Manual

TextLink.net

the text editor software to

Text display TA125

manual_TextLink_v1.3.7.doc

Contents

1   Introduction

1.1   *Welcome to TextLink*

TextLink is the text editor to the text display TA125. With TextLink texts can provided, administered, archived, and naturally transferred to the text display. The text exchange between TextLink and other Windows programs takes place simply by the windows clipboard functions and/or direct opening of text files.

TextLink further can manage the text memory (internal EEPROM) of the TA125, as well as showing all kinds of special text expositions of the text display.

Text sends the texts immediately to an attached TA125. With this "on-line mode" – a direct examination of the texts in the original format is possible. This procedure runs off automatically.

1.2   Software installation

1.2.1   TextLink

TextLink does not have to be installed; the file TextLink.net.exe is directly executable.

TextLink is based on Microsoft VB.net, so you maybe need to install the the Microsoft.net Framework - environment, which can be installed with the provided file dotnetfx.exe.

The file dotnetfx.exe lies in the same directory as TextLink.net.exe.

1.2.2   TextLink on net drives

It is to be noted that the *standard* safety attitudes of the Microsoft.net Framework is so adjusted that TextLink on a network drive assembly cannot be started. The simple solution would be to be started TextLink on a local drive assembly.

Is to be started TextLink on a network drive assembly, and then those must have the safety attitudes to be changed as follows:

1.   Start ConfigWizards.exe, this file is usually located in the directory „C:\WINDOWS\Microsoft.NET\Framework\v1.1.4322\ConfigWizards.exe"

2.   Select „.Net safety "
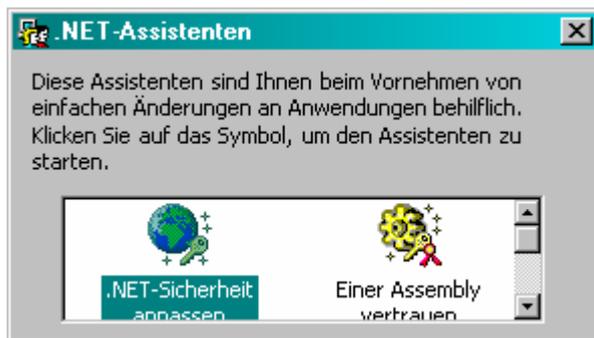
3.
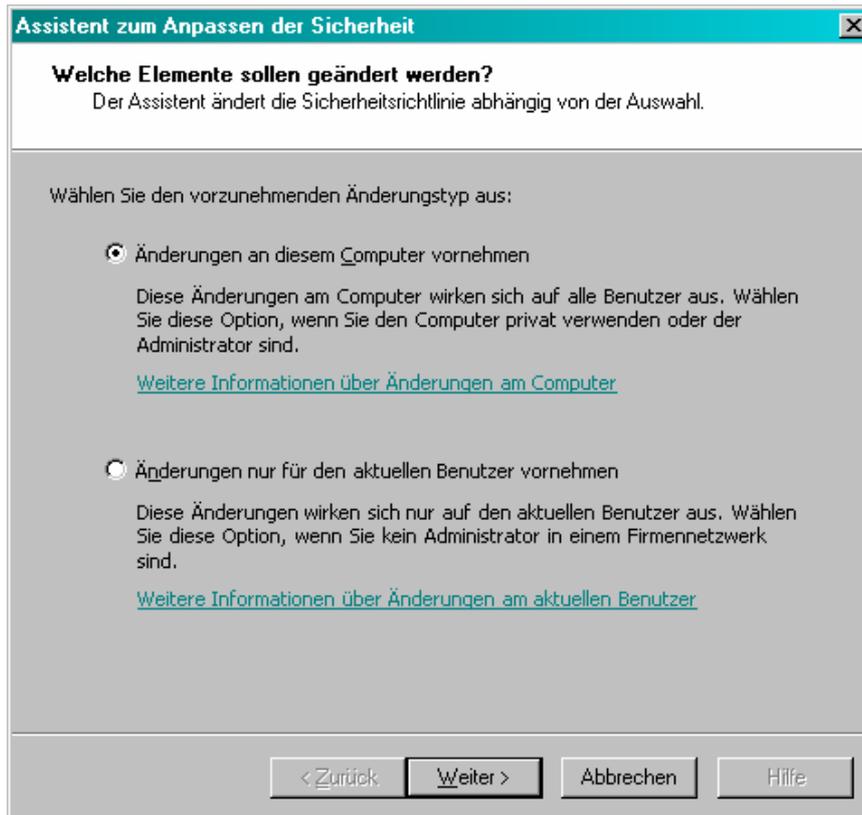
press continue

4.

Choose Local Intranet and pull the slighter until the very up position

5.

6. "Finish" and restart TextLink

1.3   Interface cable PC - TI125

1.3.1   TI125 with Modbus / Direct Char- interface (TI125.x.0.x or TI125.x.1.0)

For this a simple serial cable is needed, that at the PC at the 9-pin Sub D plug is attached and at the TI 125 to the clamps 17-19.
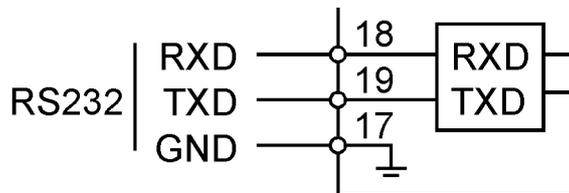

1.3.2   TI125 with Profibus Interface (TI125.x.2.0)

The TI125 with Profibus bus has a RS485 interface - your PC usually only a RS232 interface. In this case you need an interface that converts the interface signals accordingly. The converter must automatically recognize whether the master (PC) sends or receives. Such an adapter is available by Gönnheimer Electronic GmbH, part code "TI- Interface cable PC to TI to the loading of fixed texts with professional bus application".

This cable has a 9-pin Sub D plug for the connection at the TI125, a 9-pin. Sub D socket for the connection at the PC and a USB plug for the connection at the PC. The USB plug is only used for the voltage supply of internal electronics.

2 Tutorial

2.1 Scope
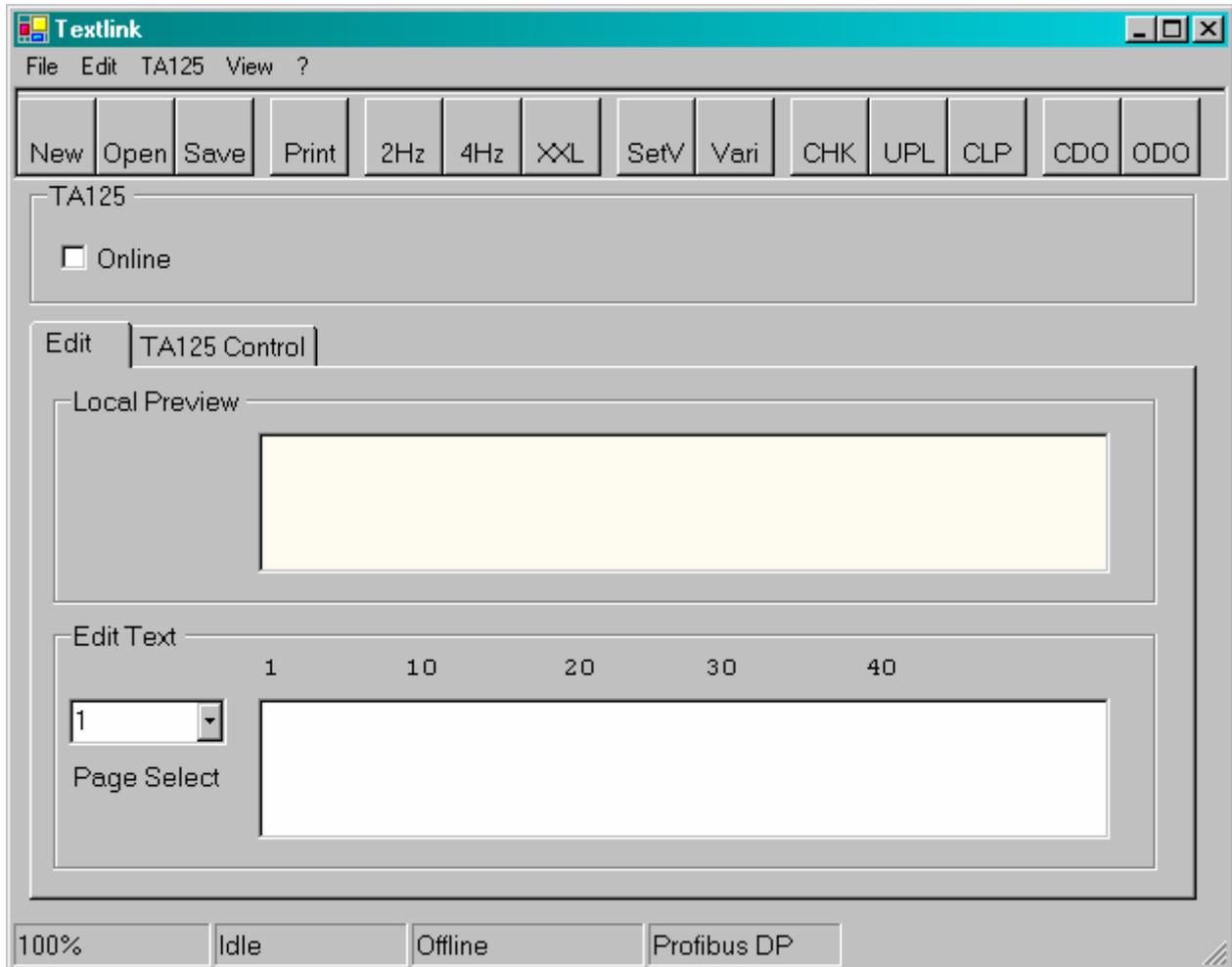
2.1.1 Window scope

An opened TextLink document shows the text input window "Edit text" (background is). With the page selection switch left successively all sides can be brought to the character indication to the announcement.

The upper text field is a Wysiwyg indicating simulation. Here the actual entered text affects the display of the character indication can be seen, without a TA125 is attached to the PC. This is in particular helpful with large texts.

2.1.2 TA125- Control

The stored pages from the internal EEPROM memory of the TA125 at the TA125 can be indicated. The texts are not transferred by TextLink but the sides actually put down in the EEPROM are indicated at the TA125.

Further the variables defined on the page get the following worth assigned.
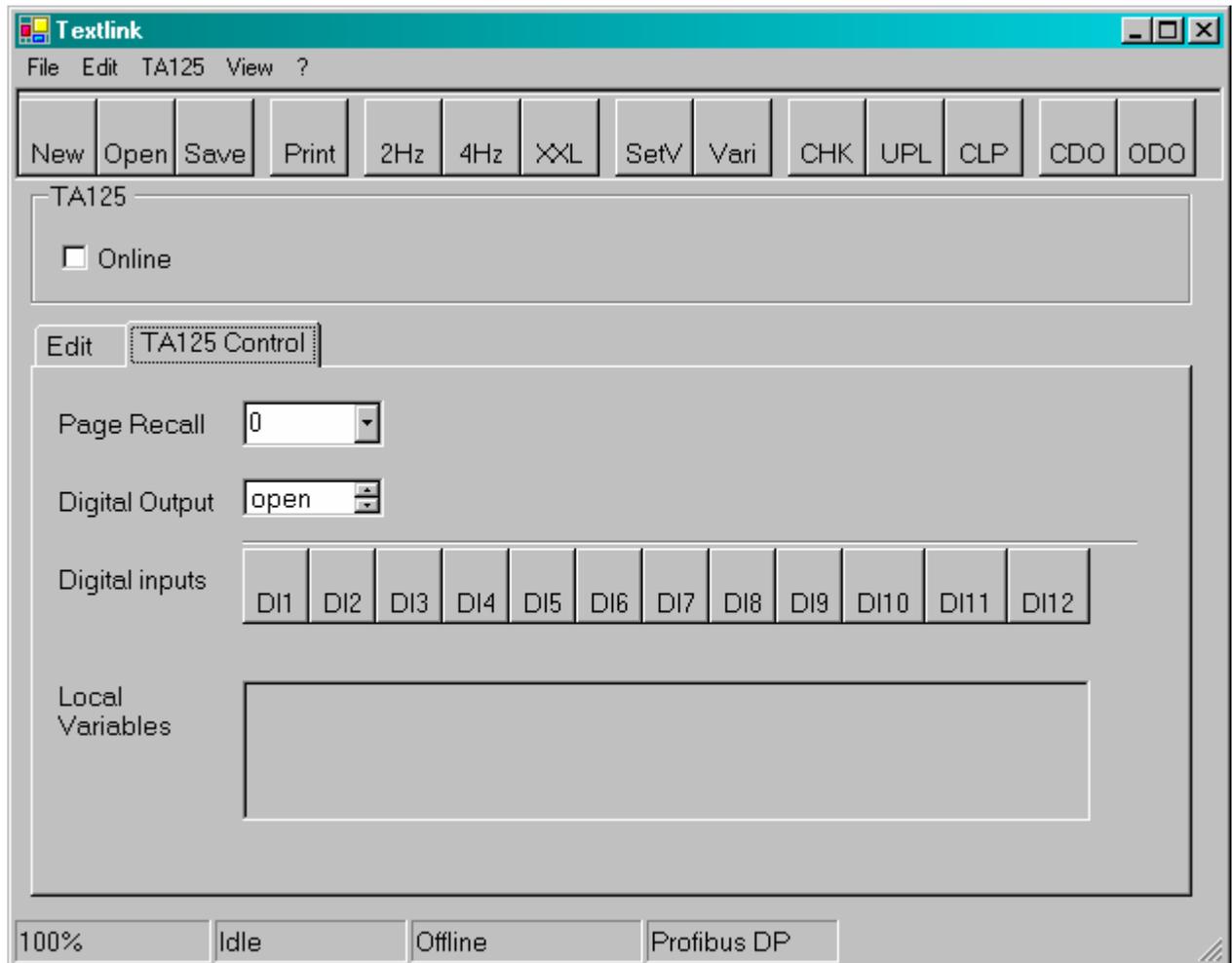
Further the current button pressings at the KB125 on the TextLink.net surface (DI1... DI12) are indicated.

With the control small box "digital output" the DA of the Ta125 is directly steered.

2.1.3 TextLink- files „*.tlk"

In TextLink.net the document is all necessary information about an individual text display TA125 contain. These are:

- the content of all Text pages
- the defined Variables

The TextLink document possesses the file ending * tlk. It represents a subset of rtf documents.

"TextLink.net" can not read the files in of the preceding software "TextLink". A file converter is intended for it.

2.2 Description TA125

The field text display TA125 indicates arbitrary messages, warnings or hints in the hazardous area zone 1. It's large (58 x 244 mm2), reflective display with a figure height of 15 mm can easily be read up to a distance of five meters. The display is organized into 4 rows with 40 characters per row.

The TA125 receives the messages for instance from a PC or DCS located in safe area. The interface TI125 serves as intrinsically safe barrier and power supply. It can be equipped

with several bus modules (RS232, RS485, RS422, Profibus DP, Interbus and Modbus). The distance to the TA125 could be up to 300 meters with a data rate of 38,4 kbit/s. Use wire with a bigger diameter for longer distances.

It is possible to connect more than one text displays to one bus (theoretical up to 255). Each one with different text content.

Additionally the TA125 has an intrinsically safe passive alarm output. With this it is possible to connect a further alarming device. With the three digital inputs you can acknowledge a message or an alarm or you can request further information on the spot in hazardous area.

The TA125 stores up to 32 kByte of messages in an internal EEprom. You can program the stored messages with the bundled windows software "TEXT LINK". There are two ways to display the stored texts: the serial interface or applying a defined bit pattern to binary address inputs of the TI125 (option).
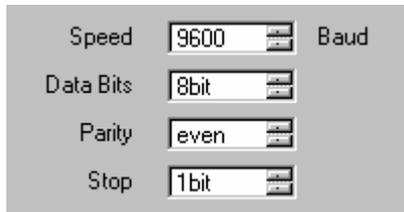
2.3   Make connection Profibus DP interface

1.   Step: configuring the interface

For the connection the serial interface must be configured.

Instruction: Menu, opinion, serial interface - dialogue box call

For the TI125 with professional bus DP the following data must be inserted:

Speed	9600	Baud
Data Bits	8bit	
Parity	even	
Stop	1bit	

On the "Protocol" field must be registered "Profibus" as protocol and the bus address must with the adjusted address at the TI125 agree.

Note that the **terminal resistance must be "on"** at the TI125, if the TI125 is the only participant in the bus.
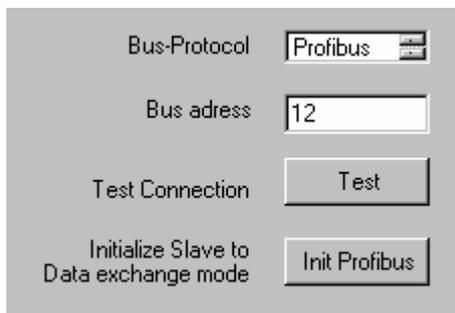
Bus-Protocol	Profibus
Bus adress	12
Test Connection	Test
Initialize Slave to Data exchange mode	Init Profibus

2. Step: Diagnosis with „Test" – button

After these settings the connection is examined on the lowest communication stage with the key "test". The professional bus diagnosis is requested. Comes no or negative answer indicates the tracer directly "failed".

To positive diagnosis it announces "test = OK"

3. Step: Set Profibus –Slave (TI125)into Data transfer mode

After a positive diagnosis answer the key "INIT professional bus" must be pressed. TextLink sends on several Profibus command sequences around to set the TI125 into data exchange condition.

After successful communication the button announces "Slave = ok".

At the TI125 now a green LED lights up, which expires red ones that shows that now data can be sent to the Ta125.

The dialogue must be acknowledged finally with the button of "ok".

3   Software Reference

3.1   Menus

3.1.1   File- Menu

File the menu contains all instructions for working with TextLink- files, like other wellknown Windows applications.

Additionally to the standard instructions: New, open, save, print and quit is the command "send", in order to transfer all pages in the actual opened file to the text display TA125.

3.1.1.1   New

Opens a new TextLinkdocument. The user can work on the pages. All pages are empty and the variables undefined.

3.1.1.2   Open

Open a TextLink document on any file system.

3.1.1.3   Save

TextLink saves the actual document under the fixed name. If no name is fixed a dialog field appears where the name and directory can be specified.

3.1.1.4   Save as

TextLink saves the actual document under a new name. A dialog field appears where the name and directory can be specified.

3.1.1.5   Print

The current TextLink document is printed out at the standard printer. In the following dialogue box the printer is selected. Beside all pages also contents and the length of the variables already defined are printed.

3.1.1.6   Quit

Terminates TextLink. Stored changes in the text do not cause a dialogue box, which suggests to storing the document.

3.1.2   Edit- Menu

The edit menu contains instructions for editing texts and the Windows clipboard. Texts can be imported or exported also from other Windows applications.

Additionally to the standard instructions there are the instructions "variable inserts" and "edit variable" with those particularly variables to can be defined.
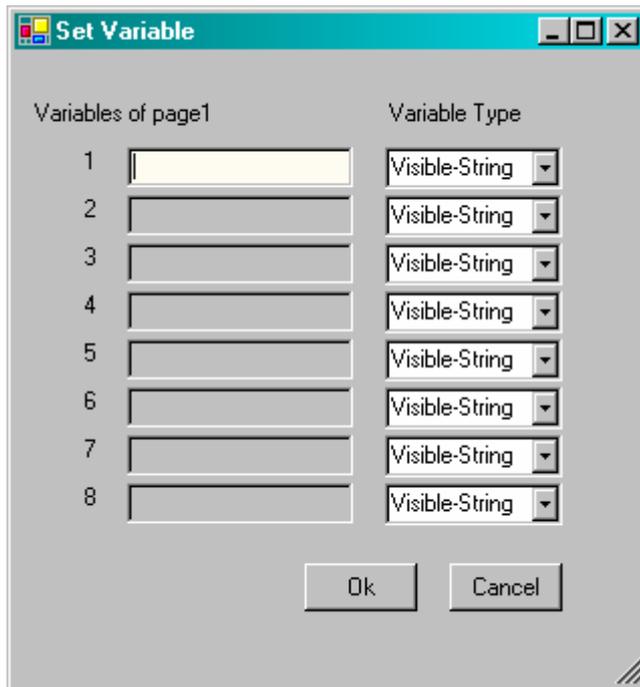
3.1.2.1   Cut, Copy and Paste

These are standard instructions in Windows applications. These instructions can be used also over the right mouse button.

3.1.2.2   TA125Code in clipboard

The TA125 receives Asci data from the PC. With this selection the Asci data is copied into the Windows clipboard. These are then available in any application.

3.1.2.3 Set Variable

With this dialogue box variables are specified directly into the text.

Beside contents also the indication length of the variables is specified. With the pressure on "inserting" - button the variable is inserted into the current cursor place.

If the Text display is on-line connected, you can see the result immediately.

3.1.2.4 Edit Variable

With this dialogue box you can work on variables already defined, i.e. change indication length and contents.
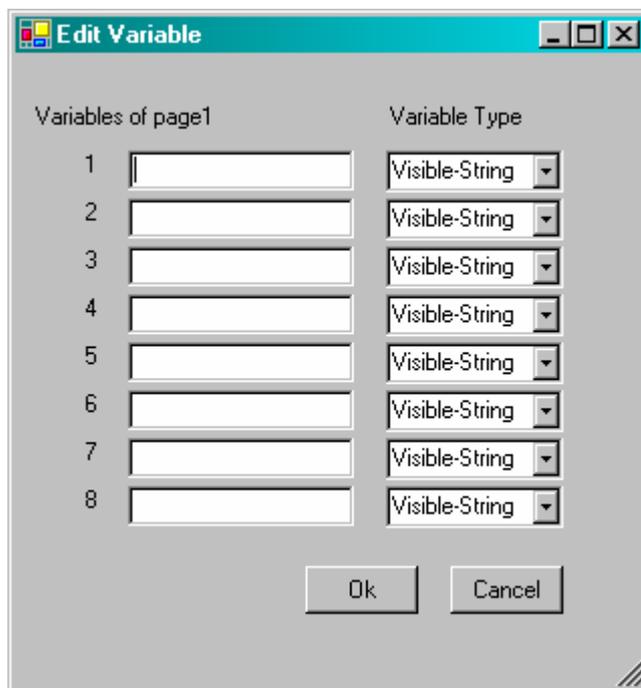
Contents, not the position and indication length, the variable remain so long preserved to

- Via this dialogue box contents and transferred to the TA125 are changed
- The TA125 is switched off

- The TA125 via another arbitrary instance (e.g. PLS) the contents of the variable changes.

The position and the text length remains until either the variable is deleted here or the side is completely overwritten.

3.1.3 TA125 - Menu

3.1.3.1 Check connection

Connecting and/or communication test with character indication TA125.

3.1.3.2 Send Texts to TA125

With the instruction "sending" all pages will transferred in the current document into the EEPROM memory the TA125.

Are transferred only the pages, which are not empty. Pages, those in the current document empty are kept in the EEPROM their contents.

During the procedure, which can take some minutes depending upon used transmission rate, a dialogue box is faded in, which informs about the progress of the work procedure.
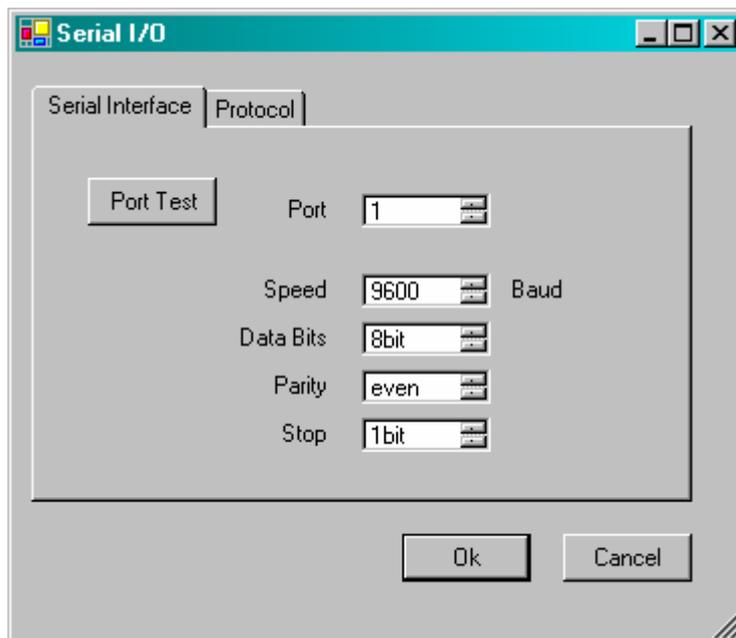
3.1.3.3 Erase Texts in TA125 EEprom

With the instruction "deletion" all texts in the internal EEPROM are deleted.

3.1.4 View Menu

In this menu instructions are contained of the window surface and options for simple organization.

3.1.4.1 Serial Interface- settings

Configures the serial interface with the dialogue box "Serial I/O".

First select the port number is selected. TextLink test examines the port characteristics after pressing on port. If a valid port number were selected, this is commentated right by the input positively (port x of OK), otherwise appears an error message.

Whether the Text display is attached at this port actually is not examined here. In addition first the rider "protocol" must be selected and appropriate protocol be adjusted. With the button test the connection will be examined.
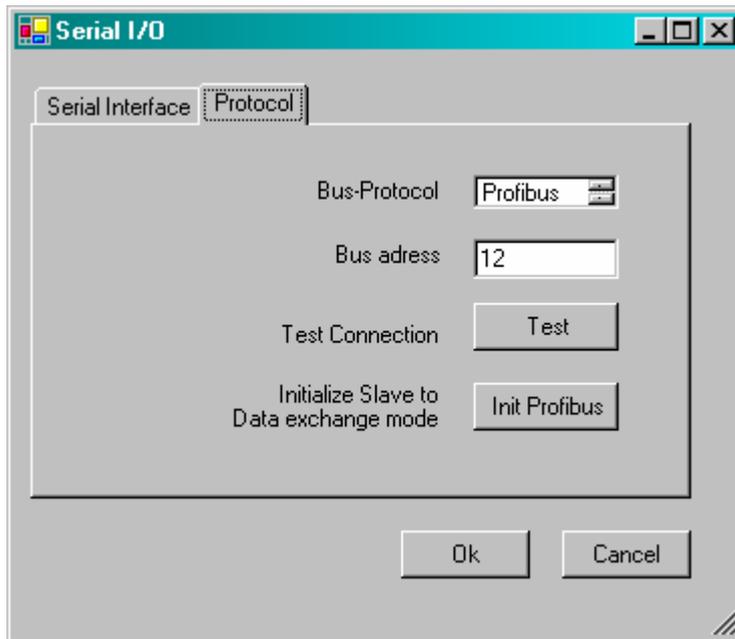
3.1.5 (?) Help Menu

The help function is not implemented yet.

3.2 Die Status line

The status line informs about the process of instructions or procedures, which are not ex-plicitly with a dialogue box for this task equipped. The fields are avowed by an example:

100%	Idle	Offline	Profibus DP	
Status Data transmission		Interface	Connection	Type of protocol

The status message gives information about the success of the selected function.

If a Text display is attached at the serial interface, then changes of text at the screen can be transferred immediately on the text display. TextLink is then "on-line" with the TA125. Changes become visible with a delay of approximately one second at the TA125.

If no connection exists, "off-line" appears in the third status line field.

3.3 Icon bar

The Icon bar permits the simple and fast call of often necessary functions. These are:

Icon	Command	Comment
New	New	A new document is created
Open	Open	A stored document is opened

	Save	Saves the actual document
	Print	Prints the actual document
	Text Flashing on (slow)	The marked text appears flashing on the text display (2 Hz)
	Text Flashing on (fast)	The marked text appears flashing on the text display (4 Hz)
	Big text	The current page appears as large text
	Insert Variable	A variable is inserted to the current cursor place
	Edit Variable	Edits the variables of the current page
	Check connection	Check connection to TA125
	Page upload	All texts contained in the document are transferred to the TA125
	Clear Texts in TA125	All texts contained in the TA125 will be cleared
	DO close	Insert the control character (close DO) into the page
	DO open	Insert the control character (open DO) into the page

3.4 Online- checkbox

With the check box "on-line" determines the user whether the texts in the edit windows will be transferred immediately to the TA125 or whether the texts will be displayed only locally und send later to the TA125.
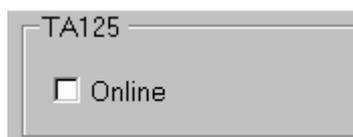
3.5 Variable Types

TextLink can also create pages with the TA125 variable types. They can be inserted in the desired place on the page. Procedure:

First put the cursor on the desired place in the text and press the function button [SetV]; the following dialogue box appears:.

The variable must defined with type and variable length. On the TA125 page the need space will be reserved.

3.5.1 Floating point- Variable (Float)

For the length the floating POINT variable the comma and the right-of-comma positions must be taken in account. Example:

The float variable: 3,1415 needs 6 places.

4 Technical info

4.1 *TextLink – files*

TextLink of documents is a subset of rtf documents. That means that TextLink documents can be worked on with a rtf editor for example the ms WordPad, special control characters as for example the "text flashing" are not indicated.

TextLink control characters appears in such an editor in red color and may not be deleted, in order not to endanger the integrity the TextLink file.

5 Annex

5.1 Rights

5.2 Disclaimer

5.3 Service

As far as no changes are made on the management, TextLink is a part of the supply of a Text display TA125. If the software should have been lost, then new CD can be ordered additionally directly by Gönnheimer.