MULTI-PROMMER user manual

(english)
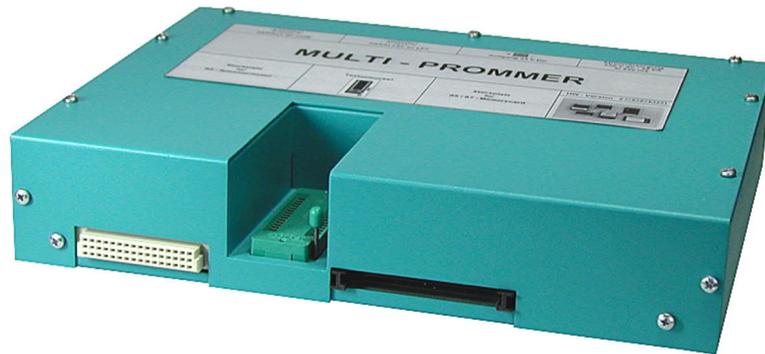
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MULTI-PROMMER

1 Description

With this series of Prommer you can write, read, save or delete several memory cards for your S7 and S5 PLC.Depending on the device, you can process the following memory modules: VG-memory modules, memory cards and Dual-In-Line Module.

The Prommer-devices are connected to the PC via RS232 cable with 9 pins 1:1. The Prommer are provided standard with 24 V DC. Only Multi-Prommer is supplied with 230 V AC.

The memory modules are processed with the software "Win-Prommer" which is included and can be installed from the CD

Please observed the following instructions:

- EPROM's, memory modules and the programming adapter of the PROMMER are electrostatically sensitive components.
- Follow carefully the general rules for handling ESD sensitive components.
- Basic requirement for the intended use of the device is the knowledge of these instruction manual
- These instruction manual must be observed by all persons who work with the device.
- The device is intended only for programming EPROM's, EPROM memory modules and memory cards by qualified personnel. A different or additional used is regarded as improper.
- The warranty and liability claims for personal injury and property damage are not covered if caused by one or more of the following causes:
  - improper use
  - not following the instruction manual
  - unauthorized modifications to the device
- Do not use the device if it shows obvious faults or damage
- Avoid connecting or disconnecting the power supply if you have one memory module in the device
- After programming the memory modules, Verify the correct work of the same within the corresponding application. Take all appropriate safety precautions. For damage, caused by incorrectly programmed memory's, can´t adopted no liability like other programmers.

Please note in the MULTI-PROMMER
With the operating device can be occupied only one Socket

2 System requirements

2.1 Operating system (s)

- WIN 3.x
- WIN 95
- WIN NT 4.0
- Windows 98 + SE
- Windows ME/NT/2000
- Windows XP

- Windows Vista
- Windows 7

2.2 Software

- Win-Prommer

2.3 Hardware

- 9 pin RS232 port on the computer
- 230V AC power supply

3 Installation

3.1 Hardware
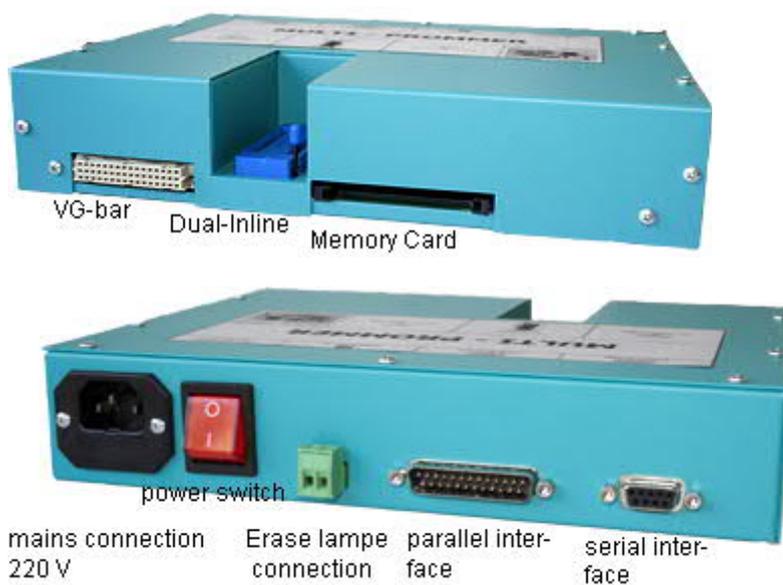
Connect the Multi-PROMMER with the provided serial or parallel cable to your PC. Connect the power cable to the Multi-PROMMER and then to a 230V socket. You can then switch on the MULTI PROMMER with the power switch.

Into the Phönix connector can be connected optionally the erase lamp UV UVL3 (Order No. 9363-3-B)

Plug the desired memory module on the space provided base firmly until it sits. The dual in-line memory modules are as follows to insert.
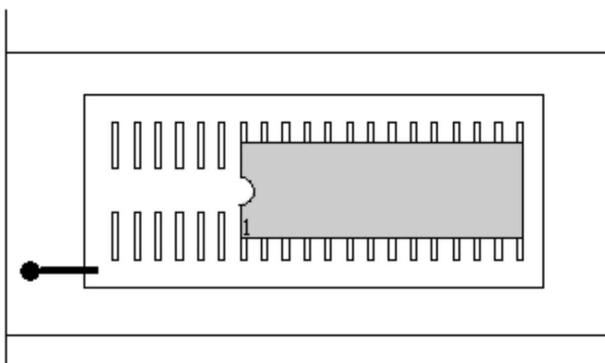
3.2 Software

To edit the memory modules or to upgrade your Prommer device you must install the software Win-Prommer, as described in the chapters " Win-Prommer Installation " .

4 Win-Prommer Software

4.1 Installation

1. Download the WinPromm-software from the product-page of your prommer and start the installation.
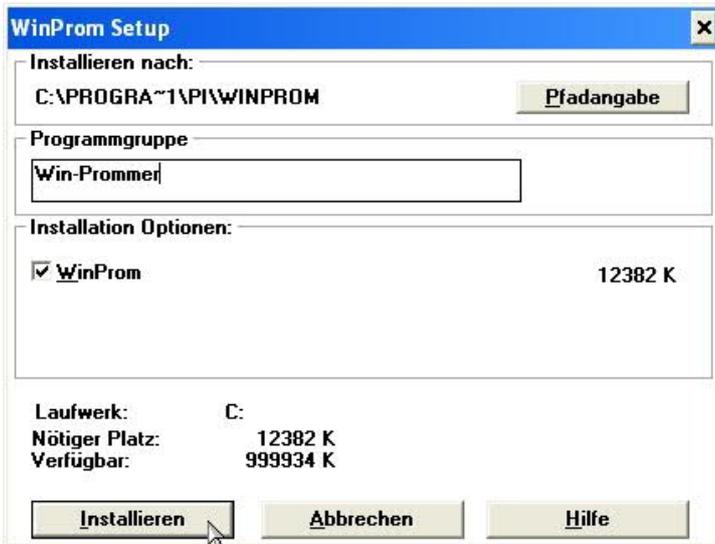
2. After selecting the language, the installation will start in the chosen language.

To change the installation path, click on "path specification".

Make sure that the folder names can not have more than 8 characters, since this is still a DOS application.

Enter then the name of the program folder under "Program Group" field.

Then click on "Install".

3. Wait for the installation of the files.

4. Finish the installation after a successful copy of data with "OK".

Finally, the following message appears. Now if you want to connect your multi-Prommer over the 25 pin parallel port, you still need install these additional drivers. If they use the 9-pin RS232 port on your computer, you can finish the installation with the "end".
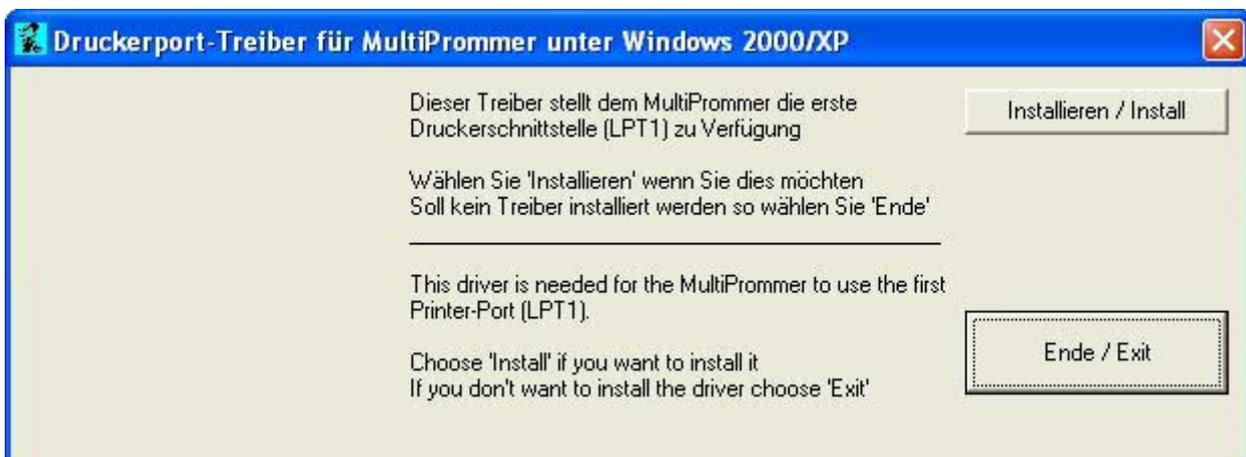
4.2 Overview

4.2.1 Adjustment of the Prommer device

If the WinProm-software is started it is checked whether the adjusted programmer is addressable.

In case of negative results of this check the following dialogue boxes are displayed:

In the box log the connection distance selected so far is displayed.

In the box Prommer type the name of the adjusted programmer is displayed.

In the box interface the adjusted communication interface is displayed.

In the box Baud rate the actually adjusted Baud rate (if adjustable) is displayed.

Configuration

installed Programmer is not ready or not connected.

Choose "Search" if WinProm should try to detect and select the Programmer itself.

Choose "manual" if you want to detect and select the Programmer by yourself.
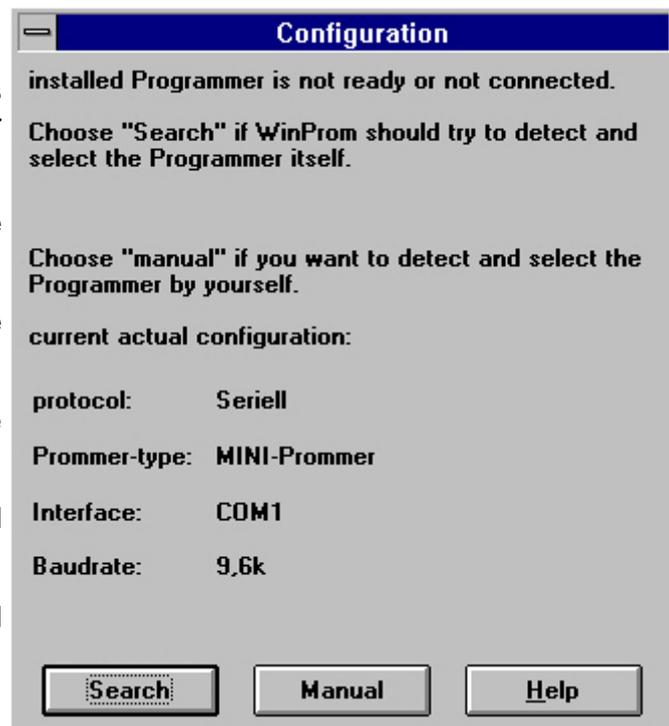
current actual configuration:

protocol:	Seriell
Prommer-type:	MINI-Prommer
Interface:	COM1
Baudrate:	9,6k

Search   Manual   Help

By pressing the operation button "search" the program tries to search and adjust the programmer automatically. First the programmers PG Prommer I, PG Prommer II, Multiprommer,FlashPrommer and Flash-Prommer II are searched on the serial interfaces. After that the MINI Prommer and then the Muliprommer are searched on the first parallel interface. If your programming device shoudn't be recognized, this is due to an inuse USB-Seriell Konverter. Therefor use the manual input!

By pressing the operation button"manual" the dialog box Schnittstellemenu_Schnittstelle is opened and the users can do the adjustments himself.

4.2.2 Update of the operating system of the programmers

Note: The update of the operating system of the Multiprommer is only possible over the serial interface.

After detecting the programmer it is automatically checked whether the programmer has got an older operating system and whether an update is necessary. If an update should be necessary the user dis pointed out to it and asked whether this is to happen now.

By selection of update the operating system will be transferred to the programming system. During this process the current energy supply must be secured.

By selection of ignore the request for the update of the operating system is ignored for this programm start.

After selecting update the progress dialogue box is slotted in. Switch off and then switch on again the programmer or rather remove and then put in again the plug (please wait some time between removing and putting in again the plug, because otherwise no restart is possible). If no switching off and on should take place within 60 seconds, this dialog box is aborted.

After that the operating system is transferred.If an error should occur a report appears. If the operating system is transferred correctly and can be programmed, then the dialog box „help/about WinProm" appears in which the current version number appears.

Über WinProm

OK

WinProm V 2.09

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Prommer-Version: V 2.0
Brückencodierung: 00
Autoident: 0000

While transferring the operating system and the following programming the energy supply of the programmer must not be interrupted.

4.2.3 Menu item file

4.2.3.1 New

This menu-command is not implemented at the moment.

 Short cut
Tool-bar

Keyboard: CTRL+N

4.2.3.2 Open

With this menu-command a file is opened and copied into the memory.

In the following dialog box the file name and/or path as well as the drive can be defined. Additionally the file format which is used to open files can be defined. At the moment the following file formats are implemented:

. All files.
It is tried to find the suitable file format due to the file ending. If no suitable file format is found binary is used.
*.BIN Binary file
*.S5D Step-5 file
*.S7P Step-7 file(structure)
*.308 ET-100 files
*ET.200 ET-200 files
*.2BF ET2-Binary export
*.HEX Intel Hex format
*.EPR Motorola Hex format
*.525 CP-525/524 files
Q*.* CP-5431-files
A*.* CP-1430/CP-143-files

In case of S7-projects there might be projected more than one controller. In this case the dialog selection PLCmenu_Selection_PLC is displayed.

The read data are shown in a window. In case of Step-5-files and S7-projects you are able deselect program modules by mouse-click i.e. these program modules are not written on the memory module. A repeated mouse-click selects the program module again, so that it is written

on the memory module. The background of deselected program modules is dark grey, the background of the selected ones is white.

Short cut
Tool-bar

Keyboard: CTRL+O

4.2.3.3 Save

With this menu-command an opened file will be saved. If a file name does not exist there is one required.

Short cut
Tool-bar

Keyboard: CTRL+S

4.2.3.4 Save as

With this menu-command a file is saved under another name.

In the following dialog box the file name and/or path as well as the drive can be defined. Additionally the file format which is used for saving can be defined. At the moment the following file formats are implemented:

> *.* All files.
> It is tried to find the suitable file format due to the file ending.
> If no suitable file format is found binary is used.
> *.BIN Binary file
> *.S5D Step-5 file
> *.S7P Step-7 file(structure)
> *.308 ET-100 files
> *.2BF ET2-Binary export
> *.HEX Intel Hex format
> *.EPR Motorola Hex format
> Q*. CP5431 file format
> A*. CP1430/CP-143 file format

4.2.3.5 Close

With this menu-command the current window is closed. If the data are not saved yet, the user is pointed out to it. The data are removed from the memory.

4.2.3.6 Quit

This menu-command quits the WinProm application, whereby the opened files are closed before quitting. If the windows are not saved yet the user is pointed out to it.

Keyboard: ALT+F4

4.2.3.7 last used files

the four final used files are displayed in the file - menu options. You can select these easily by mouse or keyboard.

4.2.4 Menu item module

4.2.4.1 Selection

With this menu option the memory module which is to process is selected.
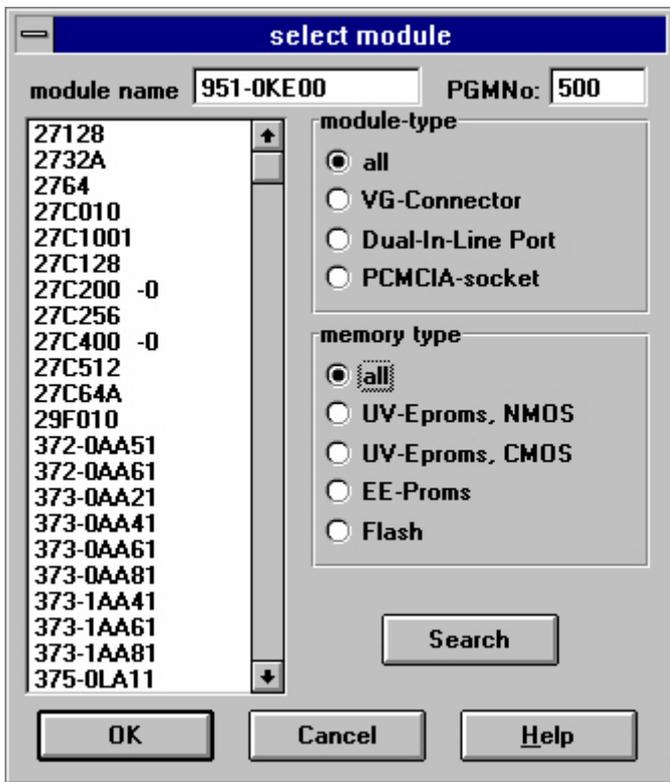
In the box module name the module can be indicated directly. The first module which is found is displayed in the selection list under the module name, as well as the suitable programming number (if available) in the PGMNr box is displayed.

In the box PGMNr the module can be selected by the Siemens programming number. The corresponding module is displayed in the box module name and in the selection list under the module name. If the programming number 500 is given, the identifier is read by the put Flash module and the corresponding module is displayed.

In the selection list a module can be selected immediately by double-click on the module name. The module which is under the mouse pointer at the moment is displayed by a simple Click. In each case only these modules are displayed which are available on the programmer selected in the dialog interface (e.g.: on the MINI Prommer no Flash Cards can be shot, therefore they are missing in the selection list).

The display in the selection list under the module name can be filtered by the boxes type of module and memory type.

In the box type of module the display of the modules can be filtered according to the type of the connector plug:

VG strip   standard-Siemens memory modules
                                  with a 48pin male
                                  VG plug:

DIL base   Dual Inline memory IC's, Components
                                 up to 32pin can be processed

Pin1

PCMCIA module   Flash Cards of Siemens

In the box memory type the display of the modules can be filtered further on according to the programming algorythm/type of the used memory IC's:

UV-NMOS   Memory modules of the older design,
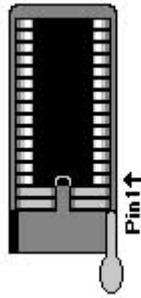   starting usually with 375-0LA,373-0AA
                                 or 376-0AA. They are quite time-consuming
                                 when burning. Almost completely replaced
                                 through UV CMOS

UV CMOS
                                 Standard Siemens modules of newer
                                 design, starting usually with 375-1LA,
                                 373-1AA or 376-1AA. They are more
                                 rapidly burned than NMOS components.
                                 These memory modules have the
                                 same bridge coding as the NMOS types,
                                 so that a mistake is possible.

                                 **Destruction danger of the memory module
                                 in case of wrong selection!**

EE PROM   electrically erasable
                                 memory modules. Deleting by
                                 irradiation with UV light is here, in
                                 contrast to UV NMOS or
                                 UV CMOS no longer necessary. The
                                 memory modules can be erased
                                 by the programmer itself.

Flash   This memory IC's are just as the
                                 EE PROM electrically writable or
                                 erasable, however better protected
                                 against unintentional overwite
                                 and quite rapidly in writing
                                 The only as VG strip executed
                                 memory module for S5 is
                                 the 375-8LA12 for the S5-AG90.

The button "Search" looks automatically for possible memory-modules which are inserted. At the Beginning the memory module identifier is read from the PCMCIA-socket (if there is a memory-module available). If a memory module is inserted in the PCMCIA-socket, then the

suitable memory module is selected.

If this check goes wrong, then the bridge coding is read from the VG-Connector (if this connector is available). All memory modules which where possible are then displayed, there are more than one possible memory modules. Select then the suitable memory module.

If the bridge coding is empty, then at the DIL-Socket the autoidentification is read (if the DIL socket is available). If the autoidentification is known, then the corresponding memory module is displayed.
If no memory module have been found, then the autoidentification data is displayed

4.2.4.2 Reading

With this menu-command the selected memory module is read completely into the memory and can be stored then in different file formats.

In the following dialog progress the user can then select the button "cancel" for aborting or the button "OK"the reading is started.

4.2.4.2.1 CP-SELECTION for file format CP525

The file format CP-525 (file-extention *.525) is used for the following communications processors:

CP 525 - 2 => CP 525 with two serial interfaces

CP 525 - 1 => CP 525 with one serial interface

CP 524 => CP 524

for all of this CP's the data which can be written look differently, so the user must select, which CP is used:

Please note, that the memory module must be correctly befor you load the CP-525 file.

4.2.4.2.2 Selection of the PLC in S7-Projects

In a S7-Project more than one PLC could be projected, for each of these controllers can the S7-blocks be written on the Flash Cards. If more than one PLC is contained, then the following selection- dialog is displayed for selecting the PLC:
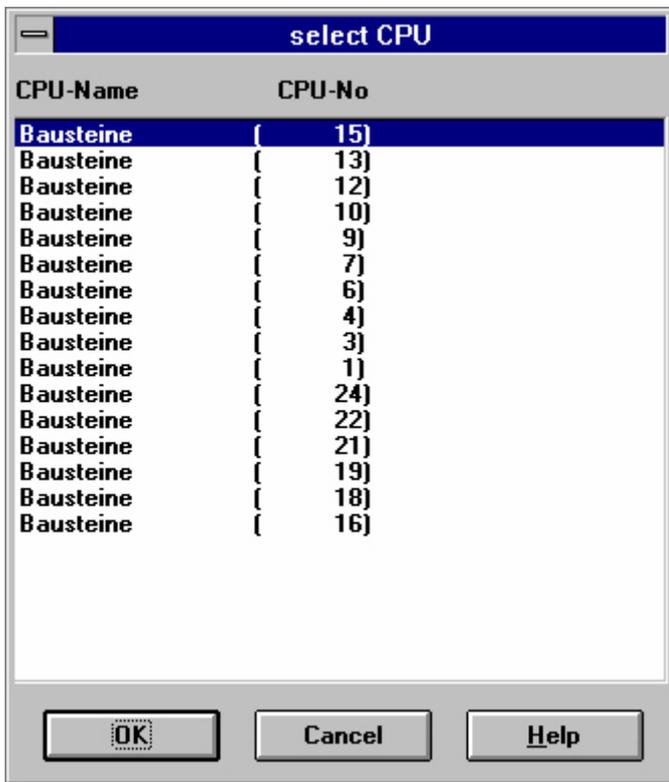
You could activate the suitable PLC by double-click or pressing of the button "OK" Pressing of the button "Cancel" the process is aborted.

4.2.4.3 Writing

With this menu-command the current data are written on the memory module. If the size of the data is too muich for the module, then this is displayed to the user and the process is aborted.

The data read is displayed in a window. With Step-5-files and S7-Projects you could then deselect by mouse-click the blocks i.e. they are not burned to the memory module. A second repeated Mouse-click selects this block again, so that it is written on the memory module. Blocks which are deselected are displayed dark grayed, the selected ones will become marked white and an asterisk "*":

In the following dialog progress can the user the pressing of the selection button cancel the process abort or by selecting the button "OK" the process start.

If the memory module is not empty, then writing to the memory module is aborted when no Sync-Word is read at the first memory-location. If a correct Sync-Word and a Step-5 file or S7-Projekt should be written to the module, then the Append-Dialog is executed.

The result of the writing procedure is displayed at the end.

:

By falsely selecting memory modules can these be destroyed!
Please, check always in the dialog progress when Writing or erasing if the correct
Memory module is selected!

ET2-Files

ET2 files are written and read as 2bf-files. A ET2 file can be exported kand imported in the
PROFIBUS-software as binary file (*.2bf).

To burn a FlashCard do the following Steps. Open in the Profibus-Software the ET2-file. The
projected Master-Systems are shown:
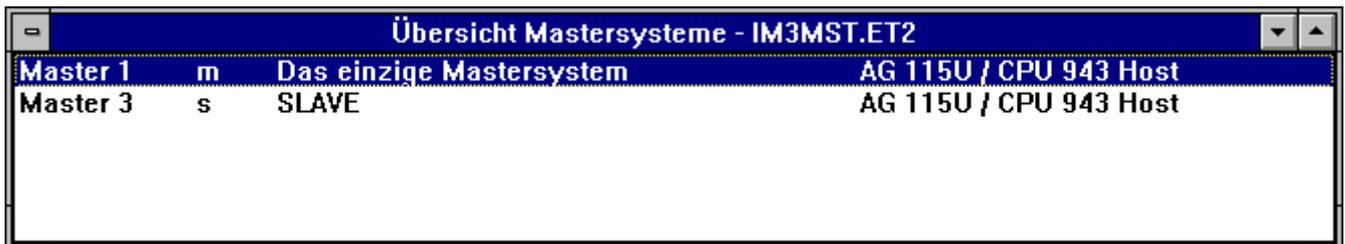
Übersicht Mastersysteme - IM3MST.ET2			
Master 1	m	Das einzige Mastersystem	AG 115U / CPU 943 Host
Master 3	s	SLAVE	AG 115U / CPU 943 Host

Select the Master-System which should be written to the FlashCard (if there are more than one):
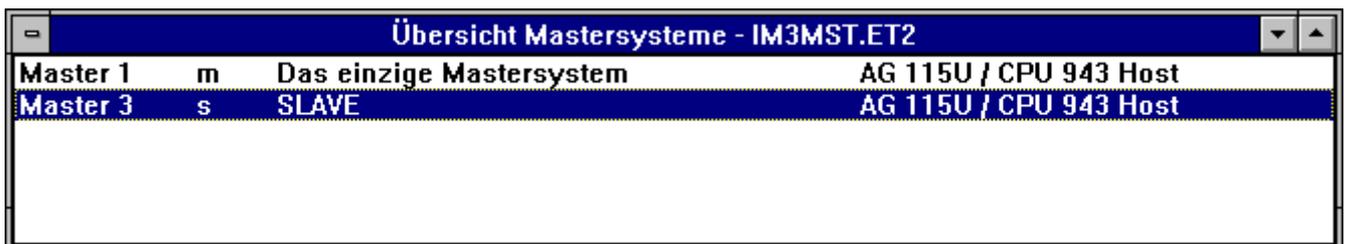
Übersicht Mastersysteme - IM3MST.ET2			
Master 1	m	Das einzige Mastersystem	AG 115U / CPU 943 Host
Master 3	s	SLAVE	AG 115U / CPU 943 Host

Choose the Menu-Point „File/Export/Binary File", a File-Dialogbox will appear:

Export Binärdatei unter

Dateiname:
im3mst.2bf

auslaufk.2bf

Dateiformat:
Binärdateien (*.2bf)

Verzeichnisse:
d:\sps\compb31\kernel

d:\
sps
compb31
kernel

Laufwerke:
d: excel

OK
Abbrechen

Choose the filename. The Extention should be „.2BF". In the following dialog you could choose
the highest station address and the Watchdog-timing:

After that the file is converted and at the end a message-box appears:

After that, start the WinPrommer application and write the 2BF-file onto the selected FlashCard.

If you want to read a IM308C- FlashCard, read with the Prommer a file with the extention „.2BF" Open the Profibus-Software and create a new file, import the file which you read before from the FlashCard with the Menu-point „File/Import/Binary File". You could import more than one Master-System from the FlashCards in the same file, so the Source-File could be restored.

4.2.4.3.2 S5 for Windows-Files

S5 for Windows saves the files in a self-defined format. In that case this files must converted into a siemens.compatible file:

Open the Project in S5 for Windows. In the block-list of the file choose the Menu-point „File/Export". In the next dialog you could choose the the filename and file-format. Change the file-format into S5D (the Siemens - compatible file) The created file could then written to a FlashCard with our WinPrommer application.

4.2.4.4 Append

This function is automatically activated if a Step-5 file or S7-Project should be written and additionally in the first word of the memory module is the Sync-Word 7070h read.

If blocks are appended to the consisting, this is omitted time-consuming resetting of the memory module.

In the first step all blocks of the memory module are looked up and should be supposed to be written this block also on the memory module, then an additional dialog is inserted:
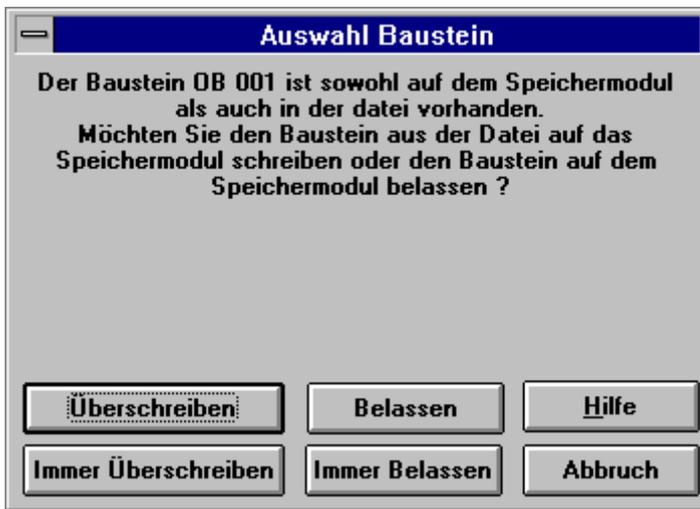
You could then select the following:

Overwrite	This block becomes an erased-bit and will be appended at the end of the memory module.
Always overwriting	This Block and all following are marked as erased and will be appended at the end of the memory module
Leave	This block will not been changed
Always Belassen	This block and all following blocks will not been changed
Cancel	The Appending- process is aborted, all marked blocks are remain erased

4.2.4.5 Blanktest

With this menu-command the selected memory module is checked for emptiness. With most memory modules the bits can be written only by High=1 on Low=0, so that writing the memory module can take place only in the empty status (means all bits on 1) practically.
The memory module is checked always completely for emptiness.

In the following dialog progress can the user the pressing of the selection button "Cancel" the process abort or by selecting the button "OK" the process start.

If the ultra-violet erasable memory module were erased only short, then all bytes can be empty (all bits on 1) a following writing procedure could fail. UV memory should be erased at least 15 minutes.

4.2.4.6 Comparison

With this menu-command two modules and/or files can be compared together. In the following dialog selection sources of comparison the two comparison-sources can be defined:
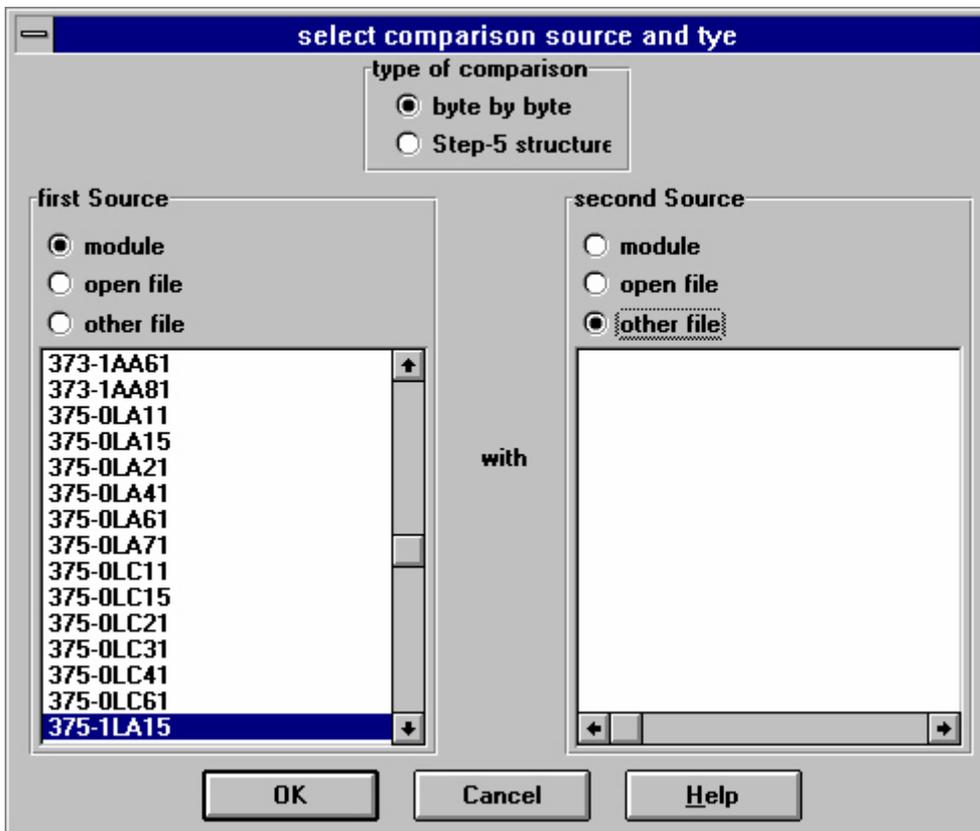
In the box comparison with format can be selected the type of the comparison:

Binary: Compares the two sources byte for Byte and the differences are then displayed in the following Diablog result of comparison.

S5D-Struktur: The two sources are compared block, so that the Allocation to the suitable block is possible. There will be more additional information in the following dialog result of comparison.

On the left and right side of the dialog the two sources of the comparison are defined, whereby both have the same possibilities.

It can be selected between 3 sources:

Module: In the selection list below that Source specification appears the possible memory modules. So you could compare also different memory module is activated.

opened file: In the selecion list below that source specification those at the moment in the WinProm opened Files with terms and path appears,mark one of it.

other file: You could then select the file names an path in selectioin dialog. This will be displayed in the selection list.

With the selection button cancel can be aborted the comparison process, with selecting the button "OK" the process is started.

The result of the comparison is displayed accordingly, should be differences available in such a way to become these also with displayed.

4.2.4.7 Block-List

With this menu-command the block-list is read from the selected memory module and displayed.

In the following dialog progress the user can pressing of the selection button "Cancel" the process abort or by selecting the button "OK" the process start.

To calculate the start of the next blocks the next 10 bytes are read. If the data read is not valid (Sync-Word 7070h missing) the process is aborted. If there is a correct Sync-Word the next Start-Address of the next block is calculated. This enshures that the memory module is not completely read, however with smaller memory modules reading the block-list lasts longer than writing. The problem in this case is that the transmission protocol in which the start address and the length and of course the data is transfered to the programmer need also time.

Afterwards the dialog block-List is displayed:

```
┌──────────────────────────────────────────────────────────────────┐
│ ─                            block-list                            │
├──────────────────────────────────────────────────────────────────┤
│ Address  Length  Block          Name         BibNr    Code        │
│ 00000    00084   PB    041                             80          │
│ 000A8    00203   PB    044                             80          │
│ 0023E    00206   PB    045                             00          │
│ 003DA    00108   PB    046                             80          │
│ 004B2    00133   PB    047                             80          │
│ 005BC    00454   PB    048                             80          │
│ 00948    00141   DB    013                             80          │
│ 00A62    00261   DB    020                             82          │
│ 00C6C    00262   DB    021                             80          │
│ 00E78    00261   DB    022                             80          │
│ 01082    00033   FX    004    UHR                      84          │
│ 010C4    00053   FX    043    ZUST-AKS                 84          │
│ 0112E    00057   FX    044    TYP-AKE                  84          │
│ 011A0    03200   FB    120    SEND                     C5          │
│ 02AA0    00027   FB    157    FLANKE-N                 C4          │
│                                                                    │
│                                                                    │
│                                                                    │
│                      ┌────────┐     ┌────────┐                     │
│                      │  OK    │     │ Help   │                     │
│                      └────────┘     └────────┘                     │
└──────────────────────────────────────────────────────────────────┘
```

In the column address is displayed the hexadecimal start address in bytes of the block.

In the column length is displayed the decimally number of words of the block.

In the column block is displayed the type of block and the number. The following types of blocks are implemented in S5:

OB Organisational component
DB Data block
DX Extended data block
FB Functional module
FX Extended functinoal module
PB Program modulen
SB Step block

The following types of block are implemented with S7:

OB Organisational component
DB Data block
SDB System data block
FB Functional module
SFB System function block
FC Function
SFC System function

Displayed in the column term with functional modules (FB) and extended functional modules (FX) the name of the block.

In the column BibNr is the library number, if this is available and not equal to 0 displayed decimally.

In the column identifier is displayed hexadecimals the PG identifier of the block:

Bit	Description
1+0	00 = User block without library number
	01 = Built-in function block
	10 = Built-in function block
	11 = User block without library number
4+3+2	000 = Block without block parameters
	001 = Block with block parameters
	010 = Block with assembler programming
	011 = Functional module with block parameters
7+6+5	000 = for AG S5-110A
	010 = for AG S5-130A/K
	100 = Linguistic area A (AG S5-110A, AG S5-130W, AG S5-150A/K, AG S5-100U, AG S5-115U)
	110 = Linguistic area B (AG S5-135U, AG S5-150S/U)

On the right side of the identifier there can be "invalidly!". This means, that the block on the memory module is not marked as valid in the EPROM. This block is no more observed by the controller. This occurs in particular when appending, if blocks are already available on the memory module.

4.2.4.8 Erase

With this menu-command memory modules are erased if this is supported by the selected programmer. Writing of nonblank memory modules is only possible in special cases.

In the following dialog progress can the user the pressing of the button "Cancel" the process abort or by the selecting the button "OK" the process starts.

When erasing with ultra-violet light the seconds up to the end of the erasing process are displayed otherwise the erased address.

Success is displayed accordingly.

Note:
Wrong selected memory modules can be destroy!
Please always check in the dialog progress when writing or erasing processes the memory module!

4.2.5 Progress

In this dialog box all important information which concerns the selected process is displayed:
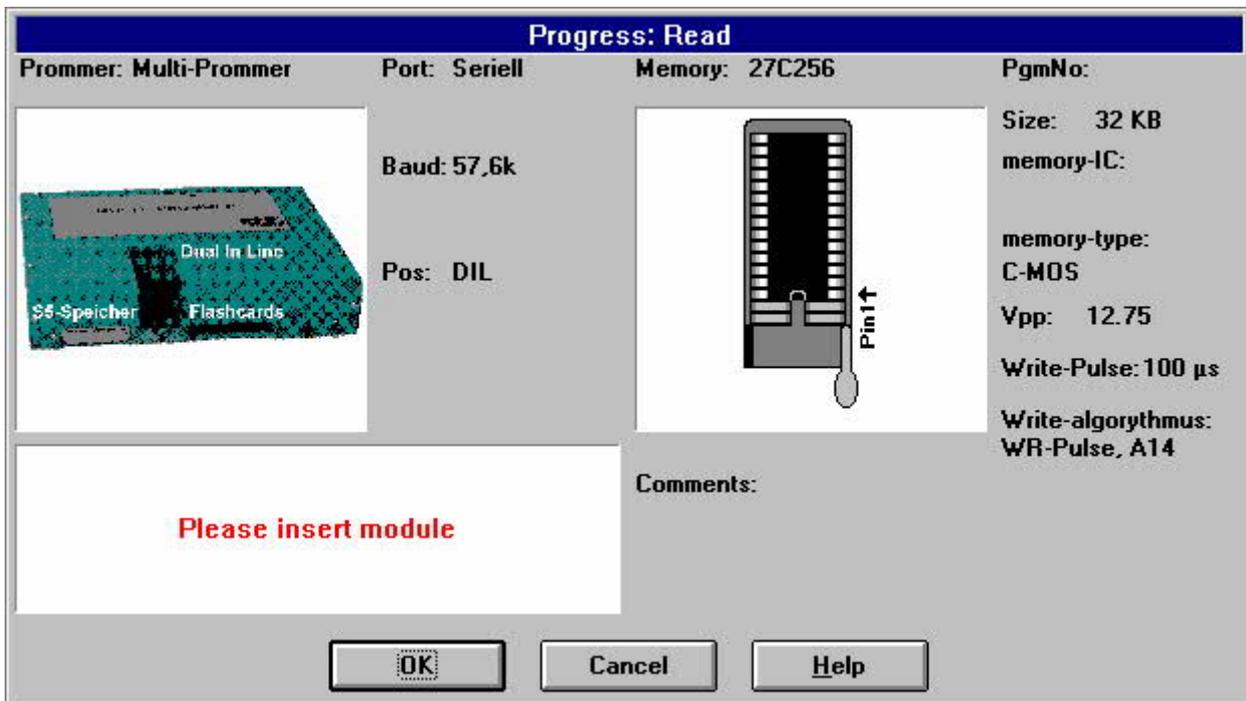
In the left area the information about the programmer is displayed. In the right area of the dialog box the information about the memory module is displayed.

In the box Prommer the name of the programmer is shown, under that the picture of this device appears. The following programming device are known:

MINI-Prommer
Flash-Prommer
Flash-Prommer II
Multi-Prommer
PG-Prommer I
PG-Prommer II

In the box port the communication interface is displayed with which the programming device has contact. The following interfaces are possible:

serial
serial (USB) (in preparation)
parallel, unidirectional
parallel, bidirectional (not with WinNT)

In the box Baud the Baud rate which was adjusted in the dialog box interface is displayed.

In the box pos the interface for the selected memory module is displayed.

Below the box the type of access and the address is displayed in hexadecimals while handling the module, additionally in the lower left area of the dialog box a light blue beam runs from the left to the right.

In the box memory the name of the selected memory module is displayed.

Under that a picture of the module is shown, if there is a picture available.

In the box programming number the programming number of the memory module is displayed if available.

In the box size the complete size of the memory module is displayed, in case of word widths EPROMs in KW (Kilo word) and in case of byte widths memory modules in KB (Kilo byte)

In the box memory IC, if available, the memory IC's on the memory module are closer defined.

In the box memory type, if available, closer specifications of the type of the memory module are displayed.

In the box burning voltage the necessary voltage for writing is displayed.

Attention in case of memory modules with 21V or more, destruction danger if the wrong memory module is put in!

In the box burning duration the minimum writing duration for one byte is displayed.

In the box burning algorythm the algorythm for writing on the memory module is displayed.

In the box notes additional information to selected memory module is displayed.

By pressing the selection button "Cancel" the process is aborted, By pressing the selection button OK the process is started. The selection button "OK" becomes grey, for it is no longer selectable and the process is started.

The selection button "Cancel" additionally becomes grey if an abort is not possible at the moment (only Multiprommer) or the selection button is already pressed. The reaction to the abort can take place with delay, because the log can be aborted only at certain positions of the record.

4.2.6 Menu item view

Tool-bar display
Use this command tool-bar to switch the toolbr on or off.

more information look tool-bar.

4.2.6.1 Tool-bar

The tool-bar is displayed in the application at the top margin underneath the menu bar.
It offers rapid access to some of the functions with the mouse.

To switch on or off the tool-bar select from the menu view the menu item tool-bar.

Symbol	Description	Menu command
	open a new object	File/New
	opens a file already existing. The dialog selection of files appears. You could choose the desired file	File/Open
	The current window is saved into the file. If the window has no file assigned to the dialog selection of files appears and the desired file could be choosen	
	Cuts out the selected data **(not supported)**	
	Copies the selected data into the clipboard **(not supported)**	
	Pastes contents of the clipboard to the current window **(not supported)**	
	Displays the module selection dialog so that the suitable module could be selected	Module/Select
	The current module is tested on emptiness, the result is displayed	Module/Blanktest

	Reads the inserted module and places the data read on the Display	Module/Read
	Writes the data in the window on the inserted module	Module/Write
	The current module is erased if this is possible	Module/Erase
	Reads from the module the block-List, both S5 and S7	Module/Bock-list
	Compares two modules and/or files	Module/Compare
	Displays the versions and the contact address	Help/About WinProm
	selects the context sensitive help function, afterwards you could click on the button or menu command for that you want to get help	

4.2.6.2 Status line

The status line is displayed in the application at the lower bottom edge. For switching the status line on or off you use the menu view/status line

Within the left area the command assertions of the menu commands are displayed to the status line, as well as status information of the up-to-date running instruction.

On the right side additional information is displayed:

Display description:

27C256 Here the up-to-date used memory module with name is displayed
32 KB Here the Size of the memory module is displayed in kilobyte or - word
DIL Here the type of module is displayed: DIL, VG or PCMCIA
CAP Caps lock is active
NUM Num lock is active
SCRL Scroll lock is active

4.2.6.3 Satus line display

Use this command to switch the status line on or off.

4.2.7 Menu item window

4.2.7.1 Overlapping

Cascade the windows, so that the title bars remain visible.

4.2.7.2 Top on Top

all windows represent top on top.

4.2.7.3 Side by Side

all windows represent side by side.

4.2.7.4 group symbols

This command arranges the Icons at the lower edge of display.

4.2.7.5 Window 1,2,...

WinProm displays a list of the opened windows at the end of the menu windows. The suitable window can be activated by simply selecting of the window number.

4.2.8 Menu item configuration

4.2.8.1 Interface

In this dialog the Prommer or the serial interface is configured.
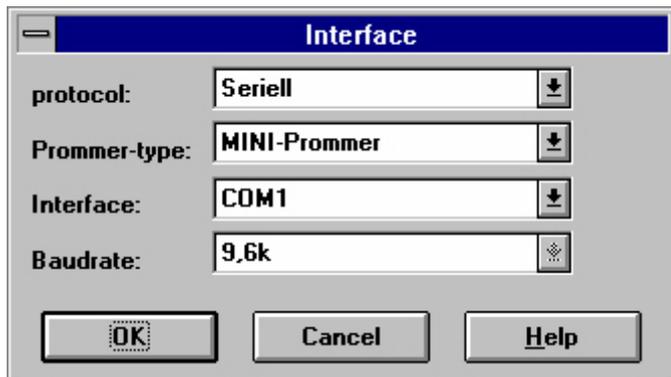
In the box protocol the following interfaces can be adjusted:

> Serial
> Serial (USB) (in preparation)
> Parallel unidirectional
> Parallel bidirectional (in preparation)

In the box Prommer type the following programmers can be adjusted:

> MINI-Prommer
> Flash-Prommer
> Flash-Prommer II
> Multi-Prommer
> PG-Prommer
> PG-Prommer II

In the box interface can, if possible the interface adjusted.

In the box Baud rate can, if this is possible of the selected programmer and protocol, which are adjusted to used Baud rate. There are possible Baud rates from 1200 to 57,6k Baud under Windows.

After acknowledgement with "OK" the suitable adjustment is transacted and checked.

4.2.8.2 Word/Block

There 3 different coding schemes for S5-PLC's for VG-Eproms:

> Byte-wise
> Word-wise
> Word/Block

The first two could be selected automatically depending on the type of the memory module. The third one creates between normal blocks some special blocks (DB 251, marked as not valid) which shifts the follwing blocks in that way, that the start of the MC5-Code is position on a paragraph boundary. A paragraph-boundary is a memory address modulo 16 which is zero. This selection is needed for PLC's 948, 947 and 946.

With this menu command you choose if the word/block-processing is use or not.

4.2.9 Menu item blocks

4.2.9.1 All blocks

From the following block-List

```
D:\SOURCE\PRM\BEDIEN\WPROMMER\L1SLAUST.S5D
Länge:      1378 Bytes davon      1176 Bytes markiert

   Adresse Länge     Baustein Name     BibNr  Kennung
*  000000  00014     OB 001                    80
*  00001c  00026     OB 021                    80
*  000050  00026     OB 022                    80
   000084  00015     PB 001                    80
   0000a2  00070     DB 002                    80
*  00012e  00070     DB 003                    80
   0001ba  00016     FB 011    SENDEN          80
*  0001da  00103     FB 012    EMPFANG         84
*  0002a8  00019     FB 014    EINR.-DB        84
*  0002ce  00102     FB 020    UNI-A-IN        84
*  00039a  00088     FB 021    UNI-A-OU        84
*  00044a  00036     FB 022    UNI-D-IN        84
*  000492  00034     FB 023    UNI-D-OU        84
*  0004d6  00070     FB 255    L1 PARM         84
```

by the selection of "all" all blocks are marked:

```
D:\SOURCE\PRM\BEDIEN\WPROMMER\L1SLAUST.S5D
Länge:      1378 Bytes davon      1378 Bytes markiert

   Adresse Länge     Baustein Name     BibNr  Kennung
*  000000  00014     OB 001                    80
*  00001c  00026     OB 021                    80
*  000050  00026     OB 022                    80
*  000084  00015     PB 001                    80
*  0000a2  00070     DB 002                    80
*  00012e  00070     DB 003                    80
*  0001ba  00016     FB 011    SENDEN          80
*  0001da  00103     FB 012    EMPFANG         84
*  0002a8  00019     FB 014    EINR.-DB        84
*  0002ce  00102     FB 020    UNI-A-IN        84
*  00039a  00088     FB 021    UNI-A-OU        84
*  00044a  00036     FB 022    UNI-D-IN        84
*  000492  00034     FB 023    UNI-D-OU        84
*  0004d6  00070     FB 255    L1 PARM         84
```

4.2.9.2 No blocks

From the following block-list

```
D:\SOURCE\PRM\BEDIEN\WPROMMER\L1SLAUST.S5D
Länge:      1378 Bytes davon      1176 Bytes markiert

   Adresse Länge     Baustein Name      BibNr  Kennung
*  000000  00014     OB 001                      80
*  00001c  00026     OB 021                      80
*  000050  00026     OB 022                      80
   000084  00015     PB 001                      80
   0000a2  00070     DB 002                      80
*  00012e  00070     DB 003                      80
   0001ba  00016     FB 011   SENDEN             80
*  0001da  00103     FB 012   EMPFANG            84
*  0002a8  00019     FB 014   EINR.-DB           84
*  0002ce  00102     FB 020   UNI-A-IN           84
*  00039a  00088     FB 021   UNI-A-OU           84
*  00044a  00036     FB 022   UNI-D-IN           84
*  000492  00034     FB 023   UNI-D-OU           84
*  0004d6  00070     FB 255   L1 PARM            84
```

by the selection of "no" all blocks are deselected, that means they are not written on the memory module:

```
D:\SOURCE\PRM\BEDIEN\WPROMMER\L1SLAUST.S5D
Länge:      1378 Bytes davon         0 Bytes markiert

   Adresse Länge     Baustein Name      BibNr  Kennung
   000000  00014     OB 001                      80
   00001c  00026     OB 021                      80
   000050  00026     OB 022                      80
   000084  00015     PB 001                      80
   0000a2  00070     DB 002                      80
   00012e  00070     DB 003                      80
   0001ba  00016     FB 011   SENDEN             80
   0001da  00103     FB 012   EMPFANG            84
   0002a8  00019     FB 014   EINR.-DB           84
   0002ce  00102     FB 020   UNI-A-IN           84
   00039a  00088     FB 021   UNI-A-OU           84
   00044a  00036     FB 022   UNI-D-IN           84
   000492  00034     FB 023   UNI-D-OU           84
   0004d6  00070     FB 255   L1 PARM            84
```

4.2.9.3 Exchange block

From the following block-list

```
D:\SOURCE\PRM\BEDIEN\WPROMMER\L1SLAUST.S5D          ↑
Länge:        1378 Bytes davon       1176 Bytes markiert

   Adresse Länge      Baustein Name      BibNr  Kennung
 * 000000  00014      OB 001                      80
 * 00001c  00026      OB 021                      80
 * 000050  00026      OB 022                      80
   000084  00015      PB 001                      80
   0000a2  00070      DB 002                      80
 * 00012e  00070      DB 003                      80
   0001ba  00016      FB 011    SENDEN            80
 * 0001da  00103      FB 012    EMPFANG           84
 * 0002a8  00019      FB 014    EINR.-DB          84
 * 0002ce  00102      FB 020    UNI-A-IN          84
 * 00039a  00088      FB 021    UNI-A-OU          84
 * 00044a  00036      FB 022    UNI-D-IN          84
 * 000492  00034      FB 023    UNI-D-OU          84
 * 0004d6  00070      FB 255    L1 PARM           84    ↓
 ←  ▮                                             →
```

by the selection of "exchanges" all blocks marked for writing are deselected and vice versa:

```
D:\SOURCE\PRM\BEDIEN\WPROMMER\L1SLAUST.S5D          ↑
Länge:        1378 Bytes davon        202 Bytes markiert

   Adresse Länge      Baustein Name      BibNr  Kennung
   000000  00014      OB 001                      80
   00001c  00026      OB 021                      80
   000050  00026      OB 022                      80
 * 000084  00015      PB 001                      80
 * 0000a2  00070      DB 002                      80
   00012e  00070      DB 003                      80
 * 0001ba  00016      FB 011    SENDEN            80
   0001da  00103      FB 012    EMPFANG           84
   0002a8  00019      FB 014    EINR.-DB          84
   0002ce  00102      FB 020    UNI-A-IN          84
   00039a  00088      FB 021    UNI-A-OU          84
   00044a  00036      FB 022    UNI-D-IN          84
   000492  00034      FB 023    UNI-D-OU          84
   0004d6  00070      FB 255    L1 PARM           84    ↓
 ←  ▮                                             →
```

4.2.10 Menu item help

4.2.10.1 About WinProm

With this menu-command version information and the contact address is displayed:

Within the upper area the ciontact address and telephone number are displayed.

Below the contact address the Software-Version of the application is displayed.

In the box Prommer version the version of the connected programmer is displayed.

In the box bridge coding the bridge coding of the inserted module is displayed.

In the box Autoident the autoidentification of the memory IC's is displayed.

5 Technical data

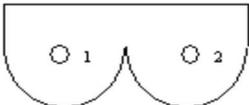|	
Supply voltage:	240V AC 50-60Hz (115V/AC optional)
Power consumption:	30 watt
Display:	-
Handling/Configuration:	WinPrommer-Software
Interfaces:	**to the PD/PC:** RS232 to any COM-Port parallel port for centronics-interface **others:** S5-memory modules S5-/S7-FlashCards Dual-In-Line-memory devices 24V/DV-output for UVL3
Operating temperature:	0 - 55°C
Case:	powder coated metal case
Dimensions:	245 x 47 x 187 mm
Scope of delivery:	
	Multi-Prommer Power-cord Cable 9pin 1to1 Cable 25pin 1to1 Power connector 2pins for 24V-out

5.1 25-pin parallel port

Pin no.	short	description
1	ACK	confirmation
2	D0	Data bit 0
3	D1	Data bit 1
4	D2	Data bit 2
5	D3	Data bit 3
6	D4	Data bit 4
7	D5	Data bit 5
8	D6	Data bit 6
9	D7	Data bit 7
10	STB	
11	INIT	Printer initialization
12	AFD	executed Linefeed automatically
13	SLIN	selection input
14	PE	no paper
15	ERR	error
16	BUSY	busy
17	SLCT	selection
18-25	GND	signal Ground

5.2 Pin assignment RS232

Pin no.	short	description	direction
1	NC	not used	
2	RXD	receive data	In
3	TXD	Send data	Out
4	NC	not used	
5	GND	signal Ground	
6	NC	not used	
7	RTS	request to Send	In
8	CTS	ready to send	Out
9	NC	not used	

5.3 Pin assignment voltage output

Pin no.	short	name	direction
1	GND	ground signal	IN
2	P24V	24V DC voltage	IN