

PSS 4000 Diag Control

User software

pilz

This document is the original document.

All rights to this documentation are reserved by Pilz GmbH & Co. KG. Copies may be made for internal purposes. Suggestions and comments for improving this documentation will be gratefully received.

Pilz®, PIT®, PMI®, PNOZ®, Primo®, PSEN®, PSS®, PVIS®, SafetyBUS p®, SafetyEYE®, SafetyNET p®, the spirit of safety® are registered and protected trademarks of Pilz GmbH & Co. KG in some countries.



SD means Secure Digital

Section 1	Introduction	4
	1.1 Validity of documentation	4
	1.2 Using the documentation	4
	1.3 Supported hardware and software	4
Section 2	Function of PSS 4000 Diag Control	5
Section 3	Install PSS 4000 Diag Control	6
	3.1 Installation on a PC	6
	3.2 Installation on a PMI	6
Section 4	Configure PSS 4000 Diag Control	7
	4.1 Configuration in a graphics software package	7
	4.1.1 "General" tab	8
	4.1.2 "Split Window 1/2" tab	10
	4.1.3 "Split Window 2/2" tab	11
	4.1.4 "Diagnostic Log" tab	12
	4.1.5 "All" tab	13
	4.2 Configuration in a browser	14
	4.2.1 General properties	14
	4.2.2 Properties for split window display ("Split Window (1/2)" tab)	15
	4.2.3 Properties for split window display ("Split Window (2/2)" tab)	15
	4.2.4 Properties for displaying the diagnostic log	17
Section 5	Run PSS 4000 Diag Control	20
	5.1 Run in a graphics software package or browser	20
	5.1.1 Run in a graphics software package	20
	5.1.2 Run in a browser	20
	5.1.2.1 Run PSS 4000 Diag Control in a browser on a PC	20
	5.1.2.2 Run PSS 4000 Diag Control in a browser on a PMI	20
Section 6	Operate PSS 4000 Diag Control	22
	6.1 Split window	22
	6.2 Single window	23
	6.3 Diagnostic log	29
	6.4 Information window	30
	6.5 Icons	33
Section 7	Appendix	34
	7.1 Examples of HTML code for calling up PSS 4000 Diag Control	34
	7.1.1 Simplified example of HTML code	34
	7.1.2 Advanced example of HTML code	34
	7.2 Overview of the languages supported and their LCID	37

1 Introduction

1.1 Validity of documentation

This operating manual describes how diagnostic data is displayed in a graphics software package or ActiveX-enabled browser (e.g. MS Internet Explorer), using PSS 4000 Diag Control.

This operating manual is valid for:

- ▶ PSS 4000 Diag Control from Version 1.11.0

It is valid until new documentation is published.

1.2 Using the documentation

This document is intended for instruction. Only install and commission the product if you have read and understood this document. The document should be retained for future reference.

1.3 Supported hardware and software

See Readme file of PSS 4000 Diag Control. The Readme file is supplied together with the PSS 4000 Diag Control.

2 **Function of PSS 4000 Diag Control**

ActiveX is a software component model from Microsoft for active content such as macros or applets; it is based on the Component Object Model (COM). PSS 4000 Diag Control can be used in ActiveX-enabled environments, e.g. in the browser MS Internet Explorer, in a graphics software package or in common programming environments (e.g. Microsoft Visual Studio).

PSS 4000 Diag Control receives the diagnostic data from a PSS 4000 OPC Server and displays it in a graphical user interface.

3 Install PSS 4000 Diag Control

3.1 Installation on a PC

To use PSS 4000 Diag Control in a graphics software package it must be installed on your PC.

System requirement:

See Readme file of PSS 4000 Diag Control.

Procedure:

- ▶ Start your PC.
- ▶ Start the installation file (PSS_4000_Diag_Control.exe).
- ▶ Follow the on-screen instructions to complete the installation.

3.2 Installation on a PMI

For installation to take place, the installation file must be downloaded via FTP/Ethernet connection, CF card or USB mass storage device.

Procedure:

- ▶ Switch on your PMI.
- ▶ Open Windows Explorer on the PMI.
- ▶ Copy the file "PSS_4000_Diag_Control_x.x.x.CAB" into the directory \Flash on the PMI.
- ▶ Start the CAB file. The installation process will start. The CAB file in the PMI directory \Flash will be deleted as a result of the installation.

4 Configure PSS 4000 Diag Control

4.1 Configuration in a graphics software package

The section below describes how to configure PSS 4000 Diag Control in a graphics software package.

Prerequisite:

- ▶ PSS 4000 Diag Control must be installed on your computer (see section entitled "[Installation on the PC](#) [ 6]").
- ▶ PSS 4000 Diag Control must be incorporated into your graphics software.

Details of how to use PSS 4000 Diag Control in your graphics software are provided in the description or in the graphics software's online help.

Most of the settings made in the tabs can be checked via the preview. The preview will partly be filled with dummy data.

4.1.1 "General" tab

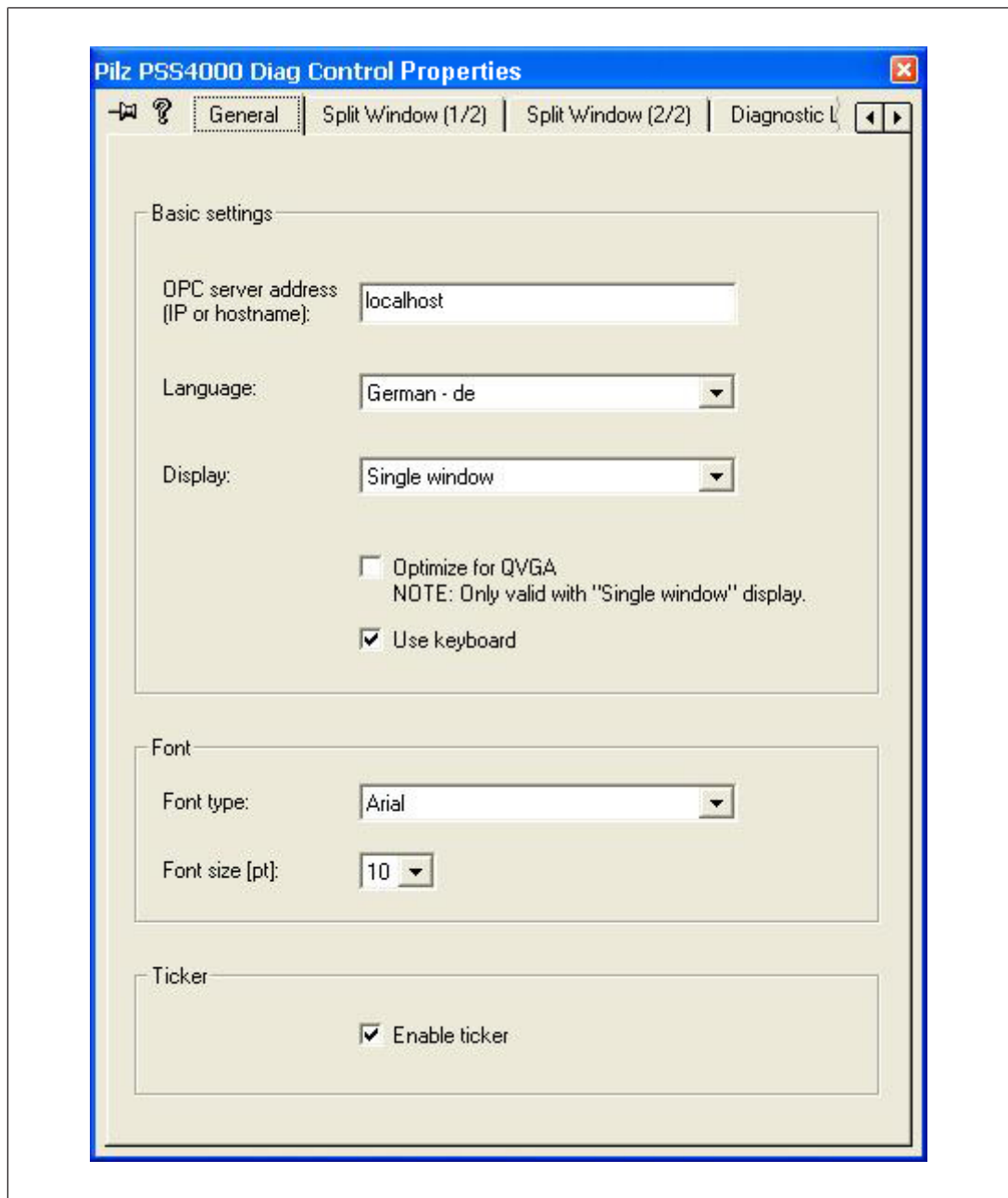


Fig.: **General** tab

On the **General** tab you can make the following settings:

► **OPC server address**

Enter the IP address or the logical name of the PSS 4000 OPC Server.

Default: "localhost"

"localhost" is the valid logical name when the PSS 4000 OPC Server and the graphics software are on the same computer.

▶ **Language**

Select the language in which the diagnostic texts and the interface of the PSS 4000 Diag Control are to be displayed. You will have defined the languages available for the diagnostic texts when you created the diagnostic configuration. The interface can be displayed in the following languages:

- German
- English

▶ **Display**

Select:

- **Single window**

Diagnostic messages and remedies appear in separate windows.

- **Split window**

Diagnostic messages and remedies appear in a split window, one above the other.

▶ **Optimize for QVGA**

Select this option to optimise the screen output for QVGA format. QVGA is a standard for small screens with 320 x 240 pixels ("Quarter VGA"). This option should only be selected when **Single Window** has been selected under **Display**.

▶ **Use keyboard**

Select this option to enable keyboard operation.

▶ **Font type**

Select the font type.

▶ **Font size**

Select the font size.

▶ **Enable ticker**

Select this option to activate the ticker for diagnostic messages, remedies and entries in the diagnostic log. This option should only be selected when **Single Window** has been selected under **Display**.

4.1.2 "Split Window 1/2" tab

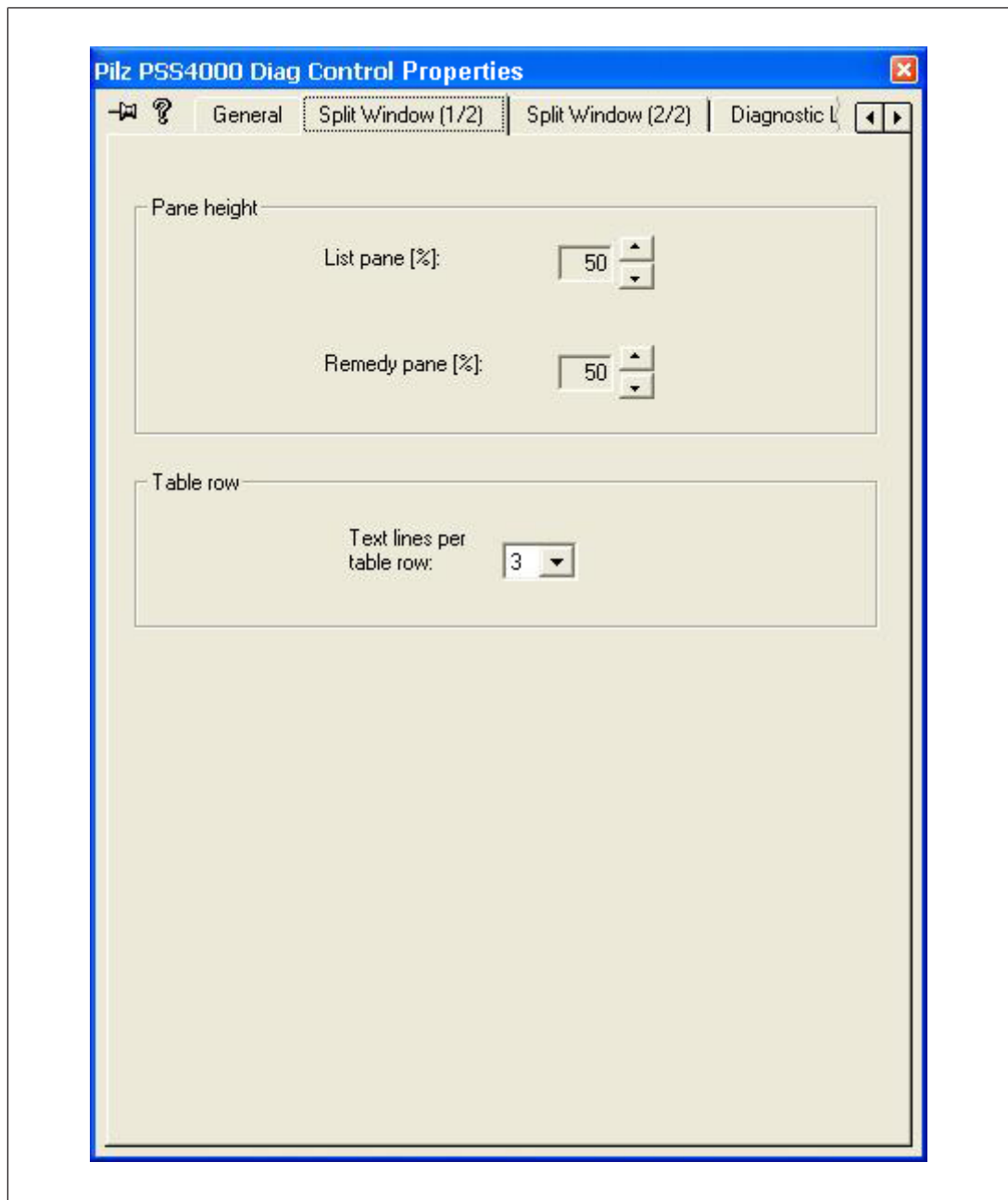


Fig.: **Split Window 1/2** tab

On the **Split Window 1/2** tab you can define the size of the window areas in the split window. These settings will apply if you selected **Split Window** under **Display**:

- ▶ **Pane height**

Adjust the height of the window areas as a percentage of the overall window height.

- ▶ **Table row**

Adjust the height of the table row in multiples of the text height.

4.1.3 "Split Window 2/2" tab

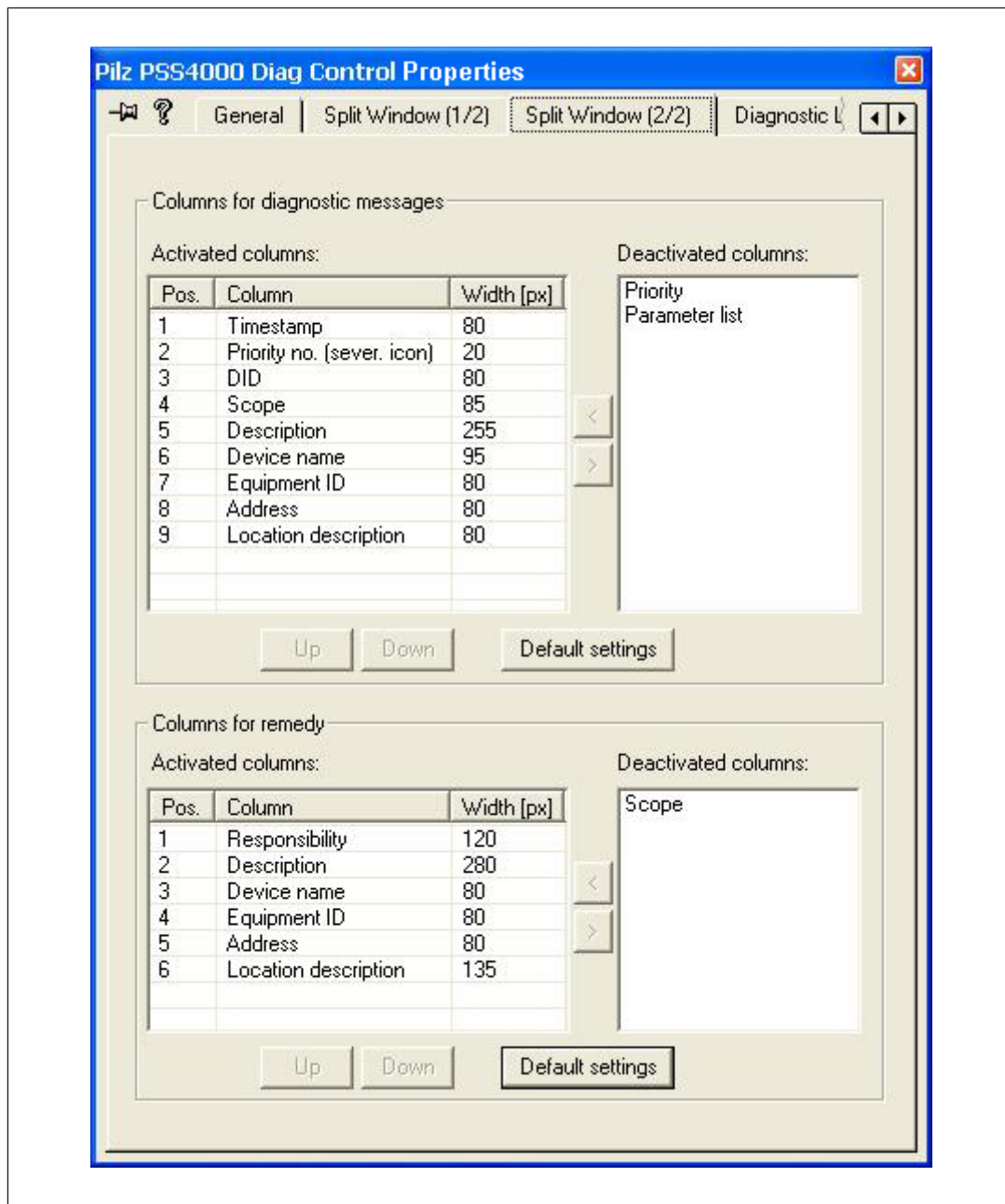


Fig.: **Split Window 2/2** tab

On the **Split Window 2/2** tab you can select the fields that are to be displayed. These settings will apply if you selected **Split Window** under **Display**:

► **Columns for diagnostic messages**

Select the fields that will be displayed in the diagnostic messages window, plus their position and width within the table.

► **Columns for remedy**

Select the fields that will be displayed in the remedies window, plus their position and width within the table.

4.1.4 "Diagnostic Log" tab

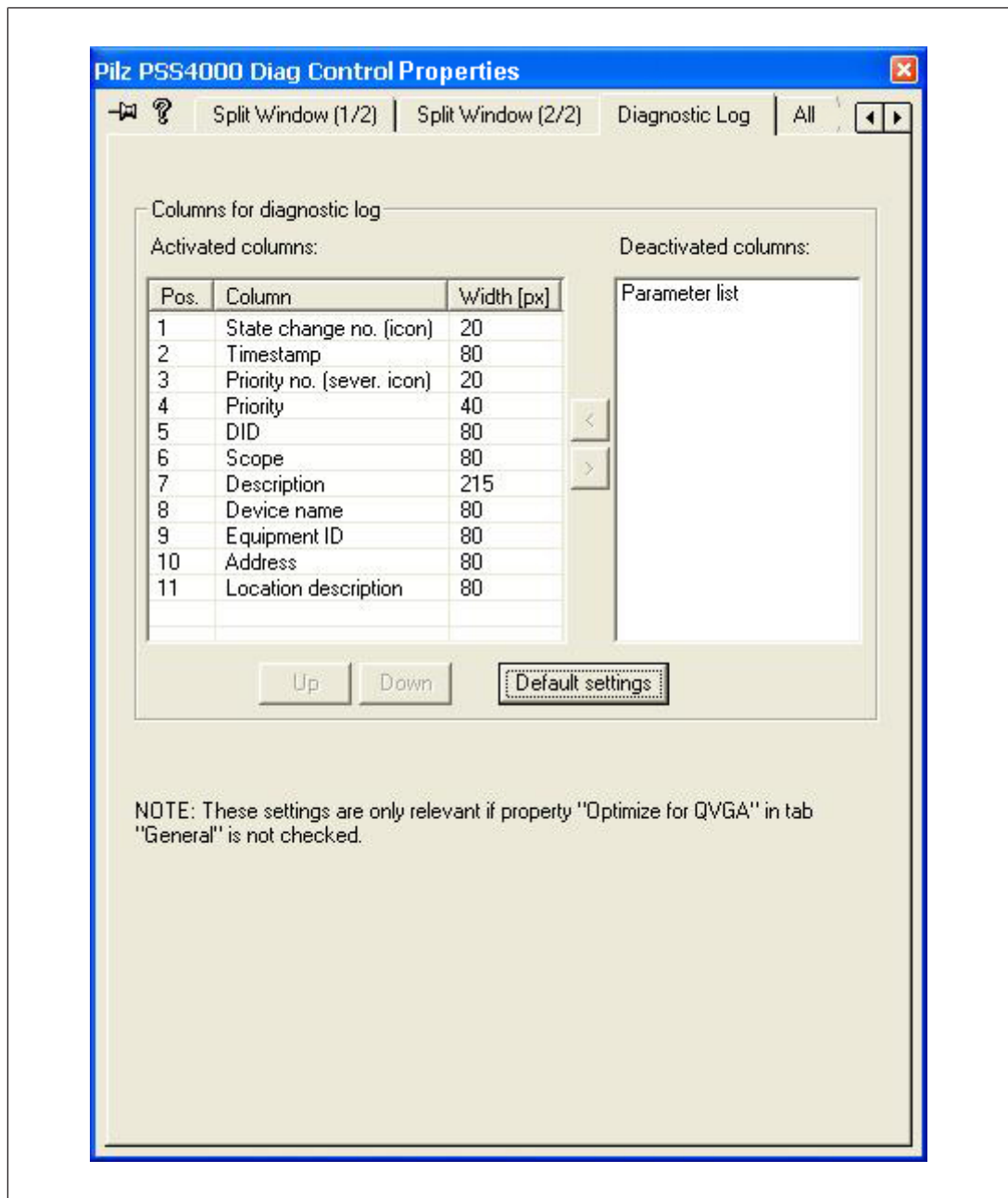


Fig.: **Diagnostic Log** tab

These settings will only apply if:

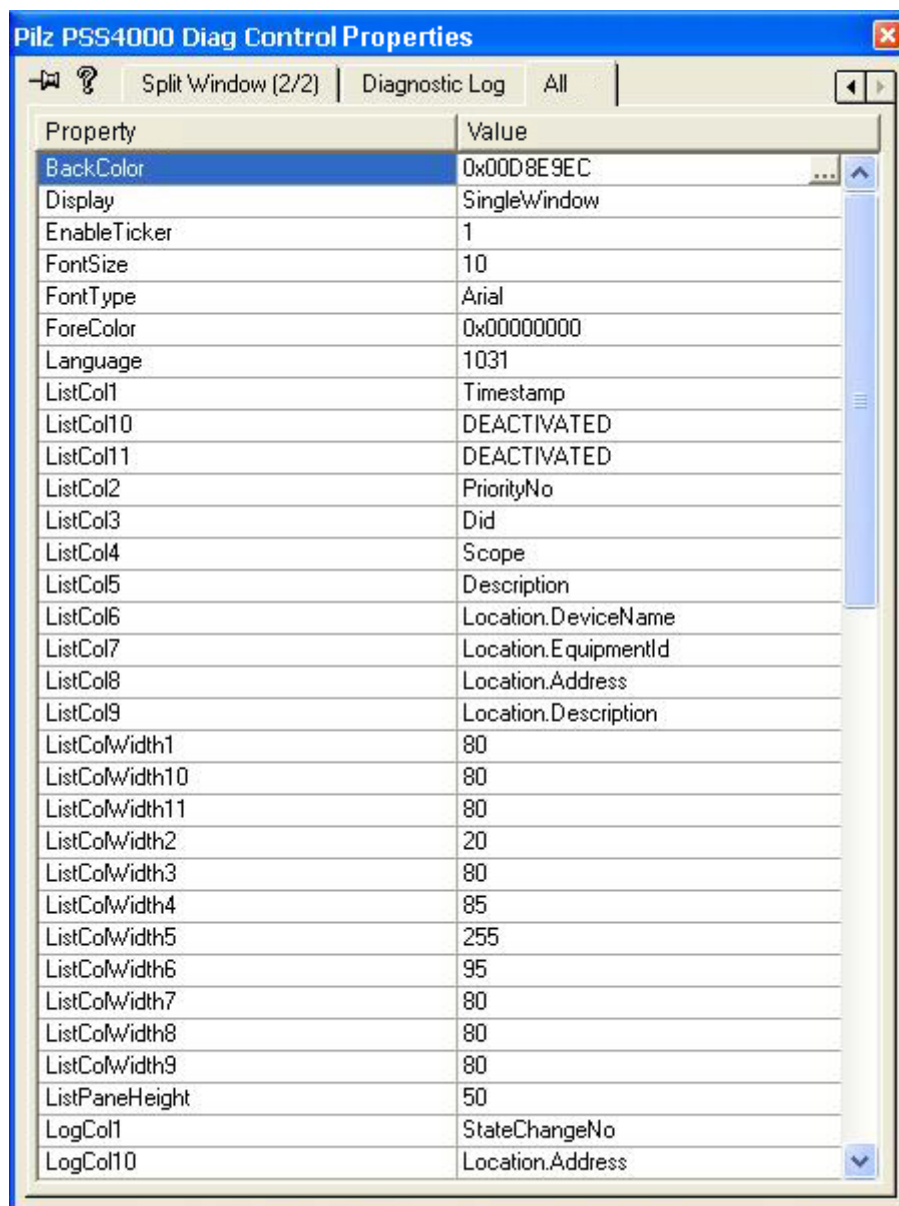
- ▶ The **Split Window** setting is selected under **Display**
or
- ▶ Under **Display**, **Optimize for QVGA** has been deactivated for the **Single Window** setting.

On the **Diagnostic Log** tab you can define the display for the diagnostic log:

- ▶ **Columns for diagnostic log**

Select the fields that are to be displayed in the diagnostic log window, plus their position and width within the table.

4.1.5 "All" tab



Property	Value
BackColor	0x00D8E9EC
Display	SingleWindow
EnableTicker	1
FontSize	10
FontType	Arial
ForeColor	0x00000000
Language	1031
ListCol1	Timestamp
ListCol10	DEACTIVATED
ListCol11	DEACTIVATED
ListCol2	PriorityNo
ListCol3	Did
ListCol4	Scope
ListCol5	Description
ListCol6	Location.DeviceName
ListCol7	Location.EquipmentId
ListCol8	Location.Address
ListCol9	Location.Description
ListColWidth1	80
ListColWidth10	80
ListColWidth11	80
ListColWidth2	20
ListColWidth3	80
ListColWidth4	85
ListColWidth5	255
ListColWidth6	95
ListColWidth7	80
ListColWidth8	80
ListColWidth9	80
ListPaneHeight	50
LogCol1	StateChangeNo
LogCol10	Location.Address

Fig.: **All** tab

The **All** tab is not displayed in every graphics software package.



INFORMATION

A description of the properties that can be configured in this tab can be found in the section entitled "[Configuration in a browser \[14\]](#)". In the **All** tab, all values are stated without inverted commas.

4.2 Configuration in a browser

The section below describes how to configure PSS 4000 Diag Control in an ActiveX-enabled browser. Configuration requires some knowledge of the HTML markup language.

The Appendix contains examples that you can use to create your own HTML file.

General browser display settings:

- ▶ **<body scroll=no>**
Switches off Internet Explorer's vertical scroll bar.
- ▶ **WIDTH=a; HEIGHT=b**
Size of the window in which the PSS 4000 Diag Control is displayed, in pixels.
- ▶ **style="margin-left:-2px; margin-top:-2px;"**
Aligned left, -2 pixels from left margin and -2 pixels from top margin for better presentation
- ▶ **CLASSID="CLSID:CE42D3A2-5C9C-4A77-B7DF-08A27AAC7BC5"**
Class-ID used to reference the PSS 4000 Diag Control.

4.2.1 General properties

General properties of PSS 4000 Diag Control:

- ▶ **OPCServer**
The IP address or logical name of the PSS 4000 OPC Server. "localhost" is the valid logical name when the PSS 4000 OPC Server and PSS 4000 Diag Control are on the same computer.
- ▶ **Language**
To display the diagnostic texts in the required language, enter the LCID for the relevant language.
Values:
 - English: "1033"
 - German: "1031"
- ▶ **Display**
Window format
Values:
 - **SingleWindow**
 - **SplitWindow**
- ▶ **QVGA**
Screen output optimised for QVGA format
Values:
 - "0" = not activated
 - "1" = activated (only when **Single Window** is selected)
- ▶ **UseKeyboard**
Keyboard operation
Values:
 - "0" = not activated
 - "1" = activated

- ▶ **FontSize**
Font size in points
- ▶ **FontType**
Name of font
(not the font's file name, i.e. Arial Unicode MS, not ARIALUNI.TTF, for example)
- ▶ **EnableTicker**
Activate ticker
Values:
 - "0" = not activated
 - "1" = activated (only when **Single Window** is selected)

4.2.2 Properties for split window display ("Split Window (1/2)" tab)

Properties for dividing the split window and the height of the table rows:

- ▶ ListPaneHeight
 - Height of event window as a percentage
- ▶ RemedyPaneHeight
 - Height of remedy window as a percentage
- ▶ TextLinesPerTableRow
 - Number of text lines per table row, e.g. "3"

4.2.3 Properties for split window display ("Split Window (2/2)" tab)

Display of diagnostic messages

Properties for show/hide, plus column layout, e.g. <PARAM NAME="ListCol1" VALUE="Timestamp">:

- ▶ ListColN (N columns from 1 to 11)
Values:
 - "Timestamp"
 - "PriorityNo"
 - "DID"
 - "Scope"
 - "Description"
 - "Location.Device"
 - "Location.EquipmentID"
 - "Location.Description"
 - "Location.Address"
 - "Priority"
 - "ParameterList"
 - "Deactivated" = Invisible column

Properties for assigning column widths, e.g. <PARAM NAME="ListColWidth1" VALUE="80">

- ▶ ListColWidthN (N columns from 1 to 11)

Values:

- Column width in pixels



INFORMATION

Please note the following with properties:

- Always state a value in all the columns under "ListColN" or in none of them.
- Each column should be assigned a unique value.
- If you don't wish to use every value, the remaining columns should be assigned the value "Deactivated" (see example).
- If the "ListColN" properties are stated, then all the "ListColWidthN" properties must also be stated.

Display of remedy messages

Properties for show/hide, plus column layout, e.g. <PARAM NAME="RmdCol1" VALUE="Responsibility">:

- ▶ RmdColN (N columns from 1 to 7)

Values:

- "Responsibility"
- "Scope"
- "Description"
- "Location.Device"
- "Location.EquipmentID"
- "Location.Address"
- "Location.Description"
- "Deactivated" = Invisible column

Properties for assigning column widths, e.g. <PARAM NAME="RmdColWidth1" VALUE="120">

- ▶ RmdColWidthN (N columns from 1 to 7)

Values:

- Column width in pixels

**INFORMATION**

Please note the following with properties:

- Always state a value in all the columns under "RmdColN" or in none of them.
- Each column should be assigned a unique value.
- If you don't wish to use every value, the remaining columns should be assigned the value "Deactivated" (see example).
- If the "RmdColN" properties are stated, then all the "RmdColWidthN" properties must also be stated.

Example

The last two columns should not be used.

- ▶ Correct configuration:
 - "RmdCol1" VALUE="Responsibility"
 - "RmdCol2" VALUE="Description"
 - "RmdCol3" VALUE="Location.Device"
 - "RmdCol4" VALUE="Location.EquipmentID"
 - "RmdCol5" VALUE="Location.Address"
 - "RmdCol6" VALUE="Deactivated"
 - "RmdCol7" VALUE="Deactivated"
- ▶ Incorrect configuration:
 - "RmdCol1" VALUE="Responsibility"
 - "RmdCol2" VALUE="Description"
 - "RmdCol3" VALUE="Deactivated"
 - "RmdCol4" VALUE="Deactivated"
 - "RmdCol5" VALUE="Location.Device"
 - "RmdCol6" VALUE="Location.EquipmentID"
 - "RmdCol7" VALUE="Location.Address"

4.2.4**Properties for displaying the diagnostic log**

Properties for show/hide, plus column layout, e.g. <PARAM NAME="LogCol1" VALUE="StateChangeNo">:

- ▶ LogColN (N columns from 1 to 12)
Values:
 - "StateChangeNo"
 - "Timestamp"
 - "PriorityNo"
 - "Priority"

- "DID"
- "Scope"
- "Description"
- "Location.Device"
- "Location.EquipmentID"
- "Location.Address"
- "Location.Description"
- "ParameterList"
- "Deactivated" = Invisible column

Properties for assigning column widths, e.g. <PARAM NAME="LogColWidth1" VALUE="20">

- ▶ LogColWidth1N (N columns from 1 to 12)
- Values:
- Column width in pixels



INFORMATION

Please note the following with properties:

- Always state a value in all the columns under "LogColN" or in none of them.
- Each column should be assigned a unique value.
- If you don't wish to use every value, the remaining columns should be assigned the value "Deactivated" (see example).
- If the "LogColN" properties are stated, then all the "LogColWidthN" properties must also be stated.

Example

The last two columns should not be used:

- ▶ Correct configuration:
 - "LogCol1" VALUE="StateChangeNo"
 - "LogCol2" VALUE="Timestamp"
 - "LogCol3" VALUE="PriorityNo"
 - "LogCol4" VALUE="Priority"
 - "LogCol5" VALUE="DID"
 - "LogCol6" VALUE="Scope"
 - "LogCol7" VALUE="Description"
 - "LogCol8" VALUE="Location.Device"
 - "LogCol9" VALUE="Location.EquipmentID"
 - "LogCol10" VALUE="Location.Address"
 - "LogCol11" VALUE="Deactivated"

- "LogCol12" VALUE="Deactivated"
- ▶ Incorrect configuration:
 - "LogCol1" VALUE="StateChangeNo"
 - "LogCol2" VALUE="Timestamp"
 - "LogCol3" VALUE="PriorityNo"
 - "LogCol4" VALUE="Priority"
 - "LogCol5" VALUE="DID"
 - "LogCol6" VALUE="Deactivated"
 - "LogCol7" VALUE="Deactivated"
 - "LogCol8" VALUE="Scope"
 - "LogCol9" VALUE="Description"
 - "LogCol10" VALUE="Location.Device"
 - "LogCol11" VALUE="Location.EquipmentID"
 - "LogCol12" VALUE="Location.Address"

5 Run PSS 4000 Diag Control

5.1 Run in a graphics software package or browser

5.1.1 Run in a graphics software package

Prerequisite:

- ▶ PSS 4000 Diag Control must be installed on the PC or PMI (see chapter entitled "[Install PSS 4000 Diag Control \[6\]](#)").
- ▶ PSS 4000 Diag Control must be configured in the graphics software (see chapter entitled "[Configuration in a graphics software package \[7\]](#)").

Procedure:

- ▶ Details of how to incorporate PSS 4000 Diag Control into your graphics software are provided in the description or in the graphics software's online help.

5.1.2 Run in a browser

5.1.2.1 Run PSS 4000 Diag Control in a browser on a PC

Prerequisite:

- ▶ PSS 4000 Diag Control must be installed on the PC (see chapter entitled "[Install PSS 4000 Diag Control \[6\]](#)").
- ▶ The HTML file must be configured (see chapter entitled "[Configuration in a browser \[14\]](#)").
- ▶ An ActiveX-enabled browser must be installed on the PC.

Procedure:

- ▶ Start the configured HTML file in an ActiveX-enabled browser.

5.1.2.2 Run PSS 4000 Diag Control in a browser on a PMI

Prerequisite:

- ▶ PSS 4000 Diag Control must be installed on the PMI (see chapter entitled "[Install PSS 4000 Diag Control \[6\]](#)").
- ▶ The HTML file must be configured (see chapter entitled "[Configuration in a browser \[14\]](#)").
- ▶ An ActiveX-enabled browser must be installed on the PMI.

Procedure:

- ▶ Download the configured HTML file to your PMI and start this file.

The HTML file can also be started automatically once the PMI has booted. The following additional lines are required in the "PMIStart.cmd" file in order to do this:

```
start \windows\iexplore.exe \Flash\<Name of HTML file>
```

Replace the <Name of HTML file> marker with the name of the HTML file on your PMI.

To start Internet Explorer in full screen mode you will need to create the following entry in the Windows registry:

- ▶ Select **Run...** in the Windows Start menu
- ▶ Enter "regedit" and click **OK** to open the registry.
- ▶ Go to "HKEY_CURRENT_USER\Software\Microsoft\Internet Explorer\Main"
- ▶ Click on **Main** and select "Value -> New DWORD" in the menu bar.
- ▶ Create the DWORD "StartUpInFullScreen" and assign the value "1" to the DWORD.
- ▶ Save and then close the Windows registry.

6 Operate PSS 4000 Diag Control

6.1 Split window

While diagnostics are being run, you can see the diagnostic list in the top half of the window. If you highlight an event, that row will turn blue and the bottom half of the window will show the remedy for this event. If you highlight a remedy, the row showing the event will turn grey and the row showing the remedy will turn blue.

Project: dsv_stpc Diagnostic list (12 / 24)					
↑↑F3		↑	↓	↓↓F4	Info (F2)
Time stamp		DID	Scope	Description	Device
25.03.2010 08:58:24		P - 0100 - 0006	Plant	Safety device has been triggered.	E-STOP pushbutton
25.03.2010 08:58:23		P - 0100 - 0006	Plant	Safety device has been triggered.	E-STOP pushbutton
25.03.2010 08:58:35		C - 0008 - 0022	Plant	Coolant level pre-alert.	Level sensor
25.03.2010 08:58:46		C - 0020 - 0106	Plant	Filtration unit almost full.	Pressure sensor
← →					
Responsibil...	Remedy for selected message			Device	Equ
Operator	Release the E-STOP pushbutton and reset if necessary.			E-STOP pushbutton	=CA
Electrical maintenance engineer	Ensure that the E-STOP pushbutton is wired in accordance with the configuration and circuit			E-STOP pushbutton	=CA
Electrical maintenance engineer	Ensure that the contacts on the safety device operate correctly.			E-STOP pushbutton	=CA
Electrical maintenance engineer	Ensure that the status of the LEDs on the inputs changes when the safety device is operated.			E-STOP pushbutton	=CA
Electrical maintenance engineer	Please contact Pilz.			E-STOP pushbutton	=CA
← →					

Fig.: Split window with horizontal split

You can switch from this view to **Diagnostic log** and back again during operation, via the information window.

	Focus is...	
	...on the diagnostic list	...on the remedy list
Cursor up	To previous diagnostic message	To previous remedy
Cursor down	To next diagnostic message	To next remedy
Enter	Show remedy for selected diagnostic message	No function
ESC	Remedy for diagnostic message is deleted	Focus is placed on the diagnostic list and remedy for diagnostic message is deleted
F1	No function	No function
F2	Switch to information window	Switch to information window
F3	Previous 10 diagnostic messages	No function
F4	Next 10 diagnostic messages	

Assignment of keyboard and buttons



INFORMATION

The **Split window** setting is unsuitable for devices with a low screen resolution.

6.2

Single window

If you have selected **Single window** under **Display** in the basic configuration, the diagnostic list and remedies will be displayed in separate windows.



INFORMATION

If **EnableTicker** is selected, the following diagnostic data - **time stamp**, **DID**, **scope**, **device**, **Equip-ID**, **location description** and **address** - will be shown in ticker format in the current diagnostic message (in VGA resolution, this is the diagnostic message highlighted in blue), if there is insufficient space to display the data.

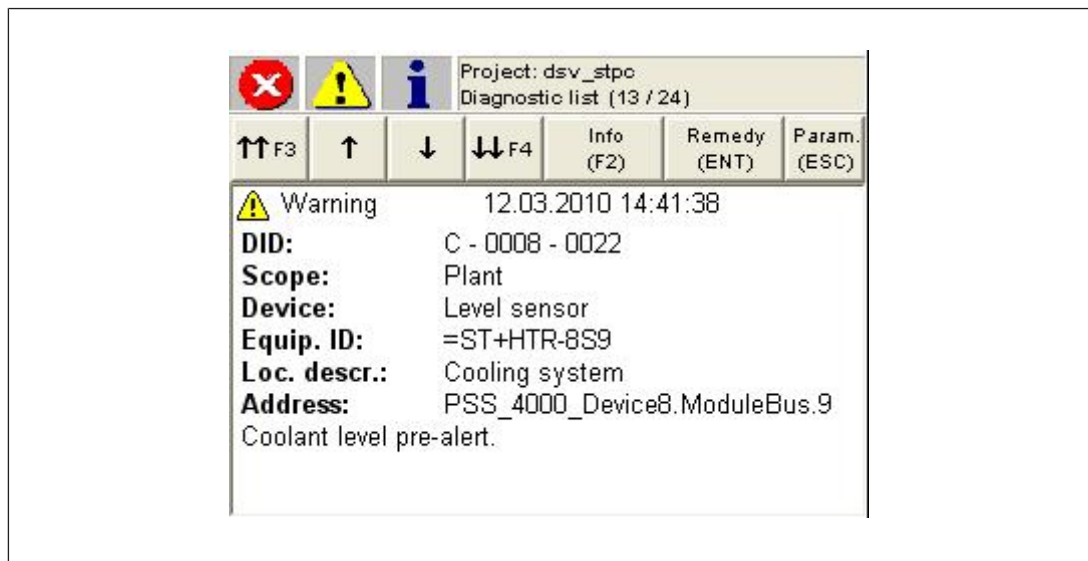


Fig.: Separate window with diagnostic list in QVGA resolution

   Project: dsv_stpc Diagnostic list (12 / 24)	
 F3	
	 F4
Info (F2)	Remedy (ENT)
Param. (ESC)	
 Error DID: P - 0100 - 0006 Scope: Plant Device: E-STOP pushbutton Equip. ID: =CA+EAA-4S1 Loc. descr.: Chip conveyor Address: PSS_4000_Device1.ModuleBus.3 Description: Safety device has been triggered.	12.03.2010 14:41:25
 Error DID: P - 0100 - 0006 Scope: Plant Device: E-STOP pushbutton Equip. ID: =CA+EAA-4S1 Loc. descr.: Chip conveyor Address: PSS_4000_Device1.ModuleBus.3 Description: Safety device has been triggered.	12.03.2010 14:41:24
 Warning DID: C - 0008 - 0022 Scope: Plant Device: Level sensor Equip. ID: =ST+HTR-8S9 Loc. descr.: Cooling system Address: PSS_4000_Device8.ModuleBus.9 Description: Coolant level pre-alert.	12.03.2010 14:41:38
 Information DID: C - 0020 - 0106 Scope: Plant Device: Pressure sensor Equip. ID: =LU+JKK-2S5 Loc. descr.: Oil dust exhaustion Address: PSS_4000_Device6.ModuleBus.10 Description: Filtration unit almost full.	12.03.2010 14:41:50

Fig.: Separate window with diagnostic list in VGA resolution

While the diagnostics are running, call up the remedy for an event by clicking **Remedy**.

**INFORMATION**

If **EnableTicker** is selected, the following data - **responsibility**, **device**, **Equip-ID**, **address** and **location** - will be shown in ticker format in the current action (in VGA resolution, this is the action highlighted in blue), if there is insufficient space to display the data.

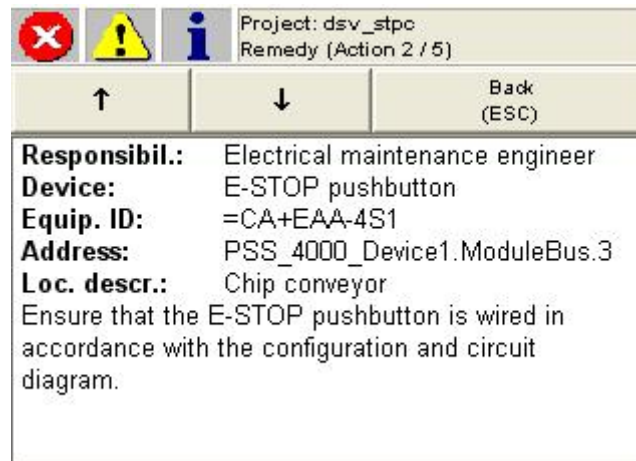


Fig.: Separate window with remedies in QVGA resolution

				Project: dsv_stpc Remedy (Action 2 / 5)
↑		↓		Back (ESC)
Responsibil.:	Operator			
Device:	E-STOP pushbutton			
Equip. ID:	=CA+EAA-4S1			
Address:	PSS_4000_Device1.ModuleBus.3			
Loc. descr.:	Chip conveyor			
Description:	Release the E-STOP pushbutton and reset if necessary.			
Responsibil.:	Electrical maintenance engineer			
Device:	E-STOP pushbutton			
Equip. ID:	=CA+EAA-4S1			
Address:	PSS_4000_Device1.ModuleBus.3			
Loc. descr.:	Chip conveyor			
Description:	Ensure that the E-STOP pushbutton is wired in accordance with the configuration and circuit diagram.			
Responsibil.:	Electrical maintenance engineer			
Device:	E-STOP pushbutton			
Equip. ID:	=CA+EAA-4S1			
Address:	PSS_4000_Device1.ModuleBus.3			
Loc. descr.:	Chip conveyor			
Description:	Ensure that the contacts on the safety device operate correctly.			
Responsibil.:	Electrical maintenance engineer			
Device:	E-STOP pushbutton			
Equip. ID:	=CA+EAA-4S1			
Address:	PSS_4000_Device1.ModuleBus.3			
Loc. descr.:	Chip conveyor			
Description:	Ensure that the status of the LEDs on the inputs changes when the safety device is operated.			
Responsibil.:	Electrical maintenance engineer			
Device:	E-STOP pushbutton			
Equip. ID:	=CA+EAA-4S1			
Address:	PSS_4000_Device1.ModuleBus.3			
Loc. descr.:	Chip conveyor			
Description:	Please contact Pilz.			

Fig.: Separate window with remedies in VGA resolution

While the diagnostics are running, call up the parameter list by clicking **ESC**. It contains all the information required by technical support to evaluate a diagnostic message. This is the diagnostic identifier and all parameters.

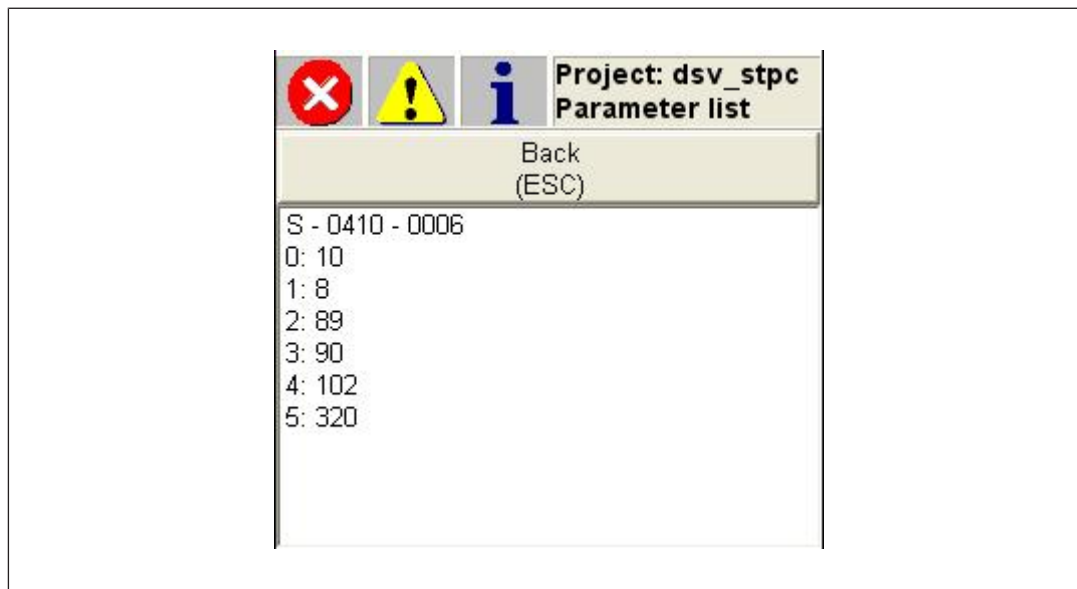


Fig.: Parameter list

	Focus is...	
	...a diagnostic message	...a remedy
Cursor up	To previous diagnostic message	To previous remedy
Cursor down	To next diagnostic message	To next remedy
Enter	Show remedy for selected diagnostic message	No function
ESC	Show parameter list, exit parameter list	Switch to diagnostic message
F1	No function	No function
F2	Switch to information window	
F3	Previous 10 diagnostic messages	
F4	Next 10 diagnostic messages	

Keyboard and button assignment

Examples:

F4 is used to jump to the next block of 10 diagnostic messages.

- ▶ Diagnostic message 7 of 15 diagnostic messages is displayed:
 - With F4, the display jumps to the start of the next block of 10, i.e. to position 11.

F3 is used to jump to the previous block of 10 diagnostic messages.

- ▶ Diagnostic message 13 of 15 diagnostic messages is displayed:
 - With F3, the display jumps to the start of the previous block of 10, i.e. to position 1.

6.3 Diagnostic log

Diagnostic messages in the diagnostic log are displayed in the form of a list, which can contain a maximum of 1000 entries. A maximum of 10 entries can be displayed per page. The most recent entries are displayed at the start of the list.

  Project: dsv_stpc Diagnostic log (11-20 / 29)					
↑↑ F3		↑	↓	↓↓ F4	Back (ESC)
	Time stamp		Priority	DID	Scope
→	25.03.2010 09:29:45	i	Status informati	C - 0020 - 0106	Plant
←	25.03.2010 09:29:44	i	Status informati	C - 0020 - 0106	Plant
←	25.03.2010 09:29:43	⚠	Warning	C - 0008 - 0022	Plant
←	25.03.2010 09:29:42	✖	Error	P - 0200 - 0010	Plant
←	25.03.2010 09:29:41	✖	Error	P - 0100 - 0006	Plant
→	25.03.2010 09:29:40	i	Status informati	C - 0020 - 0106	Plant
→	25.03.2010 09:29:39	⚠	Warning	C - 0008 - 0022	Plant
→	25.03.2010 09:29:37	✖	Error	P - 0200 - 0010	Plant
→	25.03.2010 09:29:36	✖	Error	P - 0100 - 0006	Plant
→	25.03.2010 09:29:35	✖	Error	P - 0100 - 0006	Plant

Fig.: Diagnostic log in VGA resolution

If **Optimize for QVGA** is selected, only one log entry will be displayed at a time.

**INFORMATION**

If **Optimize for QVGA** and **EnableTicker** are selected, the following data - **time stamp, DID, scope, device, Equip-ID, location description** and **Address** - will be shown in ticker format in the current diagnostic log entry, if there is insufficient space to display the data.

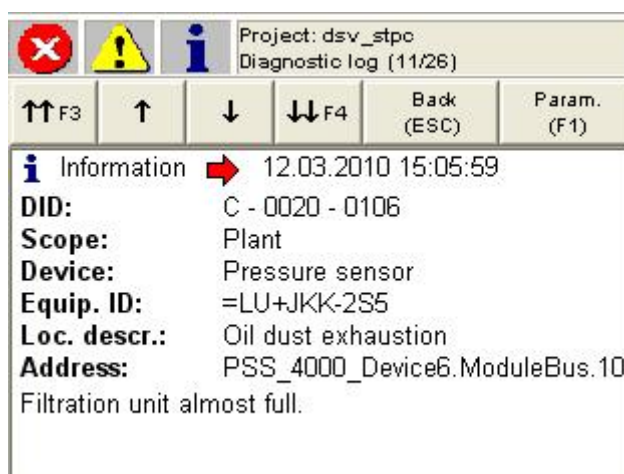


Fig.: Diagnostic log in QVGA resolution

Cursor up	To previous entry
Cursor down	To next entry
ESC	Switch to information window or exit parameter list*
F1	Show parameter list*
F3	Previous 10 diagnostic messages
F4	Next 10 diagnostic messages

Assignment of keyboard and buttons

* Only in QVGA mode

6.4 Information window

The FS project's check sum and the difference from universal time UTC are displayed under the **Integrity** tab in the information window.

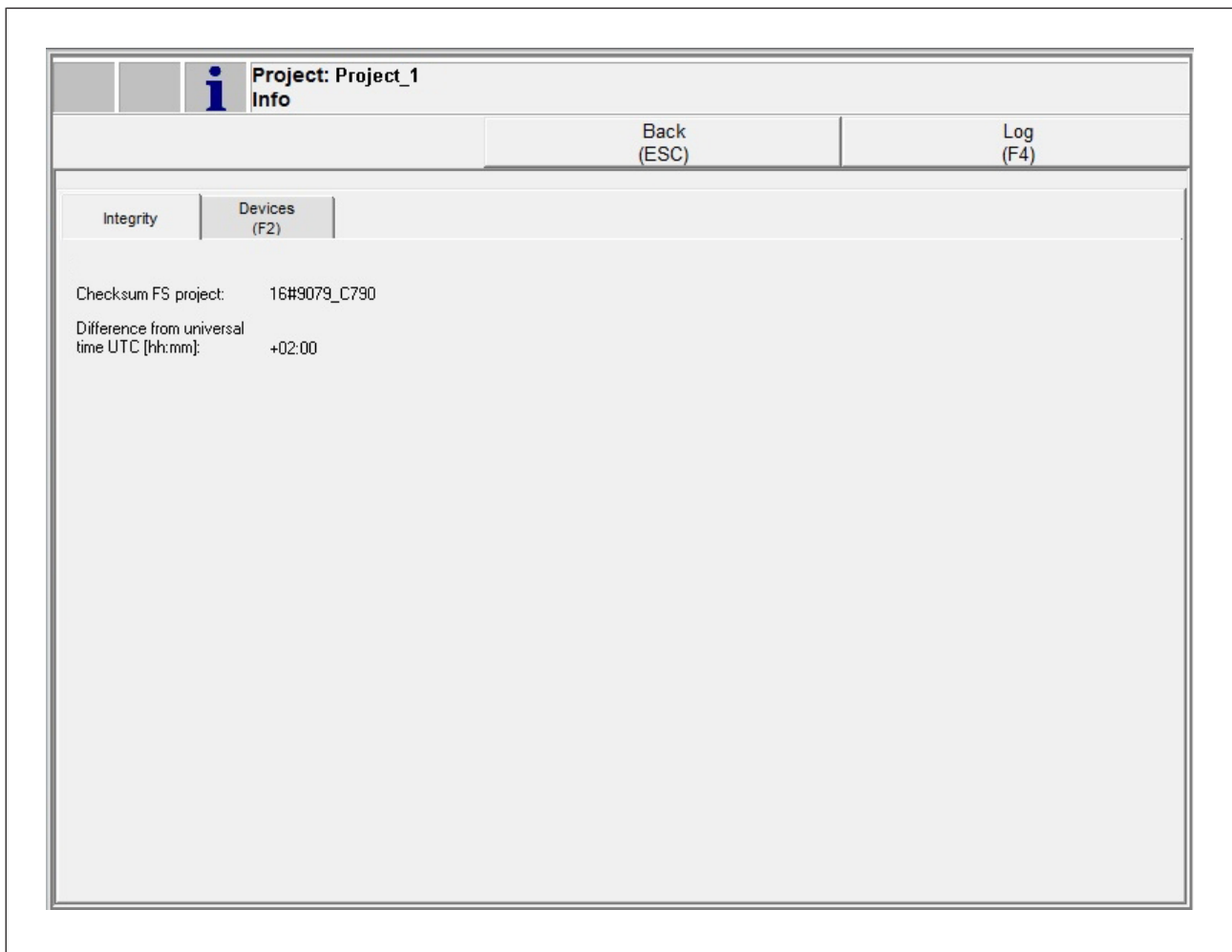


Fig.: "Integrity" tab on the information window in VGA resolution

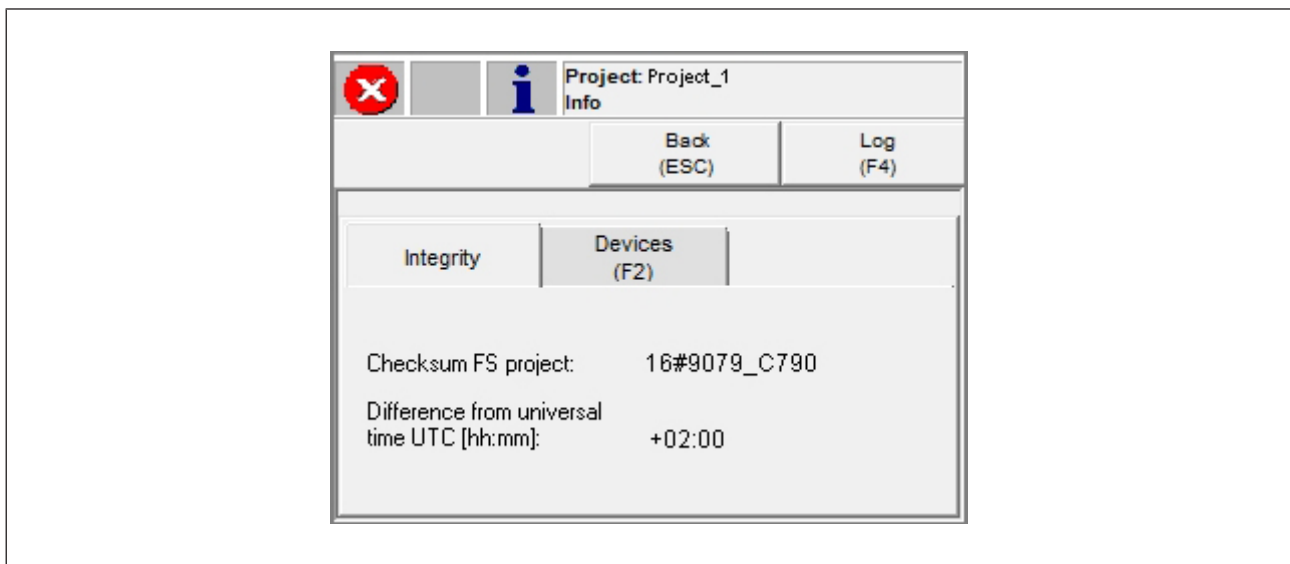


Fig.: "Integrity" tab on the information window in QVGA resolution

The following information is displayed for each device in the project under the **Devices** tab:

- ▶ Device name
- ▶ Product type

- ▶ Firmware version
- ▶ Hardware version
- ▶ Serial number

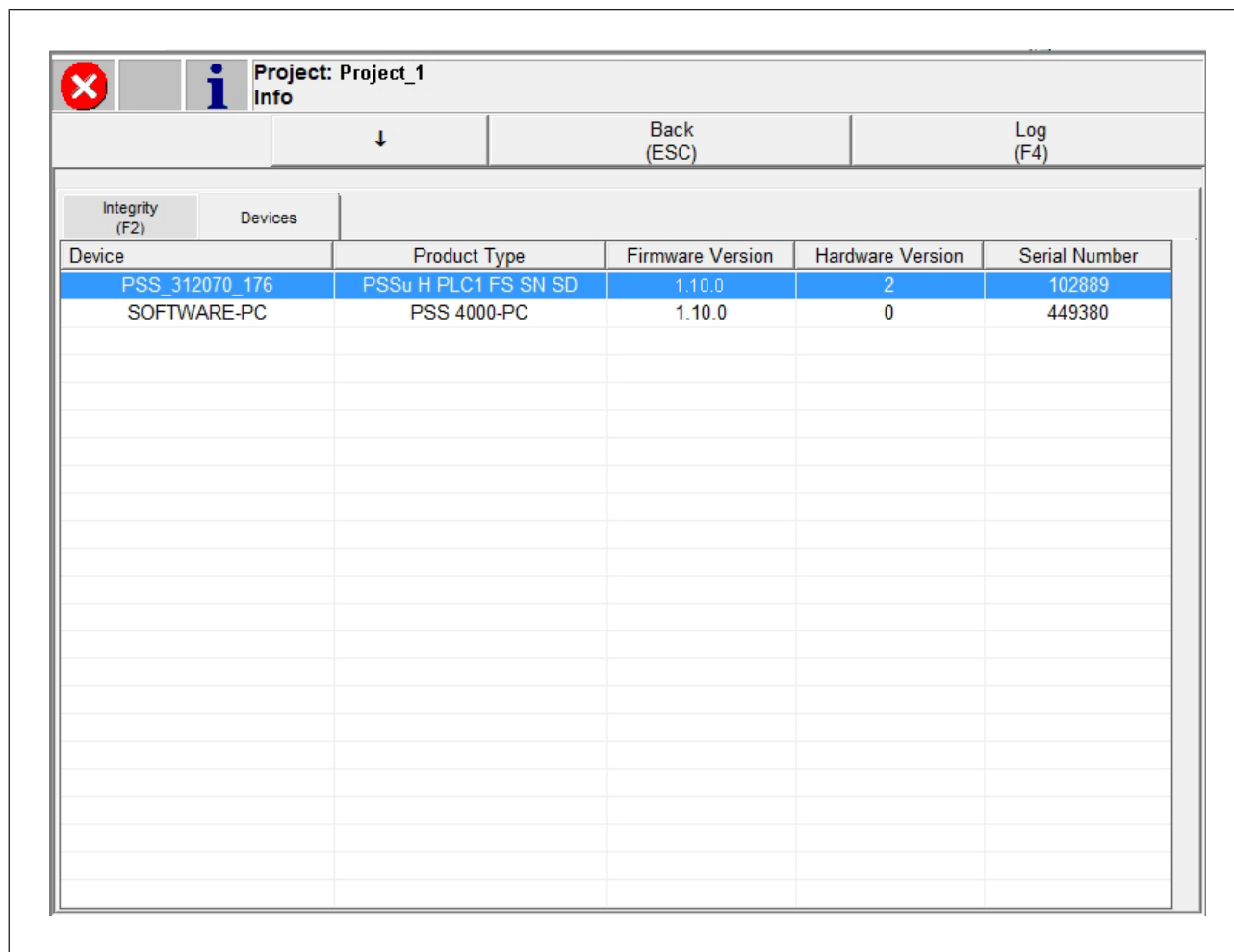


Fig.: "Devices" tab on the information window in VGA resolution

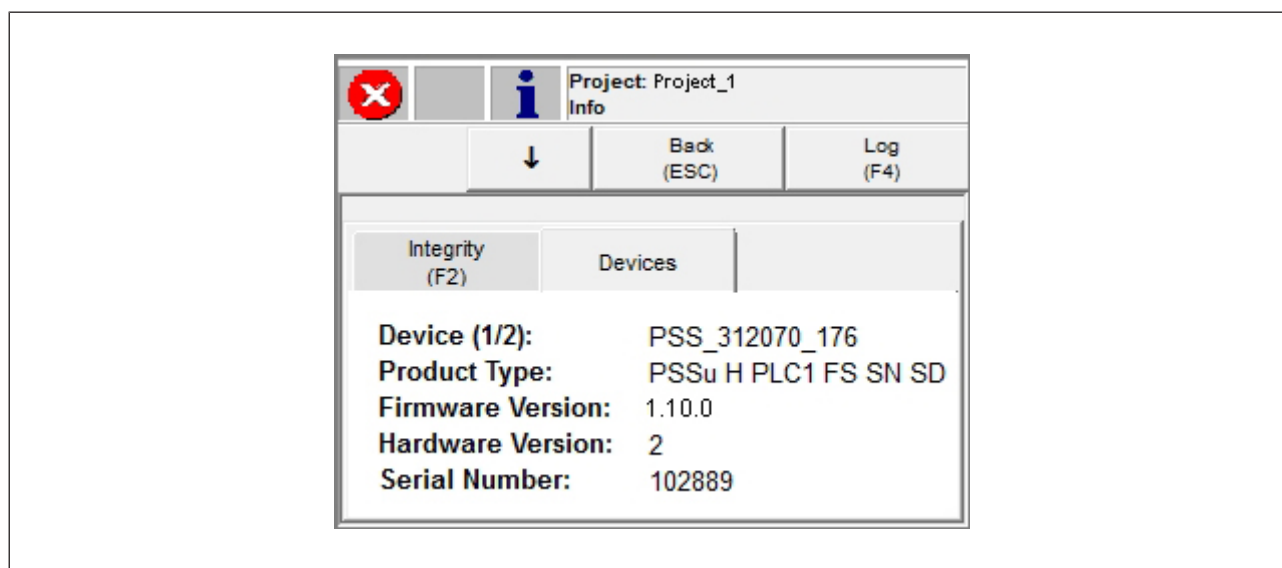


Fig.: "Devices" tab on the information window in QVGA resolution

Cursor up	To previous entry
Cursor down	To next entry
ESC	Back to event list
F1	No function
F2	Switch tab
F3	No function
F4	Open diagnostic log

Assignment of keyboard and buttons

6.5 Icons

The symbols in the window's top left-hand corner indicate the type of event:

Symbol	Meaning
	Status information
	Warning
	Error

Symbols in the **Diagnostics** window

7 Appendix

7.1 Examples of HTML code for calling up PSS 4000 Diag Control

7.1.1 Simplified example of HTML code

Example of simplified HTML code. A detailed description of the properties can be found in the section entitled "[Configuration in a browser](#) [ 14]".



NOTICE

You can copy the following example code via clipboard into your application.

Please note in this procedure that special characters are interpreted depending on the PDF Reader used. Look out for the following characters in particular:

- Dashes
- Hyphens (e.g for path names that have more than one line)
- Minus sign

```
<html>
<head>
</head>
<body leftmargin="0" topmargin="0" scroll=no>
<OBJECT ID="PilzDiag" WIDTH=800 HEIGHT=600
style="margin-left:-2px; margin-top:-2px;"
CLASSID="CLSID:CE42D3A2-5C9C-4a77-B7DF-08A27AAC7BC5">
<PARAM NAME="OPCServer" VALUE="localhost">
<PARAM NAME="Language" VALUE="1031">
<PARAM NAME="Display" VALUE="SingleWindow">
<PARAM NAME="QVGA" VALUE="0">
<PARAM NAME="UseKeyboard" VALUE="1">
<PARAM NAME="FontType" VALUE="Arial">
<PARAM NAME="FontSize" VALUE="10">
<PARAM NAME="EnableTicker" VALUE="1">
<PARAM NAME="ListPaneHeight" VALUE="50">
<PARAM NAME="RemedyPaneHeight" VALUE="50">
<PARAM NAME="TextLinesPerTableRow" VALUE="3">
</OBJECT>
</body>
</html>
```

7.1.2 Advanced example of HTML code

Example of advanced HTML code. A detailed description of the properties can be found in the section entitled "[Configuration in a browser](#) [ 14]".

**NOTICE**

You can copy the following example code via clipboard into your application.

Please note in this procedure that special characters are interpreted depending on the PDF Reader used. Look out for the following characters in particular:

- Dashes
- Hyphens (e.g for path names that have more than one line)
- Minus sign

```
<html>
<head>
</head>
<body leftmargin="0" topmargin="0" scroll=no>
<OBJECT ID="PilzDiag" WIDTH=800 HEIGHT=600
style="margin-left:-2px; margin-top:-2px;"
CLASSID="CLSID:CE42D3A2-5C9C-4a77-B7DF-08A27AAC7BC5">
<PARAM NAME="OPCServer" VALUE="localhost">
<PARAM NAME="Language" VALUE="1031">
<PARAM NAME="Display" VALUE="SplitWindow">
<PARAM NAME="QVGA" VALUE="0">
<PARAM NAME="UseKeyboard" VALUE="1">
<PARAM NAME="FontType" VALUE="Arial">
<PARAM NAME="FontSize" VALUE="10">
<PARAM NAME="EnableTicker" VALUE="1">
<PARAM NAME="ListPaneHeight" VALUE="50">
<PARAM NAME="RemedyPaneHeight" VALUE="50">
<PARAM NAME="TextLinesPerTableRow" VALUE="3">
<PARAM NAME="ListCol1" VALUE="Timestamp">
<PARAM NAME="ListCol2" VALUE="PriorityNo">
<PARAM NAME="ListCol3" VALUE="DID">
<PARAM NAME="ListCol4" VALUE="Scope">
<PARAM NAME="ListCol5" VALUE="Description">
<PARAM NAME="ListCol6" VALUE="Location.Device">
<PARAM NAME="ListCol7" VALUE="Location.EquipmentID">
<PARAM NAME="ListCol8" VALUE="Location.Address">
<PARAM NAME="ListCol9" VALUE="Location.Description">
<PARAM NAME="ListCol10" VALUE="Deactivated">
<PARAM NAME="ListCol11" VALUE="Deactivated">
<PARAM NAME="ListColWidth1" VALUE="80">
<PARAM NAME="ListColWidth2" VALUE="20">
<PARAM NAME="ListColWidth3" VALUE="80">
<PARAM NAME="ListColWidth4" VALUE="85">
<PARAM NAME="ListColWidth5" VALUE="255">
<PARAM NAME="ListColWidth6" VALUE="95">
<PARAM NAME="ListColWidth7" VALUE="80">
<PARAM NAME="ListColWidth8" VALUE="80">
```

```
<PARAM NAME="ListColWidth9" VALUE="80">
<PARAM NAME="ListColWidth10" VALUE="80">
<PARAM NAME="ListColWidth11" VALUE="80">
<PARAM NAME="RmdCol1" VALUE="Responsibility">
<PARAM NAME="RmdCol2" VALUE="Description">
<PARAM NAME="RmdCol3" VALUE="Location.Device">
<PARAM NAME="RmdCol4" VALUE="Location.EquipmentID">
<PARAM NAME="RmdCol5" VALUE="Location.Address">
<PARAM NAME="RmdCol6" VALUE="Location.Description">
<PARAM NAME="RmdCol7" VALUE="Deactivated">
<PARAM NAME="RmdColWidth1" VALUE="120">
<PARAM NAME="RmdColWidth2" VALUE="280">
<PARAM NAME="RmdColWidth3" VALUE="80">
<PARAM NAME="RmdColWidth4" VALUE="80">
<PARAM NAME="RmdColWidth5" VALUE="80">
<PARAM NAME="RmdColWidth6" VALUE="135">
<PARAM NAME="RmdColWidth7" VALUE="80">
<PARAM NAME="LogCol1" VALUE="StateChangeNo">
<PARAM NAME="LogCol2" VALUE="Timestamp">
<PARAM NAME="LogCol3" VALUE="PriorityNo">
<PARAM NAME="LogCol4" VALUE="Priority">
<PARAM NAME="LogCol5" VALUE="DID">
<PARAM NAME="LogCol6" VALUE="Scope">
<PARAM NAME="LogCol7" VALUE="Description">
<PARAM NAME="LogCol8" VALUE="Location.Device">
<PARAM NAME="LogCol9" VALUE="Location.EquipmentID">
<PARAM NAME="LogCol10" VALUE="Location.Address">
<PARAM NAME="LogCol11" VALUE="Location.Description">
<PARAM NAME="LogCol12" VALUE="Deactivated">
<PARAM NAME="LogColWidth1" VALUE="20">
<PARAM NAME="LogColWidth2" VALUE="80">
<PARAM NAME="LogColWidth3" VALUE="20">
<PARAM NAME="LogColWidth4" VALUE="40">
<PARAM NAME="LogColWidth5" VALUE="80">
<PARAM NAME="LogColWidth6" VALUE="80">
<PARAM NAME="LogColWidth7" VALUE="215">
<PARAM NAME="LogColWidth8" VALUE="80">
<PARAM NAME="LogColWidth9" VALUE="80">
<PARAM NAME="LogColWidth10" VALUE="80">
<PARAM NAME="LogColWidth11" VALUE="80">
<PARAM NAME="LogColWidth12" VALUE="80">
</OBJECT>
</body>
</html>
```

7.2 Overview of the languages supported and their LCID

One of the languages listed below can be used for diagnostic texts and for the user interface on the PSS 4000 Diag Control. For **Language**, the LCID code must always be entered as a decimal value, e.g. "1031" for German.

Language	Code	LCID (dec)
English	en	1033
German	de	1031

