above, it must be noted that although the adjusted values end up as the normal working values in the Viking, they are not permanently saved. In order to store the values into non-volatile memory, the 'Save All Edited Data' parameter must be selected or adjusted to any value. For Viking25, the location of this parameter is shown below.



The Save button must then be clicked in the Button Area.

During a save to non-volatile memory it important that power is not lost to the Viking.

In the Display Menu, the parameter 'Saving Status' indicates the progress of the save. The value will be either 'Complete' in which case the saving process is fully complete, or 'Saving' which indicates that saving is actually in progress. For Viking25 the saving process will take in the region of five to six seconds.



Note:

- The indication of saving in progress for the Viking25 is a red 'Storing Parameters' indicator that lights when the storing process is in progress.
- Saving to non-volatile memory will only take place when the engine is stationary.

If in section Connecting To Viking, differences of Viking software version or issue were seen and corrected, they should also be saved to non-volatile memory using the process above.

Graphical Editing

Some parameters may be configured to support graphical editing. If this is the case then when the parameter is dragged onto the canvas page, or selected and either the Graphic button is clicked in the Button Area, or *Menu>Edit>Graphic* selected, a choice of graphical representations will be given. The appropriate one should be selected from the list. The graphic will appear in its own window for editing.

If a parameter is not configured to be edited graphically then a warning will be shown.

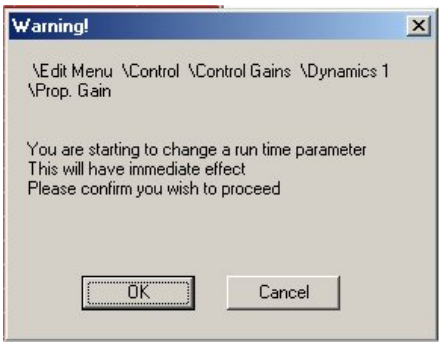
EDIT WARNING MESSAGES

When editing parameter values, certain warning messages may be shown on the screen according to the type of parameter. These messages must be read and a decision made as to whether editing of the parameter should continue.

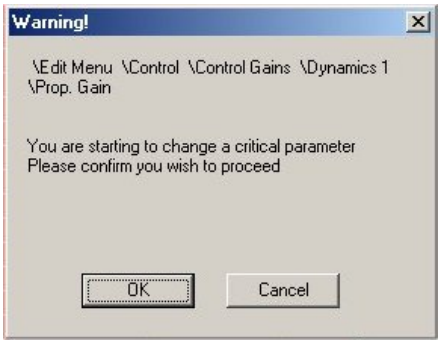
The message to the right denotes that editing will have an immediate effect on the parameter i.e. a save is not required to update the working value in the Viking.

The parameter name and menu path is indicated at the top of the message.

(Note: a save to non-volatile memory would still be required.)



The message to the right denotes that editing will have an effect on a parameter classed as critical. A critical parameter is one which has a significant effect on engine performance with a potential safety issue if adjusted.



RELOADING PRESET VALUES INTO VIKING

When in Edit mode, working parameter values can be set back to the working preset values, and the working preset, high and low range can be set back to the factory values.

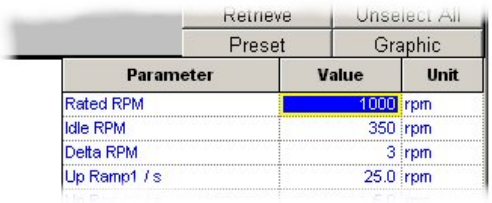
In order to carry out this function, Edit mode must be selected.

Setting Working Parameters To Their Working Preset Value

One of two methods can then be used to set selected parameters or complete menus.

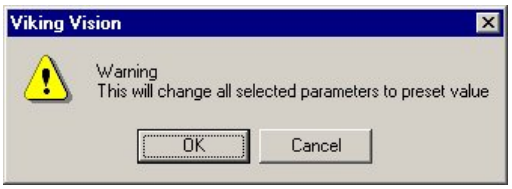
Setting selected parameters requires that the parameters are selected. This is achieved either by starting to edit each parameter and then immediately clicking either Done/Select button or Cancel/Select button, or by clicking the Select All button to select all of the parameters in the particular menu.

The parameters will then appear highlighted.



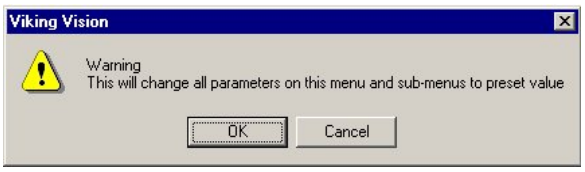
To load the preset values into these parameters either the Preset button can be clicked in the Button Area, or *Menu>Edit>Presets>Selected* selected.

In either case a warning message will be given and then the OK button clicked.



If complete menus are required to take the preset values, then the menu should firstly be selected in the Menu Area. *Menu>Edit>Presets>Sub-menus* must be selected.

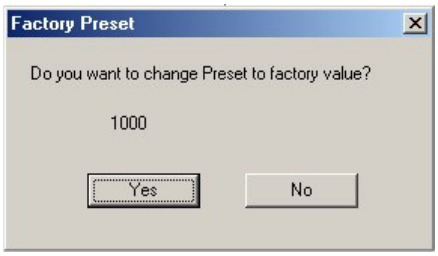
This will show a warning message and if the OK button is clicked then all the parameters within the menu, or its sub-menus will be set to their working preset values.



Setting Working Preset, High and Low Range to Their Factory Values

If the working preset, high and low range parameter values have been adjusted away from their original values, the original (factory) values can be recalled.

The process for achieving this is to expand the Grid Area so that the working values are displayed. By right clicking over the value to change, the dialogue to the right will appear. The value shown on the dialogue is the factoy value that will be used if the Yes button is clicked.

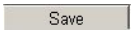


RETRIEVING PARAMETERS FROM VIKING

When in Edit mode, there is the facility to retrieve parameter values from the Viking after editing has taken place, but before the adjusted values have been sent to the Viking. This is especially useful if a parameter has been adjusted incorrectly, but no record has been made of its original value.

Note: the retrieve function will not work if editing has taken place using a 'Run Time Edit' dialogue.

In order to retrieve a value (or values) from the Viking, either the 

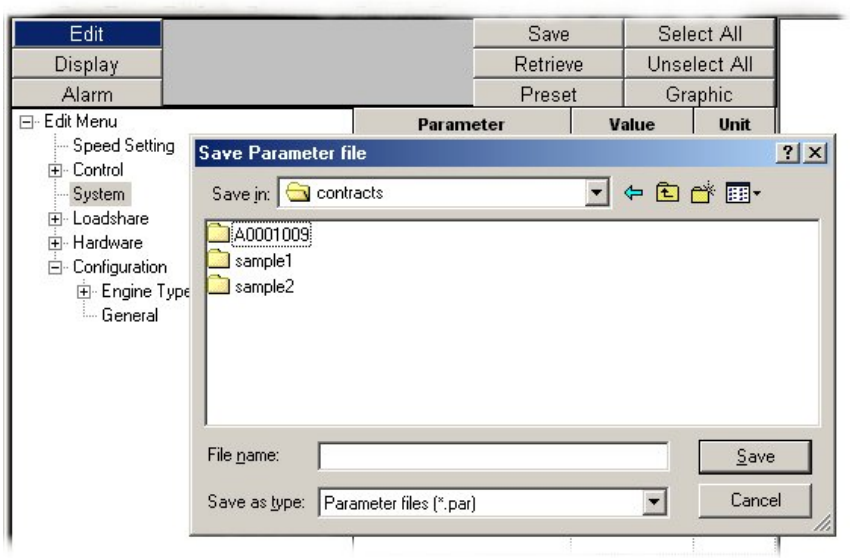
button should be clicked or *Menu>Embedded>Retrieve* should be selected. Any edited values that have not been sent through to the Viking using the 

button will be overwritten by those already stored in the Viking.

SAVING PARAMETERS FROM VIKING TO FILE

Viking Vision has the facility for saving a set of editable parameters from the Viking to a file on the computer. The file is refered to as a PAR file. This can be useful as a record of the application setup, or as a mechanism for transfer of parameter values from one Viking to another.

In order to create a PAR file, Edit mode should be accessed and then *Menu>File>Save Parameters* selected.

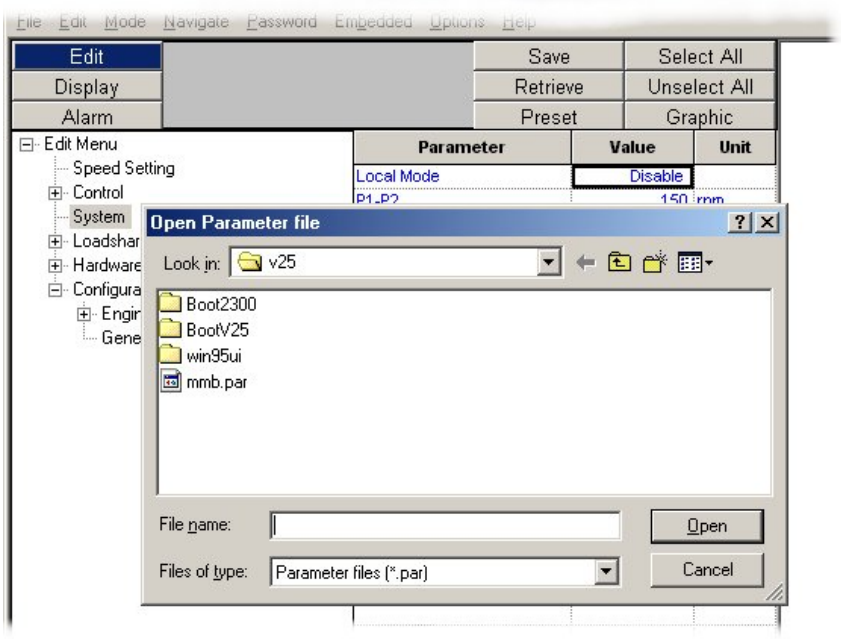


The dialogue above will be shown asking for a file name and file directory path. The file name can be any name (following Window's file naming convention), however the path should be identical to that containing the CCF file which was chosen at the start.

LOADING PARAMETERS FROM FILE TO VIKING

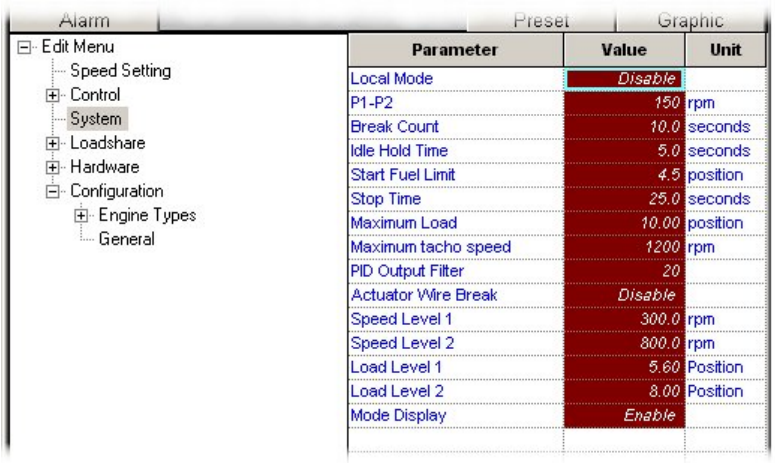
Viking Vision will allow values from a PAR file stored on the computer to be loaded into the Viking. This allows transfer of parameter values from one Viking to another.

In order to load in a PAR file, Edit mode should be accessed and then *Menu>File>Open Parameters* selected.



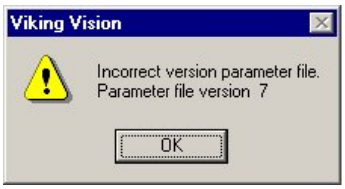
A dialogue will be shown asking for a file name and file directory path. In the example above, the PAR file 'mmb.par' will be selected for loading. The Open button should be clicked to load in the values. All editable parameter values will be overwritten with those from the file.

The Grid Area will show each parameter as being highlighed ready for saving into the Viking in the normal way. This can be seen to the right.

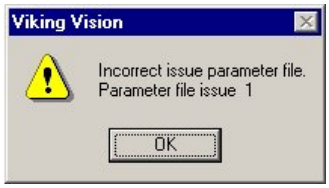


The parameters saved in the PAR file are only valid for the version and issue of software in use. To guard against the possibility of loading an incorrect PAR file the version and issue are checked.

If an incorrect version PAR file is selected then a warning will be shown along with the PAR files version.



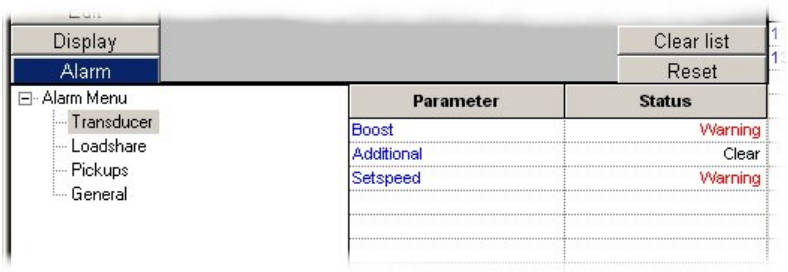
If an incorrect issue PAR file is selected then a warning will be shown along with the PAR files Issue.



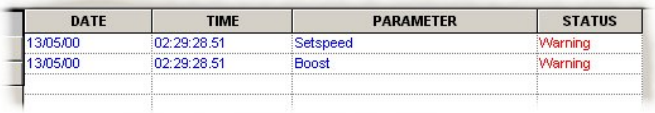
ALARMS

There are two ways that Viking generated alarms are displayed in Viking Vision:

The current status of each alarm is shown in the Grid Area. Just as with any other parameter, alarms are grouped in menus.



A chronological log of alarm state changes is shown in the Alarm Log Area. This will show when an alarm changed state, and what the state change was.



The Alarm Log Area can be cleared of all logged information by clicking the Clear list button in the Button Area.

Alarms can be reset by clicking the Reset button in the Button Area. The Viking will respond to this request and clear any alarms (where possible). Any alarms which are successfully cleared will log a change of alarm state to 'Clear' in the Alarm Log Area, and their value will be displayed as 'Clear' in the Grid Area.

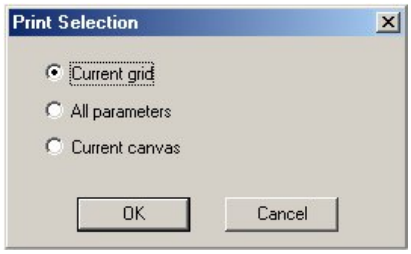
If any of the alarms have a state other than 'Clear' then the title bar of the Stop Button Area will flash and display the message 'Alarm active' (see section Stop Button).

PRINTING

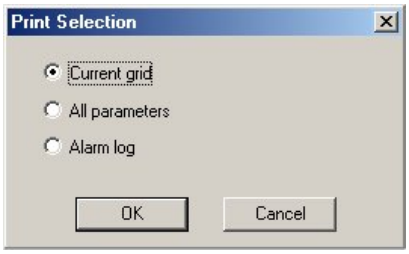
In either of the three modes, parameters can be printed to provide a hardcopy record of their values.

Printing can be initiated by selecting *Menu>File>Print.*

One of three options from either of the two dialogues that appear must be selected before clicking OK:



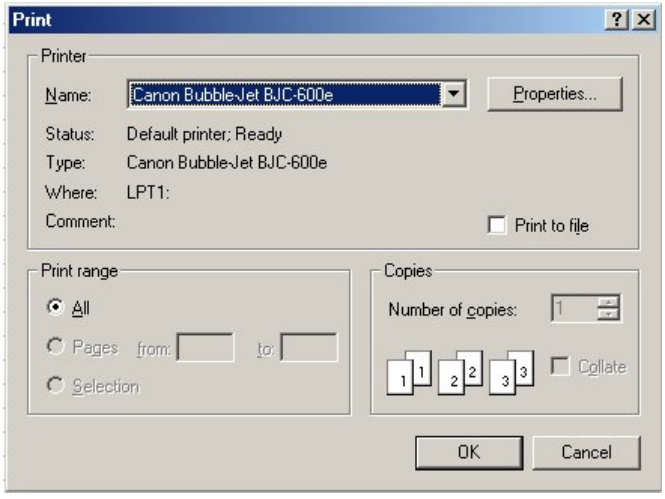
- 'Current grid' will print out just the parameters from the one menu that is currently selected.
- 'All parameters' will print out every menu set of parameters in turn. Each menu will appear on a fresh printer page.
- 'Current canvas' will print out a copy of the active canvas page (see section Graphics Canvas). This option will only be shown when in either Display or Edit modes of operation.



- 'Alarm log' will print out a copy of the Alarm Log Area (see section Alarms). This option will only be shown when in Alarm mode of operation.

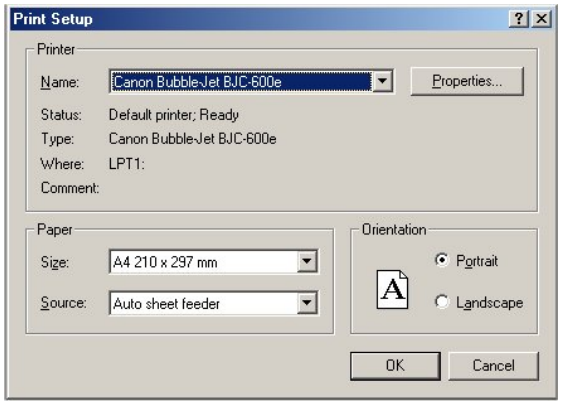
When the selection has been made the standard Windows print dialogue to the right is displayed.

This should be completed in the usual manner.



If a print preview of the parameters is required rather than a full print, exactly the same process as above should be followed except that Print Previewing can be initiated by selecting *Menu>File>Print Preview* rather than *Menu>File>Print.*

Printer characteristics can be adjusted and set by selecting *Menu>File>Print Setup* and then by using the standard Windows printer setup dialogue to the right.



STOP BUTTON

The Stop Button Area performs two main roles – to inform the user that alarms are present, and to allow a Viking Vision stop of the engine (if the contract has been configured to use a stop button).

If a stop button has been configured for the contract :-

The title bar of the area will show one of two messages:

If no alarms are present then the title bar will be stable and show the message to the right.

If an alarm is present then the title bar will flash and display the message to the right.

If the red stop button is pushed then the engine will be immediately stopped and a 'Viking Vision Stop' or 'WIN95UI Stop' message will be shown in the Alarm Log Area.

Note: The engine will only be stopped if the Viking has been configured to shutdown the engine. If an external shutdown mechanism is implimented instead of direct control from the Viking, the engine will continue to run.

On pressing the stop button, Viking Vision will confirm that the Viking has received the command by displaying the message to the right.

If a stop button has not been configured for the contract :-

The title bar of the area will show one of two messages:

If no alarms are present then the title bar will be stable and show the message to the right.

If an alarm is present then the title bar will flash and display the message to the right.

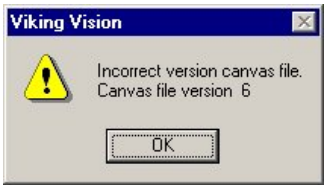
GRAPHICS CANVAS

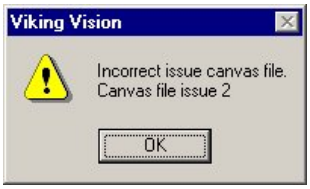
The Canvas Area allows 256 pages of parameter graphics to be created and presented for status viewing when in Display or Edit modes (only one page may be viewed at a time). The configuration of each page can be stored for future use. This allows pages to be set-up to display analogue gauges representing the various analogue inputs and outputs for example.

Any canvas page can hold graphics which are specifically associated with Display mode parameters. The canvas page will support multiple graphical representations of a single parameter on the same page.

A number of graphic display tools (gauges, graphs, etc) are supplied with Viking Vision as standard. However, Viking Vision supports additional graphic DLL files which may be provided separately with each application. If any of these graphic DLL files have been supplied then it is essential that they be installed as per the instructions with them prior to running Viking Vision with the applications CCF file. If correct installation of the additional graphics is not carried out then an error will be reported when running Viking Vision.

Note: It is important that any canvas page should be used with the CCF file that was loaded in at the time of its creation. Under no circumstance should CCF files and canvas pages be mixed between different applications. To prevent this occuring each canvas page is checked prior to loading and will show a warning if it is the wrong version or issue.

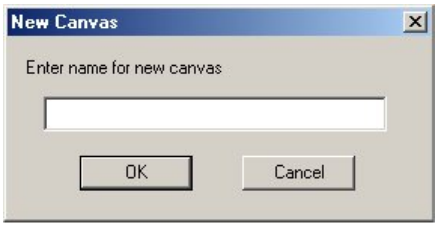




Creating A New Canvas Page

In order to create a new canvas page to lay graphics onto, the New button in the Navigation Area must be clicked.

A name for the page must be entered and then the OK button clicked. The name must follow Window's file naming convention.



The name entered should then appear in the Navigation Area as shown below.

Saving A Canvas Page

A canvas page can be saved to the hard disk drive by clicking the File button in the Navigation Area.

'Save Canvas' must then be selected from the dialogue shown to the right.

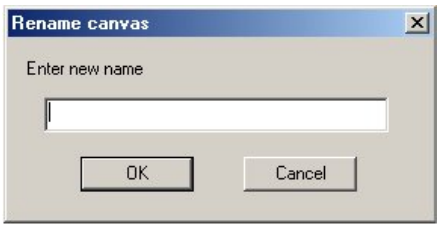
It is also possible to save a canvas by selecting the *Menu>File>Save Canvas* menu option when in Display mode.

Renaming A Canvas Page

A canvas page can be renamed by clicking the File button in the Navigation Area.

'Rename Canvas' must then be selected from the dialogue shown to the right.

The new canvas name must then be entered into the dialogue to the right.

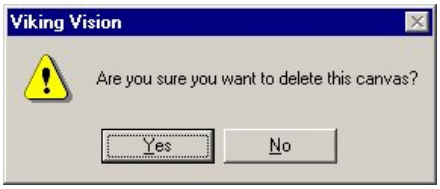


Deleting A Canvas Page

A canvas page can be deleted by clicking the File button in the Navigation Area.

'Delete Canvas' must then be selected from the dialogue shown to the right.

A warning will be given and then the Yes button should be clicked.



Loading A Canvas Page

Canvas files in the same directory as the CCF file will automatically be loaded when the program is started, if they are for the same version and issue as the CCF file.

It is also possible to load a canvas by selecting the *Menu>File>Open Canvas* menu option when in Display mode.

Navigating Around The Canvas Pages

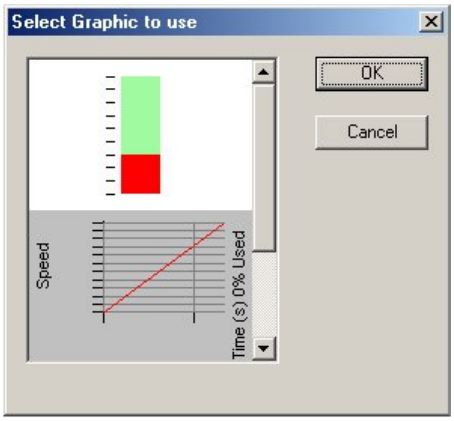
The Navigation Area provides all the controls necessary to select and navigate around the canvas pages.

The ▼ button brings up a list of canvas pages for selection.The ⏮ and ⏭ buttons select the first and last canvas pages from the list. The ▶ and ◀ buttons select the next and previous pages from the list.

Adding Graphics To The Canvas Page

Graphical representation of display parameters can be added to the active canvas page by one of three methods:

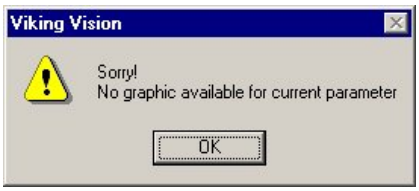
Firstly the parameter can be selected in the Grid Area and then dragged (with the left-hand mouse button pressed down) onto the canvas page. If a parameter has been defined such that it can be displayed graphically, a list of available graphic types will be displayed. By scrolling up and down the list, left clicking once on the desired image and then clicking the OK button, the image will appear in its own window on the canvas page



Secondly, rather than dragging the parameter onto the canvas page, the parameter can be selected and then the Graphic button clicked. The following actions are then the same as described above.

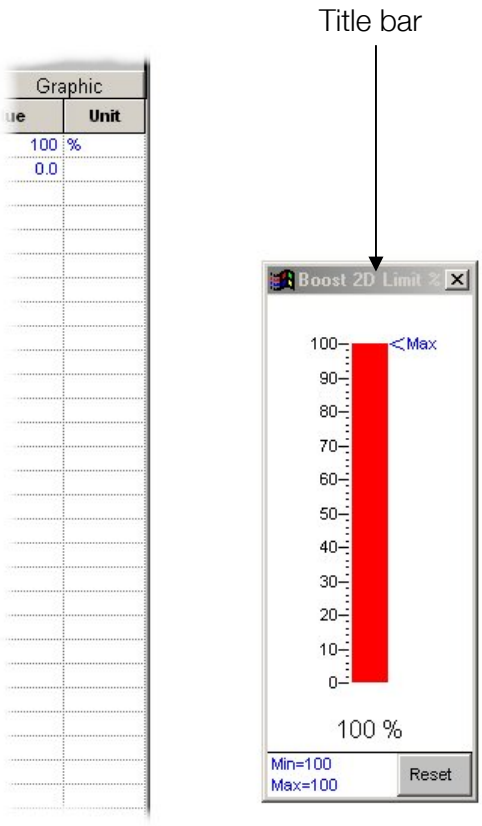
Thirdly, the parameter can be selected and then *Menu>Edit>Graphic* selected. The following actions are then the same as described above.

If in the three methods above the parameter has been defined such that a graphical representation is not available, the warning message to the right will be shown. The OK button should be clicked to close the warning dialogue.



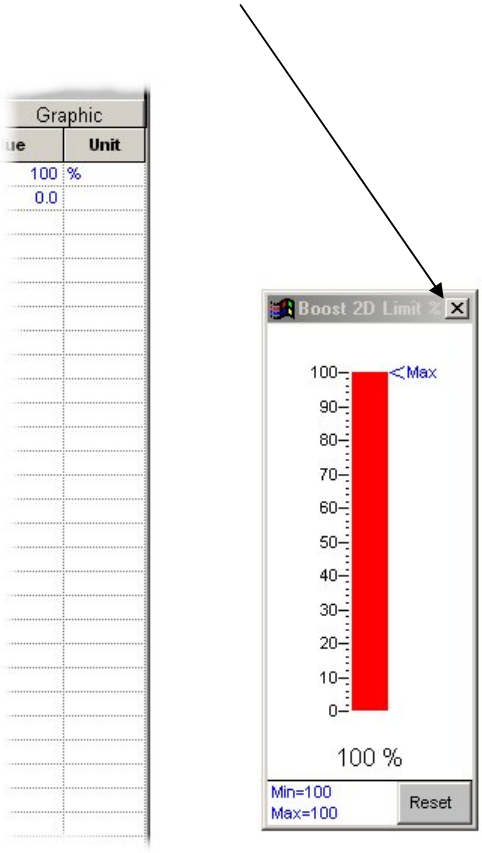
Moving The Position Of The Graphic

A graphic image on the canvas page can be moved by left clicking on the title bar of the image and dragging the image to the desired position.



Removing A Graphic From The Canvas Page

Each graphic on the canvas page can be permanently removed by clicking on the ✕ button in the top right-hand corner of the graphic image.



Alternatively, right-clicking on the graphic image and then selecting 'Close' from the dialogue that appears will achieve the same result.

Changing The Type Of Graphic Parameter Representation

If a parameter has been placed onto the canvas page in a particular graphical format, it can be changed at any stage into another type from the original list.

This can be achieved by right-clicking on the graphic image and then selecting 'Graphic' from the dialogue that appears. The original graphic symbol list will be shown. The desired symbol should be selected.

SECURITY

A mechanism for password protection exists within Viking Vision. This protects individual menu parameters from being edited or changed by unauthorised access.

Five levels of protection are provided with an additional default level (Level 0) offering minimal access privileges. The levels are numbered 1 to 5. Level 5 allows full access to all parameters and functions, Level 1 gives minimum access (according to configuration). On entry to Viking Vision, the password level will be the default level of 0.

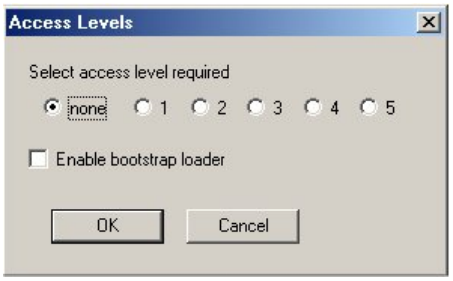
Entering a password level will give access rights for that level and all levels below.

All passwords are stored in the Viking itself so that they are transferred with the product and are independent of the Viking Vision computer. Therefore password entry and change can only occur when connected to the Viking.

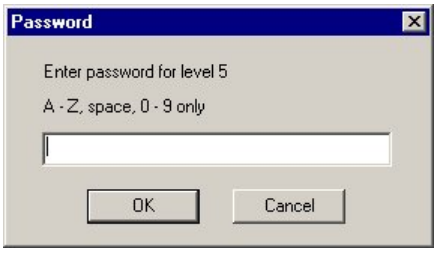
Setting The Password Level

In order to set the password level, *Menu>Password>Set Level* must be selected.

The dialogue to the right will be displayed prompting for selection of the desired level 1 to 5.
(Note: 'Enable bootstrap loader' only applies to bootstrap loading – see section Bootstrap Loading).



A prompt will be given for the correct password. This should be entered and then the OK button clicked.



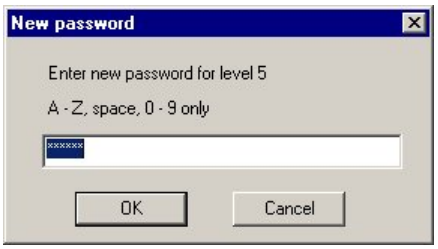
If the password was entered correctly then access rights will be given.

However, if the password was incorrectly entered an error message will be shown and the current password level will be maintained.

Changing Passwords

The password for each level can be changed by firstly ensuring that a level equal to or greater than that to be changed has been set (see previous section).

Menu>Password>Change should then be selected. A prompt will be given to enter a new password for each level including and below the one currently active. If no change is to be made to a password then the OK button should be clicked, otherwise the new password should be entered and then the OK button clicked.

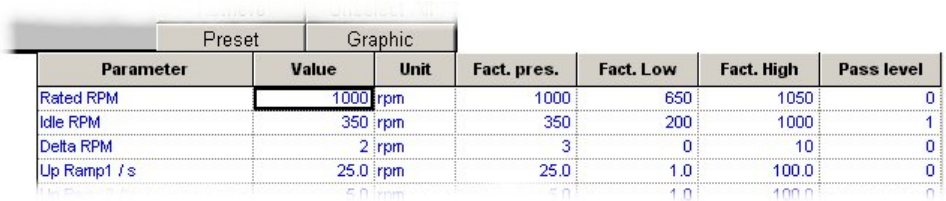


Viewing Parameter Password Levels

It is possible to expand the the Grid Area to show the password level allocated to each parameter in two ways.

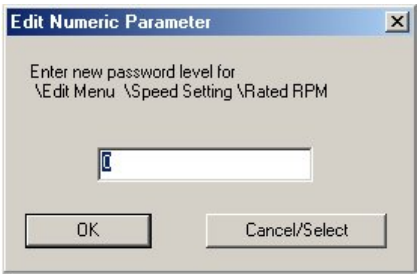
1. When in Edit mode, selecting *Menu>Password>Parameter*.

2. Selecting the Parameter option from the right mouse button menu.



Changing Individual Parameter Password Levels

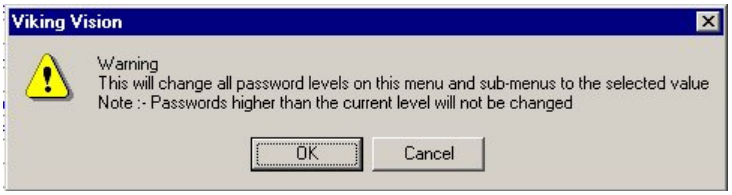
Selecting *Menu>Password>Parameter* will expand the Grid Area to show the password level allocated to each parameter. Left clicking the password level which is to be changed will display the dialogue shown to the right. A new value between 0 and 5 should be entered and then the OK button clicked.



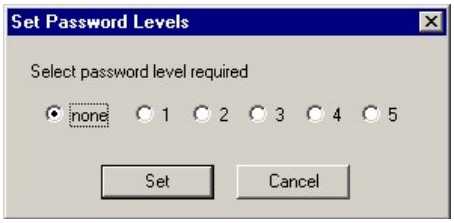
Note: A save to non-volatile memory should take place in order to semi-permanently store the changes.

Changing Sub-Menus Parameter Password Levels

Selecting *Menu>Password>Set sub-menus* when in edit mode, with a password level of 1-5 set, will display the warning dialog. This allows the operation to be canceled, by clicking Cancel, or continued, by clicking OK.



If the operation is continued the password level selection dialog is displayed. Select the password level required and then click the OK button.



It is only possible to select and set password levels that are the same or lower than the current password level. If some of the parameters have password levels that were higher than the current password level a warning will be displayed at the end of the operation.

Note: A save to non-volatile memory should take place in order to semi-permanently store the changes.

BOOTSTRAP LOADING

Viking Vision supports the loading of application code into Viking products, generally known as 'bootstrap loading'.

ONLY AUTHORISED PERSONNEL SHOULD BOOTSTRAP LOAD VIKING PRODUCTS AS PERMANENT DAMAGE MAY OCCUR IF THE PROCESS IS NOT CORRECTLY FOLLOWED.

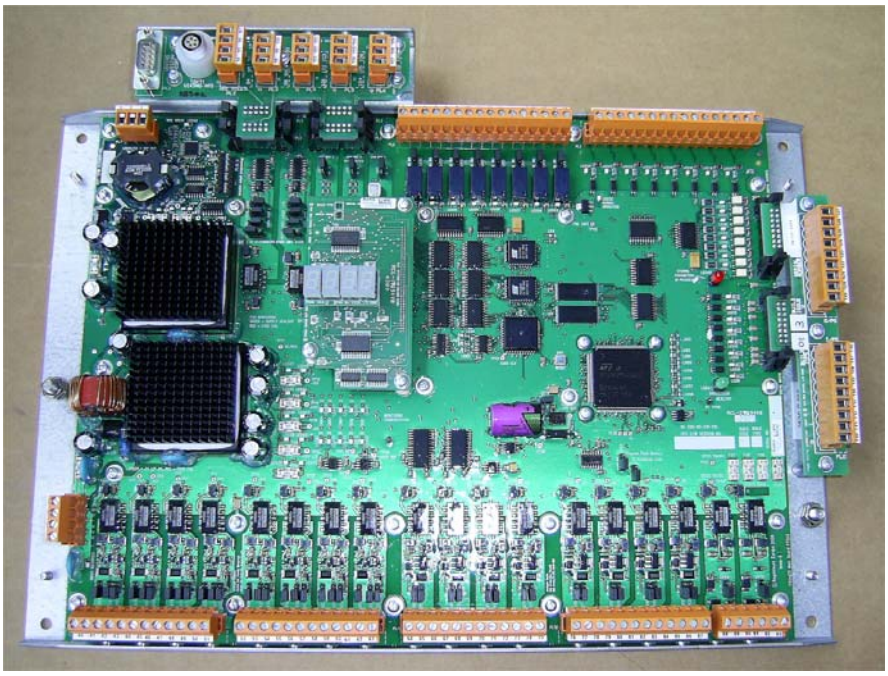
Setting The Viking Ready For Loading

In preparation for bootstrap loading, the Viking should be connected to the computer in the same way as described in Viking Vision Installation and Running Viking Vision For The First Time i.e. the serial cable should be connected and the CCF stored in the correct directory on the computer.

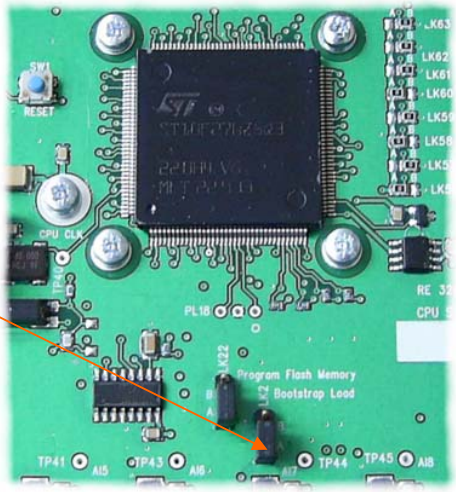
Ensure that the Viking is disconnected from external equipment except for the power supply and Viking Vision serial communications connectors.

Ensure the power supply to the Viking is switched off.

Setting Viking25 / 35 To Bootstrap Mode



Set LK2 (Bootstrap Load) to position B.



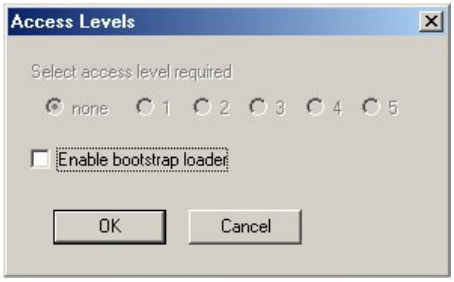
Restore the power to the Viking.

If a 4-character display is fitted, the message displayed should be ‘FAIL’ continuously.

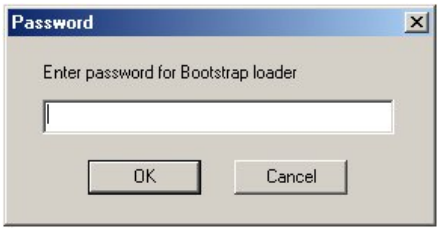
Loading The Software Into The Viking

With Viking Vision running, select *Menu>Password>Set Level.*

The dialogue to the right will be displayed. 'Enable boostrap loader' should be selected and then OK clicked.



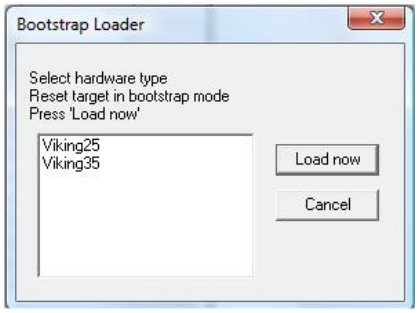
The correct bootstrap loading password must be entered and then OK clicked.



Ensure that the application program file, (project.h86), is available on a drive on the computer.

Select *Menu>Embedded>Bootstrap.* This will launch bootstrap loading mode. A file selection dialog will be displayed allowing the required application program file, (project.h86), to be selected.

When the the required application program file has been selected the appropriate Viking product should be selected from the list presented and then the Load now button clicked.

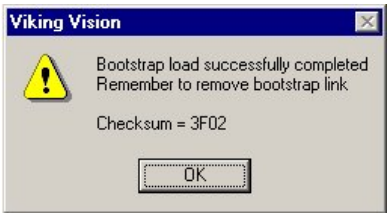


Viking Vision will try to establish communications with the Viking, during which the message to the right will be shown.

When communications are established, a confirmation message will be shown.

According to the type of Viking product, a number of different status messages may be shown on the screen during the duration of the program upload.

Eventually a final message will be shown indicating the unique checksum value for the bootstrapped program.



This should be checked against the one issued for the version and issue of software which has been used.

Only an exact match should be accepted as confirmation that the correct program has been loaded into the Viking.

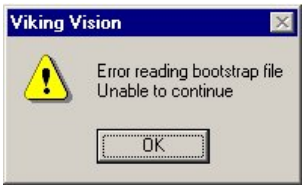
The bootstrap link should now be set to its original position and the Viking powered down, and then up again

Bootstrap loading is now complete.

Bootstrap Loading Errors

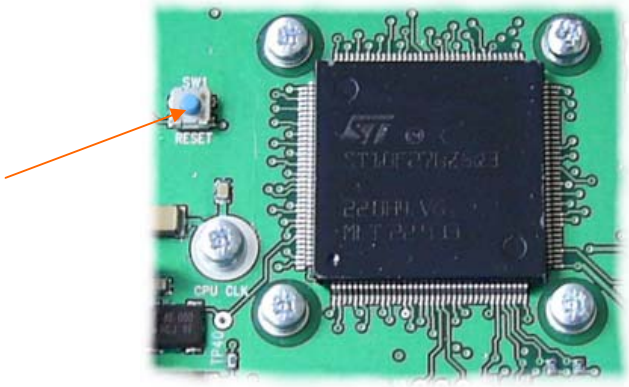
- If communication with the Viking is not established correctly, a warning message will be shown.

- If the application program file, (project.h86), selected is missing from the disk when required by the program then a warning message will be shown.



If any of these errors occur, then the blue reset button  should be pressed to re-initialise the Viking and the process in the previous section should be repeated.

The location of the blue reset button is:



Viking25 / 35

KEYBOARD INTERFACE

Whilst a mouse can be used to select parameters, click buttons, etc., the program also supports keyboard operation for interaction with the software.

As for the majority of Windows applications, the ALT key may be used to navigate through the program menus. This is achieved by holding down the ALT key and then pressing the letter that appears underlined in the item of the desired menu.

e.g. to select *Menu>Embedded>Connect* press (ALT)b and then (ALT)c.

Viking Vision also supports the use of shortcut keys. The function of these are described below:

Key Combination	Mode	Function
(CTRL) Home	All	Go to the top of the menu tree.
(CTRL) End	All	Go to the bottom of the menu tree.
(CTRL) Left	All	Contract the branch of the menu tree.
(CTRL) Right	All	Expand the branch of the menu tree.
(CTRL) Up	All	Move up one level of the menu tree.
(CTRL) Down	All	Move down one level of the menu tree.
(CTRL) PgUp	All	Move up one screen of the menu tree (scroll).
(CTRL) PgDn	All	Move down one screen of the menu tree (scroll).
(ALT) Keypad *	All	Expands all sub - nodes of the menu tree.
Home	All	Scroll the grid so that the first parameter is at the top of the table and make it the current parameter.
End	All	Scroll the grid so that the last parameter is at the bottom of the table and make it the current parameter.
Left	All	Move the current parameter selection to be the cell to the left.
Right	All	Move the current parameter selection to be the cell to the right.
Up	All	Move the current parameter selection to be the cell above.
Down	All	Move the current parameter selection to be the cell below.
PgUp	All	Move the current parameter selection to one screen above.
PgDn	All	Move the current parameter selection to one screen below.
ENTER	Edit	Select the parameter currently highlighted.

FAULT FINDING

Unable To Connect To The Viking25 Or Viking35

This can affect Windows 98 SE and Windows ME on a computer that supports the ACPI specification.

Solution

Disable the power management of the COM ports.
Backup the registry
Use the registry editor (regedit.exe) to locate the EnablePowerManagement value in the registry key
HKEY_LOCAL_MACHINE\System\CurrentControlSet\Services\VxD\VCOMM
Change 01 to 00 and click OK
Exit the registry editor

For more information see Microsoft Knowledge Base article Q252184

Unable To Select LPT Or COM Port In Alarm Print Dialog

When the 'Print alarms on receipt' check box is ticked and OK selected the warning 'Unable to access selected port for alarm print' is displayed.

Solution

If this is for a COM port selection it may be already selected as the Viking Vision COM port or another running applications COM port. Choose another COM port.

If this is for the LPT port selection it may be that a printer has the port captured. This can be released by choosing the End Capture on the printers properties dialog.

Problem Printing Alarms On Receipt

If the Print alarms on receipt check box is ticked in the Alarm Options dialog and the alarms do not print.

Solution

The printer must be directly connected to a COM or LPT port of the computer running Viking Vision. The alarms will not print to a network mapped printer.

Problem Navigating Around Canvas Pages Using The Navigation Buttons

If a canvas page is selected clicking the left button moves to the last canvas page and not the previous canvas page.

Solution

This is caused by renaming a canvas page from outside of Viking Vision. The canvas pages maintain an internal copy of the canvas name that will not be updated if the file is renamed in Explorer or DOS.

Problem Bootstrap Loading With Windows Vista

At the end of the bootstrap loading process Viking Vision may crash when the dialogue is closed.

Solution

This seems to be an issue only occurring under Window Vista. There is no current solution to this problem. However, the bootstrap loading process itself is not affected by the crash so a restart of Viking Vision can safely be made with no data loss or corruption occurring..

CUSTOMER SUPPORT

Customer training and support for this product can be provided either in Colchester, Roden, or on-site. Contact below for further details.

Regulateurs Europa Ltd
Port Lane
COLCHESTER ESSEX C01 2NX ENGLAND

Tel: 44 (0)1206 875409 Fax: 44 (0)1206 792685

Regulateurs Europa BV
Ekkelkamp 3
9301 ZZ
RODEN NETHERLANDS

Tel: 31 5050 19888 Fax: 31 5050 13618

LICENSE AGREEMENT

SOFTWARE LICENCE ISSUED BY REGULATEURS EUROPA LTD, REGULATEURS EUROPA ("Regulateurs Europa")

* IMPORTANT NOTICE *

THIS IS AN END USER SOFTWARE LICENSE AGREEMENT FOR REGULATEURS EUROPA VIKING VISION SOFTWARE.

BY USING THIS SOFTWARE, YOU ARE AGREEING TO BE BOUND BY THE TERMSOF THIS AGREEMENT.

DO NOT USE THIS SOFTWARE UNTIL YOU HAVE CAREFULLY READ AND AGREED TO THE FOLLOWING TERMS AND CONDITIONS.

IF YOU DO NOT AGREE TO THE TERMS OF THIS AGREEMENT, PROMPTLY RETURN THE SOFTWARE AND ANY ACCOMPANYING ITEMS.

IF YOU USE THIS SOFTWARE YOU WILL BE BOUND BY THE TERMS OF THIS AGREEMENT.

LICENSE:
Regulateurs Europa grants you a personal, non-exclusive and non-transferable right to use the enclosed software program (the "Software"). You will not use, copy, modify, rent, sell or transfer the Software or any portion thereof except as provided in this Agreement.

You may:
1. Use the Software on a single computer;
2. Copy the Software solely for backup or archival purposes;

RESTRICTIONS:
You may not:
1. Use the Software or cause the Software to be used on more than one computer at the same time including using the Software across a network system;
2. Sublicense the Software;
3. Reverse engineer, decompile, or disassemble the Software;
4. Copy the Software except as provided in this Agreement;
5. Copy, change, adapt, translate, transform, reproduce, alter, modify, merge or combine the software in whole or in part with any other software or documentation.

OWNERSHIP AND COPYRIGHT OF SOFTWARE:
Title to the Software and all copies thereof remain with Regulateurs Europa.
Copyright in the software shall remain at all times with Regulateurs Europa.
You will not remove the copyright notice from the Software.
You will keep the software confidential and limit access to it to those employees who either have or need to know or are specifically engaged in its use.

WARRANTY:
Regulateurs Europa warrants that it has the right to license you to use the Software.

Regulateurs Europa warrants that the media on which the Software is furnished will be free from defects in material and workmanship under normal use for a period of ninety (90) days from the date of purchase. Regulateurs Europa's entire liability and your exclusive remedy shall be the replacement of the Software if the media on which the Software is furnished proves to be defective. This warranty is void if the media defect has resulted from accident, abuse, or misapplication. Any replacement of media will be warranted for the remainder of the original warranty period or thirty (30) days, whichever is longer.

DISCLAIMER:
Except as provided above, the Software is provided "AS IS" without warranty of any kind.

LIMITATION OF LIABILITY:
THE ABOVE WARRANTIES ARE THE ONLY WARRANTIES OF ANY KIND EITHER EXPRESS OR IMPLIED INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. REGULATEURS EUROPA SHALL NOT BE LIABLE FOR ANY LOSS OF PROFITS, STATUTORY OR OTHERWISE, PRODUCTION, BUSINESS, CONTRACTS, REVENUES OR ANTICIPATED SAVINGS, INTERRUPTION OF BUSINESS, NOR FOR INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND WHETHER UNDER THIS AGREEMENT OR OTHERWISE SUFFERED BY YOU OR BY ANY THIRD PARTY. NOTHING IN THIS LICENCE SHALL LIMIT OR EXCLUDE OUR LIABILITY FOR DEATH OR PERSONAL INJURY ARISING OUT OF THE NEGLIGENCE OF OURSELVES, OUR AGENTS OR SUB-CONTRACTORS. SUBJECT TO THE ABOVE, OUR LIABILITY UNDER THE LICENCE SHALL NOT EXCEED THE LICENCE FEE PAYABLE.

INTELLECTUAL PROPERTY RIGHTS:

You acknowledge that all trademarks, brand names, copyrights, patents and other intellectual property rights relating to the software shall remain the exclusive property of Regulateurs Europa.

AUDIT:
Regulateurs Europa reserves the right to conduct or have conducted audits to verify your compliance with this Agreement. You are required to provide us on request a written record of the location of the software.

TERMINATION OF THIS LICENSE: Regulateurs Europa may terminate this license without prejudice to any other rights or remedies at any time if you are in breach of any of these terms and conditions. Upon termination, you will immediately destroy the Software or return all copies of the Software and documentation to Regulateurs Europa along with any copies you have made.