USER´S MANUAL

KIBES RUNTIME VERSION

SIEMENS VDO
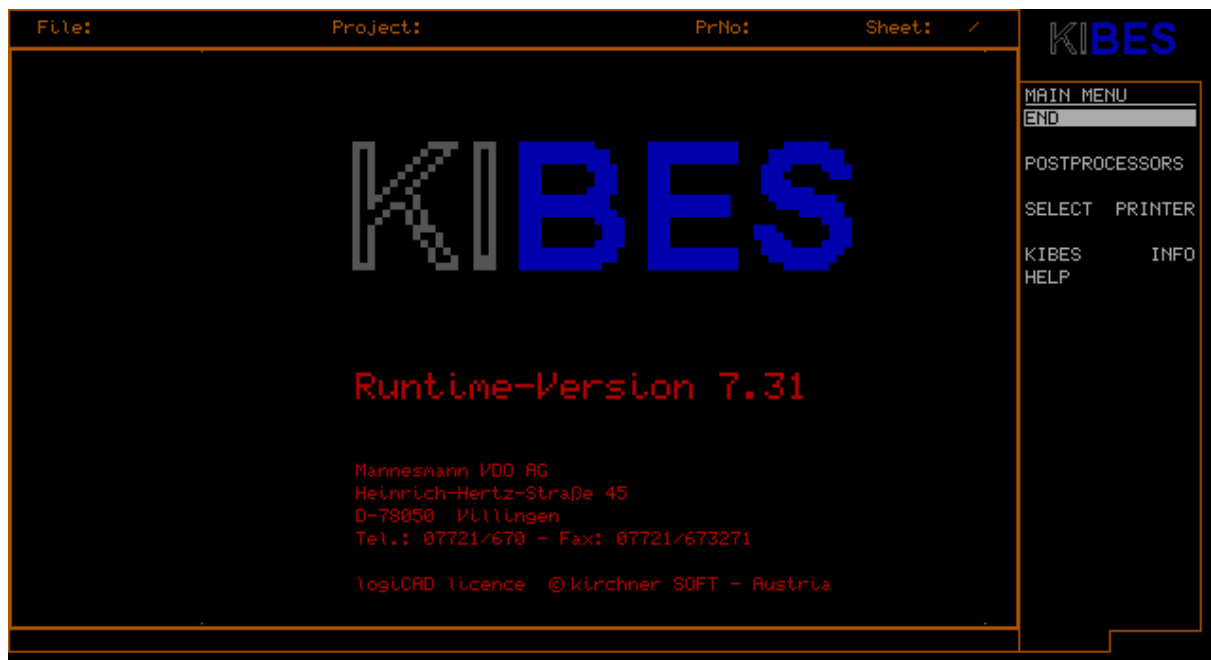*A u t o m o t i v e*

KIBES Runtime Version
Project: KIBES-2
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KIBES RUNTIME VERSION

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1   Product / system overview

1.1   Introduction

KIBES software is used to create a PLC program by means of a function diagram and transmit this program to the central processor. The KIBES basic package is used for creating the function diagram. The post processor converts the function diagram into a program which can be uploaded to the central processor.

Using the KIBES Runtime version finished programs can be transmitted to the central processor. The KIBES runtime version does not allow corrections to the PLC program (function diagram). However, it is possible to check the program in the central processor with an "online test" and receive information about the PLC program in the central processor.

The KIBES Runtime version provides the following functions:

- •   **Up/Download of finished applications to/from the central processor.**

- •   **Execution of online tests of PLC programs in the central processor.**

- •   **Retrieve information about the hardware components used in the PLC program and the inputs/outputs configured by the user.**

- •   **Various printouts of function diagrams of selected program parts.**

- •   **Import/export function for various project parts or files.**

- ➔   **A dongle is not required for the use of KIBES Runtime version.**

1.2 Description of main components

The KIBES Runtime version consists of 2 floppy disks or one CD-ROM.

These should be installed on a PC or laptop.

A serial interface between PC and central processor is required to perform downloads and online tests.

Please read this manual throughly before using the KIBES Runtime version for the first time.

A general knowledge of MS-DOS and Windows is required. Knowledge of Boolean algebra as well as programming skills and ability of handling PLC systems are advantageous.

The following chapters contain the information below:

-   **how to install the KIBES Runtime version.**

-   **how to import and link the required files.**

-   **how to transmit finished projects to the PC.**

-   **how to perform downloads and online tests.**

-   **how to log different information.**

2   Installing the KIBES RUNTIME version

2.1   System requirements

➔   **IBM compatible PC (486 DX33 min.)**

➔   **8MB RAM min., 540 KB min. free conventional memory**

➔   **DOS version 5.0 or Windows 95/98 or Windows NT (from KIBES version 7.3)**

➔   **Graphics board:**

•   **EGA resolution: 640 x 350 pixels**

•   **VGA resolution: 640 x 480 pixels**

➔   **floppy disk drive (IBM format: 3.5 in., 1.4 MB)**

➔   **hard disk drive (10 MB min. of free space)**

➔   **CD-ROM drive (if KIBES is installed from CD-ROM)**

➔   **Parallel interface**

➔   **1 x serial interface RS232-COM1 (when using a mouse)**

➔   **1 x serial interface RS232-COM2 (for communication with ZR2-B).**

2.2 Software installation

After booting your computer, use the task bar to start the Windows Explorer.

1.)   Place the CD-ROM or floppy disk containing the KIBES Runtime version
in the corresponding drive.

2.)   Open the *Rt_03_FF* directory which is located on the CD-ROM or on disk
1 of the KIBES Runtime version.

Windows Explorer with selected directory.
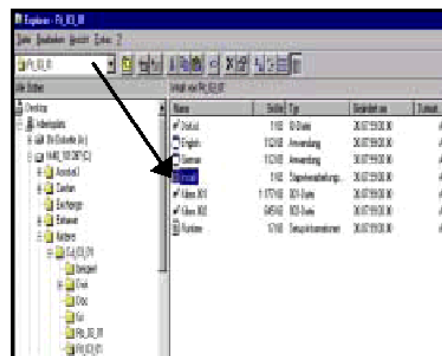
The INSTALL file which starts the installation is located in the Rt_03_FF
directory. In order to install the KIBES Runtime version under Win95/98, you
have to disable "Windows regognition through MS-DOS Prompt" in the context
menu (Properties).

Disabling the context menu "Windows regognition through MS-DOS Prompt":

1.)   Use the right mouse button to click on the INSTALL file

2.)   Select the *Properties* command in the context menu and then the
Program tab.

3.)   Click on the *Advanced..* button.
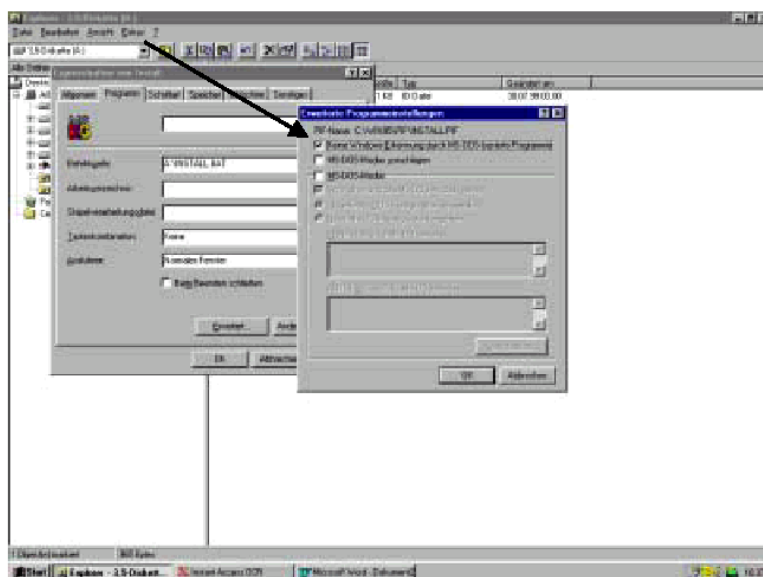
Changes of the extended program settings

4.) Deactivate the control small box MS-DOS mode suggest and activated the control small box No Windows recognition through DOS based programs.

5.) Close the dialogue box window extended program settings with one click on OK, and leave also with a further click on OK the dialogue window.

If changes have made, you can run the installation.

There are two ways to perform the installation:

... Double click on the Install file in the Windows Explorer.

... Or boot the computer in MS-DOS mode and enter the command Install. Make sure that you first open the directory containing the Install file.

2.3 Running the installation

After starting the installation with the *Install* command, some specifications are still required in the installation menus.
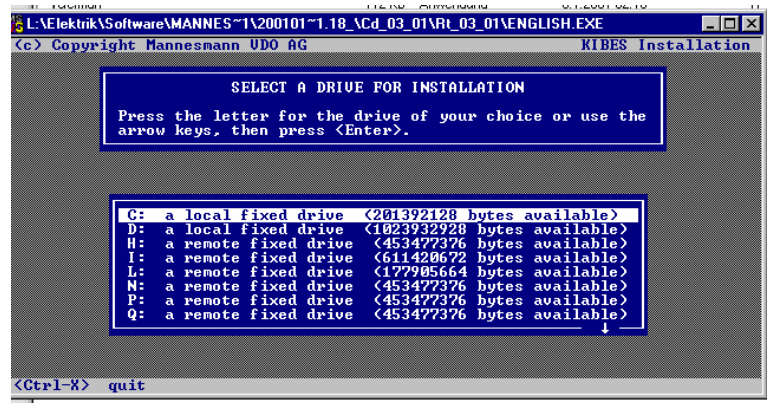
Selection of preferred hard disk partition

1.) Use the arrow keys to select the preferred (hard disk partition) in this menu. Confirm your selection with *Return*.

Caution !!!

The KIBES Runtime version needs 4MB min. of free space on your hard disk.
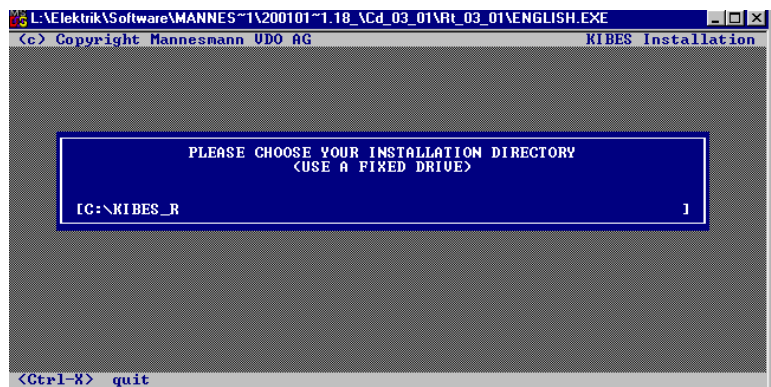
Input of working directory

2.) Enter the (working directory) where the KIBES Runtime version will be saved. Confirm your selection with *Return*.

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Selection of a serial interface for the communication to the central computer
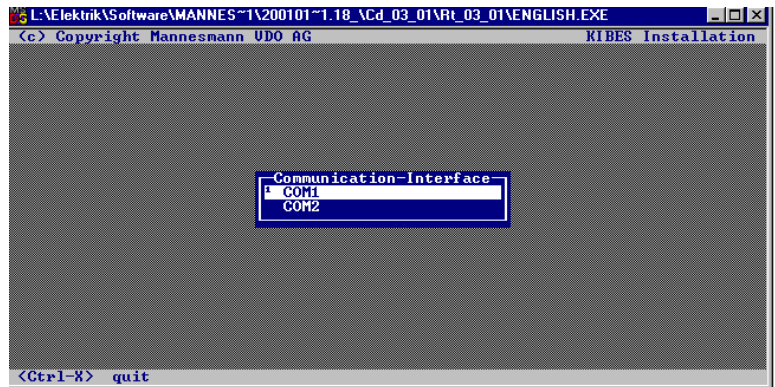
2.) Use the arrow keys to select the interface which later will handle the communication to the central processor.

CAUTION !!

Please bear in mind that usually one of the two interfaces is used as mouse port.

2.4   Starting the installed KIBES Runtime version

After completion of the installation and after a reboot of the computer you will find the KIBES Runtime version in the working directory specified during the installation of the software.

Starting the Kibes Runtime version under Win 95/98 and Windows NT

There are two possibilities to start the KIBES Runtime version:

•   Double click on the *KS.bat* file in the Windows Explorer. This file is located in the working directory specified during the installation process.

•   or by booting the computer in MS-DOS mode and input of the KS command. Also in the corresponding working directory.

➔   It is also possible to link the *KS.bat* file with the Windows desktop and run KIBES from the desktop.

2.5 Connection of PC and central processor

A serial data line named K_Line is used for exchanging data between PC and central processor.

This line is connected between the RS232 COM interface of the PC and the C connector (PIN C 3) of the central processor (siehe figure 1).

• The data line is connected between PIN 3 of RS232 and C connector PIN 13 of the central processor.

• The power supply is connected between PIN 1 (+24V) and PIN 5 (GND)

Chart of connector layout:

COM interface RS232

ISO/SAE PC-Interface

+24 V   GND

Power Supply

C13

Zentralrechner

Summary of pin
assignment

PC interface RS232

Central
Computer
Plug C Pin 13

	PC interface RS232	Central Computer Plug C Pin 13
K-Line	PIN 3	
Plus	PIN 1	Plus 24 V
GND	PIN 5	GND
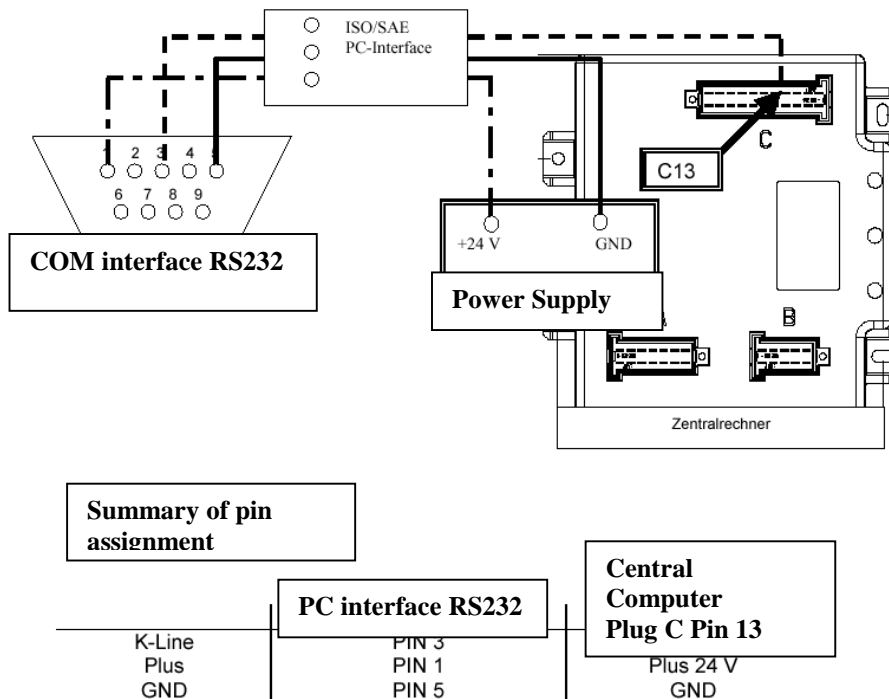
summary of pin assignment:

3   Operator prompts

KIBES is an interactive program asking the operator questions in form of windows, providing selections in form of tables (menus) and waiting for answers made by the user.

Input field   **Dialogue field**   **Output field**

```
File: 995UDS.GPS        Project: KIBES          PrNo: KIBES    Sheet:  9/9      KIBES

                                                                        ZR2B:_PP_03_01
                                                                        END
                                                                        CONFIG.      EDIT
                                                                        ADDRESS      EDIT
                                                                        PARAMETER    EDIT
                                                                        DIAGNOSIS

                                                                        COMMUNICATION
                                                                        ONLINE TEST

                                                                        DOCUMENTATION
                                                                        LOGBOOK

                                                                        PROJECT TOOLS

                                                                        INFO


                              System time:
```

Menu bar

3.1 Mouse functions

3.1.1 Mouse buttons

•   **left mouse button**

The left mouse click is the most important operator function in all program parts. Nearly all the functions during the program run are enabled by this button.

➡   **A left mouse click is equivalent to pressing Return.**

•   **right mouse button**

The right mouse click corresponds, most generally spoken, always to a cancel operation in several functions or program points.

➡   **A right mouse click is equivalent to pressing Esc.**

3.1.2 Menu mode

To select menu functions move the *highlight bar* which moves along with the mouse to the desired program function. The desired box is displayed inverted. Click the left mouse button to select the function.

Cursor in the menu mode
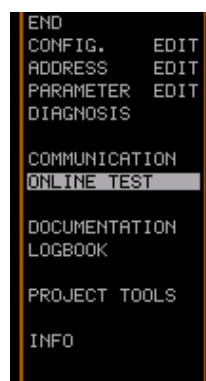
3.1.3 I/O mode

After selecting the function DEF & RUN the *hightlight bar* is either located in the *input or output box* and can be positioned where needed in the box. Move the mouse to the left to position the highlight bar in the input field or move the mouse to the right to position it in the output field. You can select an input or output similar to the selection in menu mode. Click the left mouse button to enable the input or output; in case of an analog input you can enter an integer value

Cusor in the I/O mode
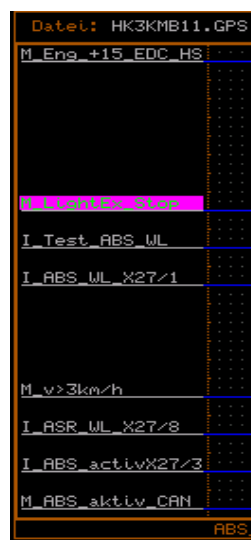
3.2 Keyboard functions

In some of the program parts the use of function keys is possible. Press function key _F1_ to see the configuration of the function keys.


```
┌─□─────────────────────────────────────────┐
│                    HELP                     │
│                                             │
│    This helpwindow can be reached in all menu levels by
│    pressing the F1-Key and gives you a survey about the
│    allowed function keys.
│
│  Useable keys at any time:
│
│  F1 ....... help
│  RETURN ... activation   or `Yes` (L-Click)
│  ESC ...... deactivation or `No`  (R-Click)
│  ↑ ........ one position up
│  ↓ ........ one position down
│  ← ........ one position to the left
│  → ........ one position to the right
│  PGUP ..... to the topmost position
│  PGDN ..... to the bottommost position
│  HOME ..... like PGUP
│  END ...... like PGDN
│  INS ...... switch off in EGA-mode menu at function call
│  DEL ...... switch off in EGA-mode menu
│         logiCAD licence  © kirchner SOFT - Austria
└─────────────────────────────────────────────┘
```

Overview of the available keyboard functions

-> **For a detailed description of the function key configuration in online test see chapter 7.2.**

4   Linking of PLC programs

4.1   Introduction

It is necessary to link the program files to KIBES before performing an online test or download a PLC program to the central processor.

When you compile the created program using the full version of KIBES, among other files a PRG and a ZIP file are created.

•   The PRG file is required in order to transfer the program to the central processor.

•   The ZIP file is needed to perform an online test.

➔   In the full version both files are located in the PST directory.

4.2   Linking of the PST and ZIP files

1.)   Start the Windows Explorer.

2.)   Then open the PST directory of the KIBES full version.

3.)   Copy all files in the directory to the PST directory of the KIBES Runtime version.
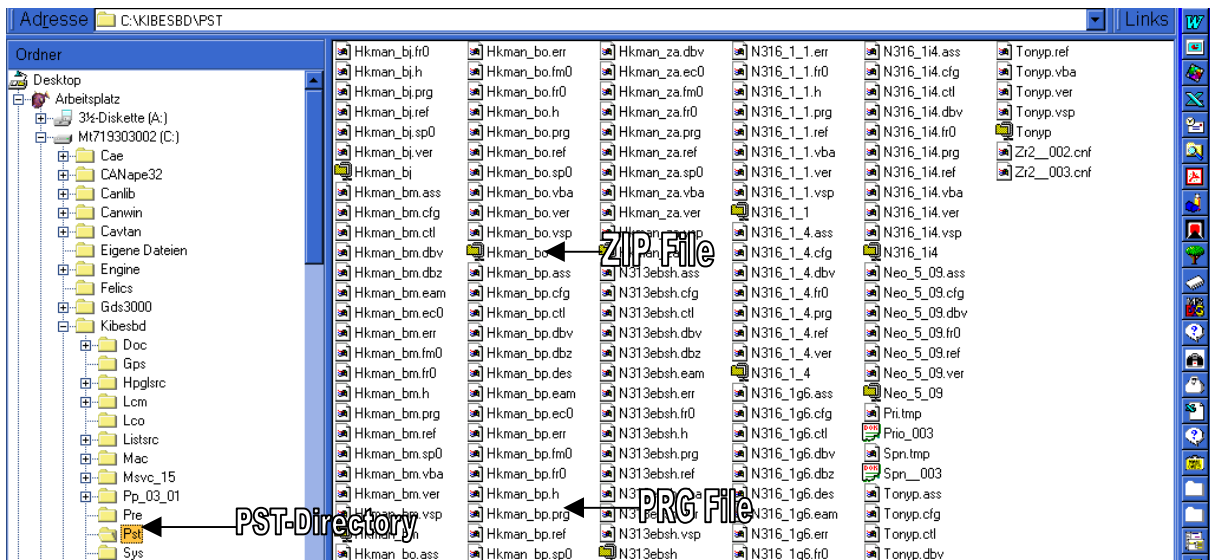
The PST directory with the two files PRG and ZIP

4.)   Exit the Windows Explorer and start the KIBES Runtime version
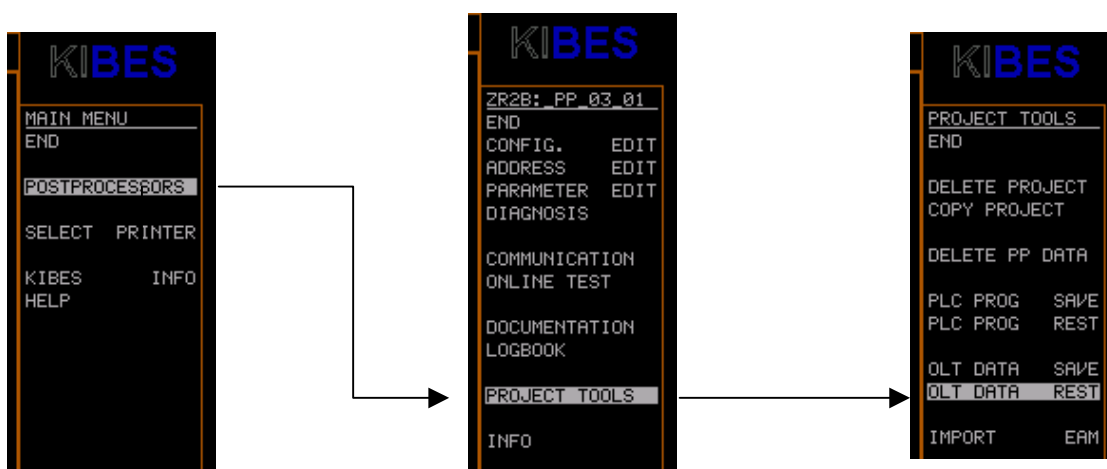
Selection of the "OLT Data Rest" directory

5.)   Select "Post Processor" in the main menu, then select "Project Tools" in the following menu.

6.)   Select "OLT Daten Rest" in the "Project Tool" menu.

➔   **When you select "OLT Daten Rest" the ZIP file is "extracted" making it possible to perform an online test.**

## 4.3   Upload of PLC programs from central processor

From KIBES Runtime version 7.31 upwards an *upload* from the central processor to the KIBES Runtime version is possible.

This means, if the ZIP file is loaded to the central processor, you can transfer the program from the central processor to the KIBES Runtime version by means of this upload and then create a ZIP file of the corresponding program.

4.3.1 Performing an upload

Selection of the online test
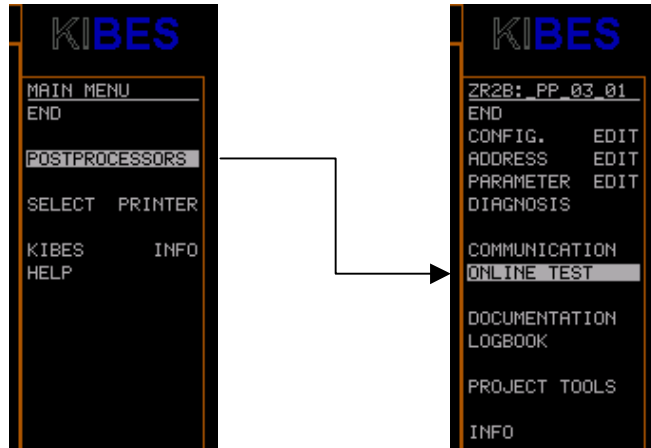
1.) Select "Post Processor" in the main menu.

2.) In the following menu click on "Online Test".

➔ The upload starts automatically!

5 Hardware configuration ("Post Processor" menu settings)

5.1 Introduction

The post processor menu handles the communication with the target system (central processor). The program parts which are created on the logical level (PLC program) are first adapted to the hardware of the target system and then transferred to the target system.

The adaptation of the hardware consists of the following parts

• **Declaration of used hardware components (configuration menu)**

• **Addressing of the logical inputs and outputs to the inputs and outputs of the device**

 (address menu)

• **Setting of some important parameters of each selected hardware component**

 (parameter menu)

Caution !!!

You cannot edit these menus in the KIBES Runtime version. You can only use them to retrieve information.
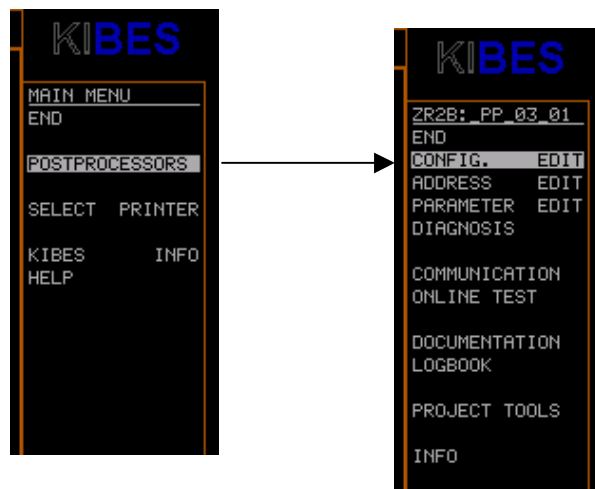
Only in the full version of KIBES it is possible to edit the configuration, address, and parameter menus.
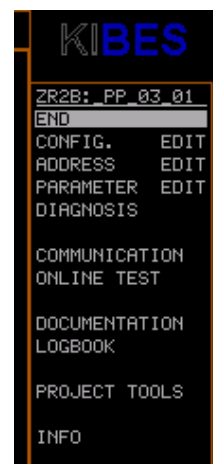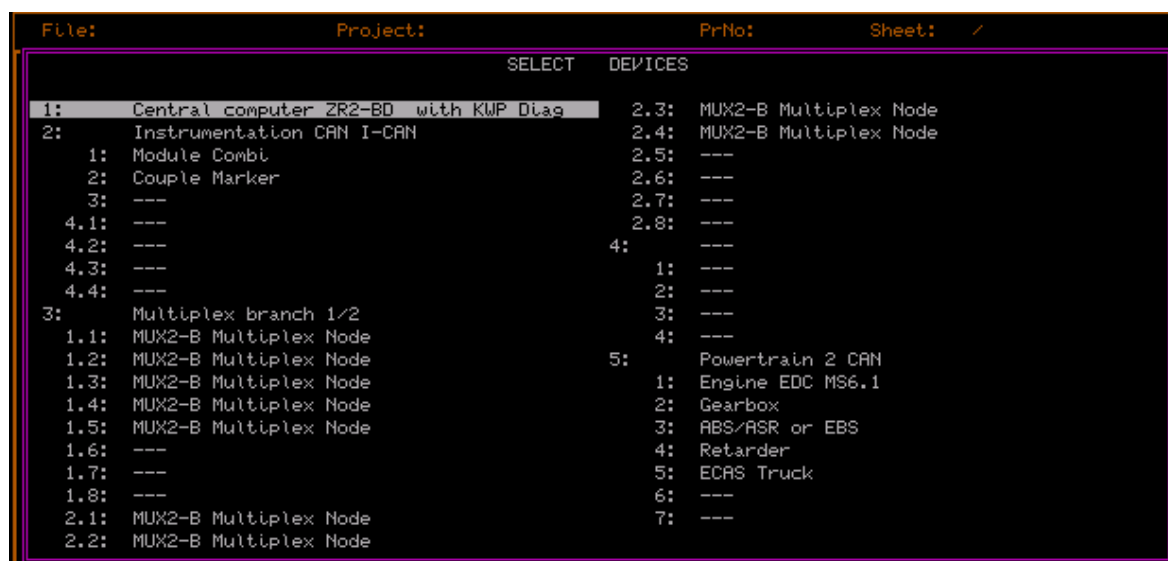
5.2 Configuration menu

Use the configuration menu to get information about what *hardware components* are controlled or used by the corresponding PLC program.

Selection of the configuration menu

Selection of the configuration menu:

1.) **Select "Post Processors" in the main menu.**

2.) **In the following menu select "Config. Edit".**

3.) **In the following menu enter the file name of the program you want to view.**

➜ **Press the space bar and then Return to view a list of the existing programs.**

```
File:              Project:              PrNo:      Sheet:  /

                          SELECT   DEVICES

1:      Central computer ZR2-BD  with KWP Diag    2.3:   MUX2-B Multiplex Node
2:      Instrumentation CAN I-CAN                 2.4:   MUX2-B Multiplex Node
    1:  Module Combi                              2.5:   ---
    2:  Couple Marker                             2.6:   ---
    3:  ---                                       2.7:   ---
  4.1:  ---                                       2.8:   ---
  4.2:  ---                                   4:         ---
  4.3:  ---                                       1:     ---
  4.4:  ---                                       2:     ---
3:      Multiplex branch 1/2                      3:     ---
  1.1:  MUX2-B Multiplex Node                     4:     ---
  1.2:  MUX2-B Multiplex Node               5:           Powertrain 2 CAN
  1.3:  MUX2-B Multiplex Node                     1:     Engine EDC MS6.1
  1.4:  MUX2-B Multiplex Node                     2:     Gearbox
  1.5:  MUX2-B Multiplex Node                     3:     ABS/ASR or EBS
  1.6:  ---                                       4:     Retarder
  1.7:  ---                                       5:     ECAS Truck
  1.8:  ---                                       6:     ---
  2.1:  MUX2-B Multiplex Node                     7:     ---
  2.2:  MUX2-B Multiplex Node
```

Configuration menu

The menu is divided into main and sub devices. The sub devices are connected to the central processor via each main device.

->   **The sub devices are shown indented**

The sub devices use a main device to transmit input and output signals to the central processor.

You can enable 3 main devices:

•   **Central processor ZR2-B**

The central processor controls all operations.
Therefore, it is always enabled.

->   **It is not possible to connect more sub devices "directly" to this unit.**

•   **driver's working place** *or* **I-CAN instrument CAN**

The driver's working place is connected via I-CAN to the central processor. It is not possible to declare sub devices, because it has its own defined inputs and outputs.

The I-CAN (instrument CAN) is a special CAN bus connected to the instrument block.

The following sub devices may be connected to this unit:

- **Combination Module**

- **MTCO**

- **Communication flag (logical connection to DMUX)**

- **MCAN multiplex line 1,2**

The multiplex system is connected to these 2 CAN bus lines. The following devices can be selected.

- **multiplex node N**

- **multiplex node M**

- **multiplex node B**

- **SMUX.**

5.3 Assignment (Address) menu

Use the assignment menu to get information on which logical inputs and outputs of the PLC program are assigned to the physical inputs and outputs of each selected hardware component.
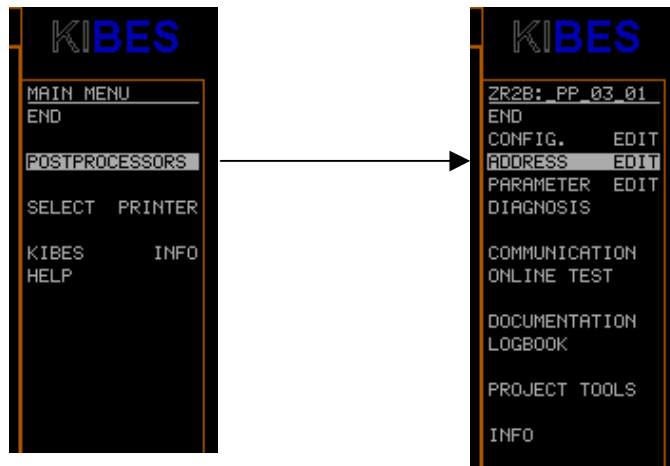
Selection of the assignment (address) menu:

1.) Select "Post Processor" in the main menu.

2.) In the following menu select "Address Edit".

3.) In the following menu enter the file name of the program you want to view.

➔ **Press the space bar and then Return to view a list of the existing programs.**

5.3.1 Explanation of the Address menu

```
Project: HKMAN_BO

                  I   T                                          LIMITS           C E
  Name            O   Y  Device   Address                        L    U  TYP AF   O O

  I_Door_2_Control  E  B  MUX   1.3  EIN_STATUS_04                80   80 1-0
  I_ECAS_NN_X29/5-  E  B  MUX   2.2  EIN_STATUS_04                20   20 1-0
  I_Ecas_WL_X55/6-  E  B  MUX   2.2  EIN_STATUS_05                20   20 1-0
  I_Em_DoorExit-    E  B  MUX   2.3  EIN_STATUS_20                20   20 1-0
  I_EmButtEngStop-  E  B  MUX   2.3  EIN_STATUS_23                20   20 1-0
  I_EmPBrkSw_Open-  E  B  MUX   1.2  EIN_STATUS_08                20   20 1-0
  I_EmRearWinOpen-  E  B  MUX   2.4  EIN_STATUS_22                20   20 1-0
  I_Encoder_tank    E  W  MUX   1.4  EIN_ANALOG_02                              0
  I_Eng_Cool_T_CAN  E  W  MOTOR      engine coolant temperature
  I_Eng_CWaterLev-  E  B  MUX   2.3  EIN_STATUS_10                20   20 1-0
  I_Eng_IntakeM_T   E  W  MUX   2.3  EIN_ANALOG_05                              2
  I_Eng_SwOilAuto-  E  B  MUX   2.1  EIN_STATUS_11                20   20 1E0
  I_EngineSwFlap-   E  B  MUX   2.3  EIN_STATUS_11                20   20 1-0
  I_EngStartBut_R-  E  B  MUX   2.3  EIN_STATUS_09                20   20 1-0
  I_EngX251_03HRL-  E  B  MUX   2.1  EIN_STATUS_19                20   20 1E0
  I_EngX251_05DIA+  E  B  MUX   2.1  EIN_STATUS_20                80   80 1E0
  I_EngX252_01_OPr  E  W  MUX   2.1  EIN_ANALOG_01                              0
  I_EngX252_07_D1+  E  B  MUX   2.1  EIN_STATUS_03                80   80 1E0
  I_EngX252_08_D2+  E  B  MUX   2.1  EIN_STATUS_04                80   80 1-0
```

Address menu

- **Name**

Name of the logical inputs and outputs specified in the PLC program. These are connected to the physical inputs and outputs in the *Address* column.

- **IO (input/output)**

This column indicates whether this is an *input* (I) or an *output* (O).

- **TY (type)**

This column indicates whether the input or output is a *binary* (B) or *Word* (W) type.

- **Device**

This column indicates which device is assigned to which input or output.

➔   Declared devices are displayed in the configuration menu.

•   1.1; 1.2, etc. is similar to the addresses in the configuration menu.

- **Address**

This is the name of the physical input or output which is present at one of the connected devices.

C O (Compensation) (word type input)

If the input is a word type, e.g. from a NTC resistor, this analog signal is converted into a stepped digital signal.

A word input can have *six* conversion types:

Number and	PARAMETER			Measuring Range	Resolution
Type	Value	Value	Value		
0:R OFF	0	500	-	0...500 Ohm	2 Ohm
1:R	0	500	-	0...500 Ohm	2 Ohm
	0	5000	-	0...5000 Ohm	20 Ohm
	0	10000	-	0...10000 Ohm	40 Ohm
2:NTC	R25	B-Value	0.5°C	-35...90°C	0.5°C
	R25	B-Value	1°C	-40...210°C	1°C

$R_t = R_{25} * \exp [B * (1/T - 1/T_0]$ with $T_0 = 298K$ (25°C)

3:R n. lin	-	-	-	0...237568 Ohm	64Ω for $0\,\Omega \leq R \leq 409\,\Omega$
					128Ω for $4096\,\Omega \leq R \leq 8192\,\Omega$
					256Ω for $8192\,\Omega \leq R \leq 16384\,\Omega$
					512Ω for $16384\,\Omega \leq R \leq 32768\,\Omega$
					1024Ω for $32768\,\Omega \leq R \leq 65536\,\Omega$
					2048Ω for $65536\,\Omega \leq R \leq 131072\,\Omega$
					4096Ω for $131072\,\Omega \leq R \leq 237568\,\Omega$

4:U	0	5000	-	0...5V		for Uplus = 23...32V
				0...2V	20mV	for Uplus = 10...32V

5:U	0	20		0...20% Uplus	0,4% Uplus	
				0...100% Uplus		with ext. Voltage devider Rv1 = 5K6 & Rv2 = 1K5

-> The corresponding conversion type is displayed in column CO of the assignment (address) menu.

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Example for specified conversion type 0 : R OFF

Conversion of type 0: R OFF

```
Project: HKMAN_BO

                  I  T                                          LIMITS        C E
 Name             0  Y  Device    Address                       L   U  TYP AF 0 0

I_Door_2_Control  E  B  MUX   1.3  EIN_STATUS_04                 80  80 1-0
I_ECAS_NN_X29/5-  E  B  MUX   2.2  EIN_STATUS_04                 20  20 1-0
I_Ecas_WL_X55/6-  E  B  MUX   2.2  EIN_STATUS_05                 20  20 1-0
I_Em_DoorExit-    E  B  MUX   2.3  EIN_STATUS_20                 20  20 1-0
I_EmButtEngStop-  E  B  MUX   2.3  EIN_STATUS_23                 20  20 1-0
I_EmPBrkSw_Open-  E  B  MUX   1.2  EIN_STATUS_08                 20  20 1-0
I_EmRearWinOpen-  E  B  MUX   2.4  EIN_STATUS_22                 20  20 1-0
I_Encoder_tank    E  W  MUX   1.4  EIN_ANALOG_02                              0
I_Eng_Cool_T_CAN  E  W  MOTOR      engine coolant temperature
I_Eng_CWaterLev-  E  W  MUX   2.3  EIN_STATUS_10                 20  20 1-0
I_Eng_IntakeM_T   E  W  MUX   2.3  EIN_ANALOG_05                              2
I_Eng_SwOilAuto-  E  B  MUX   2.1  EIN_STATUS_11                 20  20 1E0
I_EngineSwFlap-   E  B  MUX   2.3  EIN_STATUS_11                 20  20 1-0
I_EngStartBut_R-  E  B  MUX   2.3  EIN_STATUS_09                 20  20 1-0
I_EngX251_03HRL-  E  B  MUX   2.1  EIN_STATUS_19                 20  20 1E0
I_EngX251_05DIA+  E  B  MUX   2.1  EIN_STATUS_20                 80  80 1E0
I_EngX252_01_OPr  E  W  MUX   2.1  EIN_ANALOG_01                              0
I_EngX252_07_D1+  E  B  MUX   2.1  EIN_STATUS_03                 80  80 1E0
I_EngX252_08_D2+  E  B  MUX   2.1  EIN_STATUS_04                 80  80 1-0
```

Threshold (U O Typ) (Limit (U O type) (binary type input)

All the *status inputs* (BINARY) are detected in an analog manner. The digitizing takes place in the device. This digitizing is influenced by the following three parameters:

- **Lower limit value (L)**
- **Upper limit value (U)**
- **Conversion (digitizing) type**
  (Position of the ranges "Active", "Inactive", "Inactive error")

Digitizing parameters of the assigned inputs or outputs.

By means of these limit values and the digitizing type, it is determined whether the signal is in the *dominant* state (logical 1) or in the *recessive* state (logical 0).
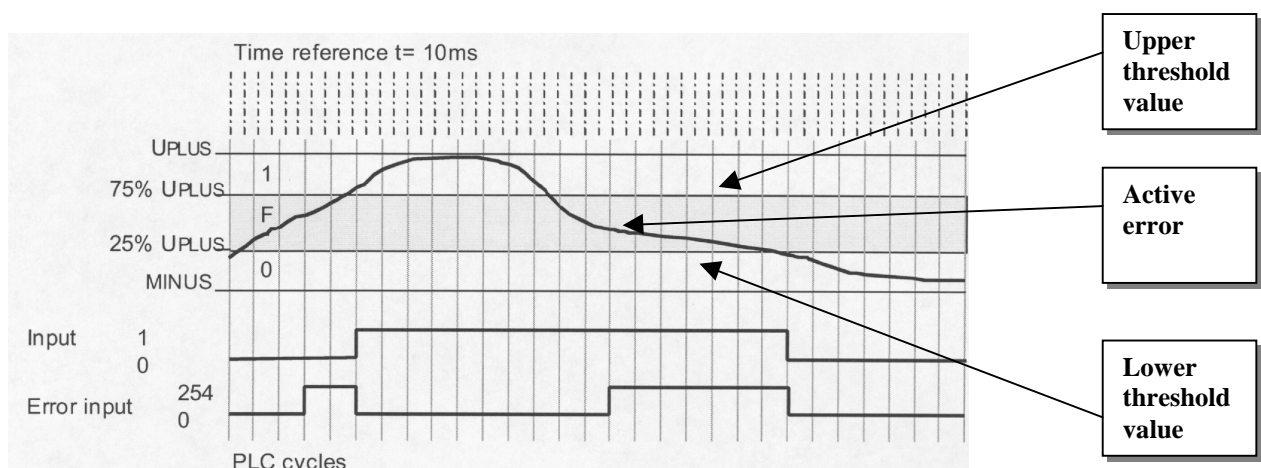

Diagram with possible voltage curve and the resulting digitizing of input (0;1) and error input (0;254)

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The board voltage range is divided in three parts by the two *limit values*

- Upper range-> Board voltage - Upper limit value
- Mid range   -> Lower limit value - Upper limit value
- Lower range-> Lower limit value - GND

These limit values are a percentage of the board voltage. Ex; Board voltage is 24V, upper limit value is 75%, that equals a voltage of 18V.

Additionally, you can determine how each range is defined.

- F   Error condition
- -   Intermediate condition (without error enabling)
- 1   Active condition
- 0   Inactive condition

As a result there are the following digitizing types.

TYPE	Upper range	Mid range	Lower range
1F0	Active	Error	Inactive
0F1	Inactive	Error	Active
F10	Error	Active	Inactive
F01	Error	Inactive	Active
10F	Active	Inactive	Error
01F	Inactive	Active	Error
1-0	Active	Condition	Inactive
0-1	Inactive	Condition	Active

If the error input is active for a certain time, an error message for this input is activated.

->   The time during which the voltage can stay the same before an error message is activated is determined in the parameter menu (see next chapter).

• AF (adaptation factor)

This column displays the relation between motor speed and generator speed (TERM.W).

• NO (Emergency run)

This column displays what will happen when the communication to the central processor is interrupted. That is, that the output does not receive any information from the central processor.

Since no signal could be transmitted in this case, you have to determine how the output should behave in case of an interruption:

A: <u>output turned off</u>
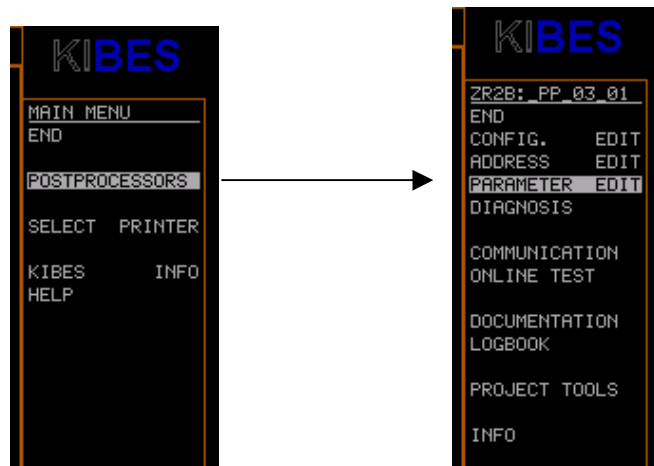
E: <u>output turned on</u>

H: <u>Hold condition</u>

B: <u>output blinks.</u>

5.4 Parameter menu

**Use the parameter menu to get information on certain hardware parameters.
These can be edited only in the KIBES full version. In the KIBES Runtime
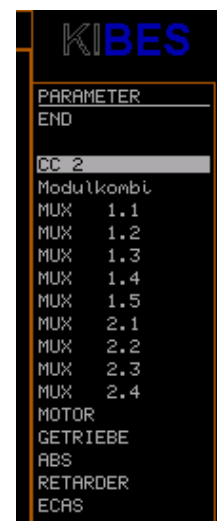version the parameter menu only is an information source .**

Selection of the parameter menu

Selection of the parameter menu:

- **Select "Post Processor" in the main menu.**

- **In the following menu select "Parameter Edit".**

- **In the following menu enter the file name of the program you want to view.**

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Selection menu of the used hardware components

In the following menu you will find a selection menu with each used hardware component.

->   Use the arrow keys or the mouse to select the parameters of a certain hardware component.

CC 2   (central processor)
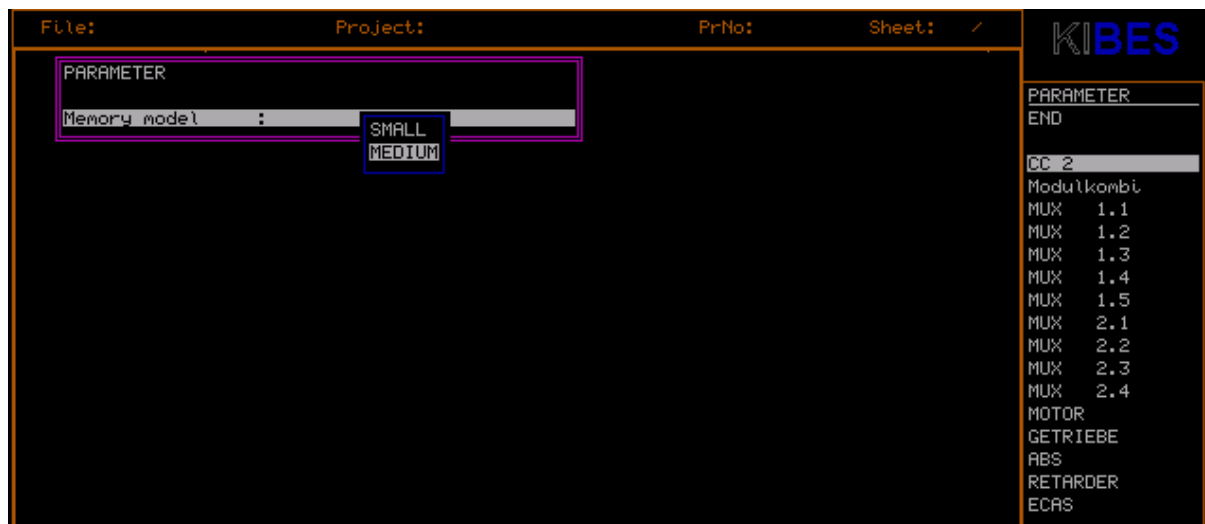
Parameter menu of the central processor

Here the memory module used by the central processor is displayed.

The following memory models are available.

- **Small 128k**

- **medium 256k**

• DWP/FAP (Driver's Working Place)

Parameter menu of the driver's working place DWP/FAP

Here the language set at the DWP/FAP and the free texts which have been entered are displayed.

The following list shows the assignment of each language:

Language: The language of the fix texts is defined as:

Language	Number	Language	Number
German	0	English	1
French	2	Spanish	3
Italian	4	Dutch	5
Polish	6	Norwegian	7
Swedish	8	Finnish	9
Danish	10	Portuguese	11
Croatian	12	Slovene	13
Czech	14		
Hebrew	20		

Use the mouse or the arrow keys to select the free text line and view the free text entered.

MUX (1.1 - 2.8)
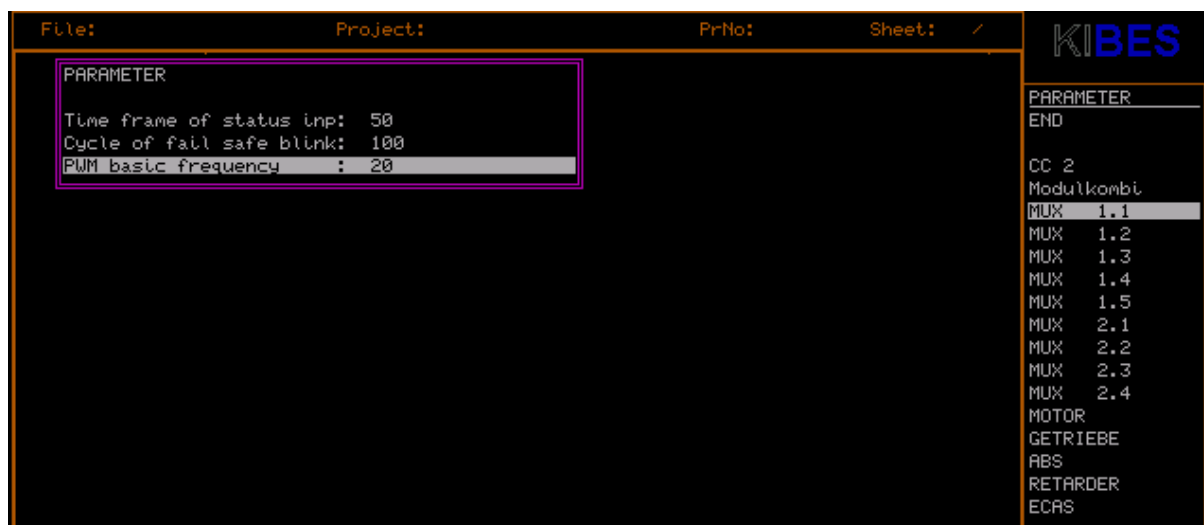
Parameter menu of a MUX (multiplex node)

Here the following parameters of a multiplex node are displayed:

•   Error time of status input: (50)
This value specifies the time which the status input can stay in error mode before an error message is activated

->   An input is, for example, in error mode when the voltage is in the intermediate range during the digitizing.
->   The value is displayed in *ms*

•   Period duration Emergency run Bl: (100)
If an output is in emergency run mode during the emergency run, this value specifies the period duration of the blinking output.

•   PWM base frequency (111)
->   The value is displayed in Hz

If a PWM signal controls an analog output, this column displays the base frequency of the PWM signal.

5.5 Communication

Use the communication menu to transfer a program to the central processor; furthermore, it is possible to receive information about the PLC program currently loaded in the central processor.

Selection of the communication menu:

1.)   Select "Post Processor" in the main menu.

2.)   In the following menu select "Communication".

3.)   In the following menu enter the file name of the program you want to view.

5.5.1 Loading a PLC program in the central processor

1.)   Select LOAD PLC PROG.

2.)   Enter the name of the PLC program to be transferred to the central processor.

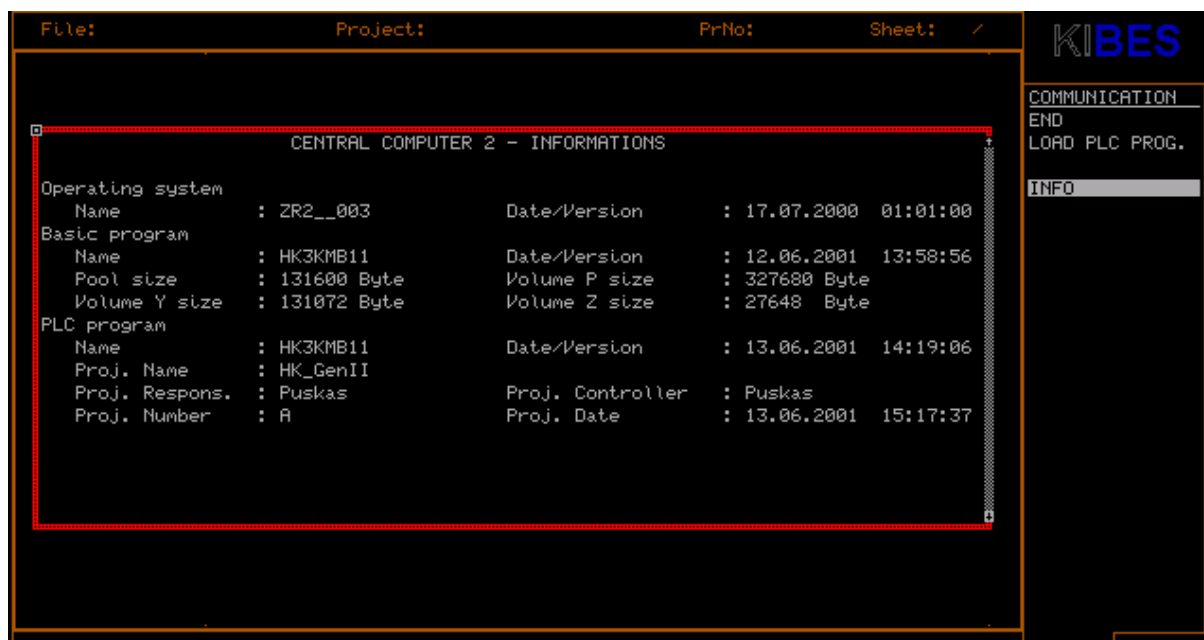**->**   Press the space bar and then Return to view a list of the existing programs.

Caution !!

In order to perform a download the PRG file must exist in the PST directory.

The central processor should be connected to voltage.

5.5.2 Communication information page

It is possible to get information about the PLC program loaded in the central processor.

```
File:              Project:                PrNo:        Sheet:   /      KIBES

                                                                       COMMUNICATION
                                                                       END
  ┌                 CENTRAL COMPUTER 2 - INFORMATIONS              ↑    LOAD PLC PROG.
  │
  │ Operating system                                                   INFO
  │   Name          : ZR2__003       Date/Version     : 17.07.2000  01:01:00
  │ Basic program
  │   Name          : HK3KMB11       Date/Version     : 12.06.2001  13:58:56
  │   Pool size     : 131600 Byte    Volume P size    : 327680 Byte
  │   Volume Y size : 131072 Byte    Volume Z size    : 27648  Byte
  │ PLC program
  │   Name          : HK3KMB11       Date/Version     : 13.06.2001  14:19:06
  │   Proj. Name    : HK_GenII
  │   Proj. Respons.: Puskas         Proj. Controller : Puskas
  │   Proj. Number  : A              Proj. Date       : 13.06.2001  15:17:37
  │
  │
  │
  └                                                                ↓
```

Information page for the PLC program currently loaded in the central processor

1
Display of the information page:

1:)   Select "INFO" in the communication menu.
➔   Press the Esc key to delete the information page.

---

6   Online test

6.1   Introduction

The online test makes it possible to intervene in a "running" PLC program on the central processor which allows to understand the function in the PLC program and localize possible error sources.

You can perform <u>logic and value evaluations</u> of <u>binary</u> as well as <u>analog</u> conditions in all sheets of a project.

During the online test you can set conditions for not assigned inputs as well as <u>module modifications</u>. Furthermore, it is possible to change the values for certain modules.

Use the function keys to scroll through the project in order to view single project sheets during the online test.
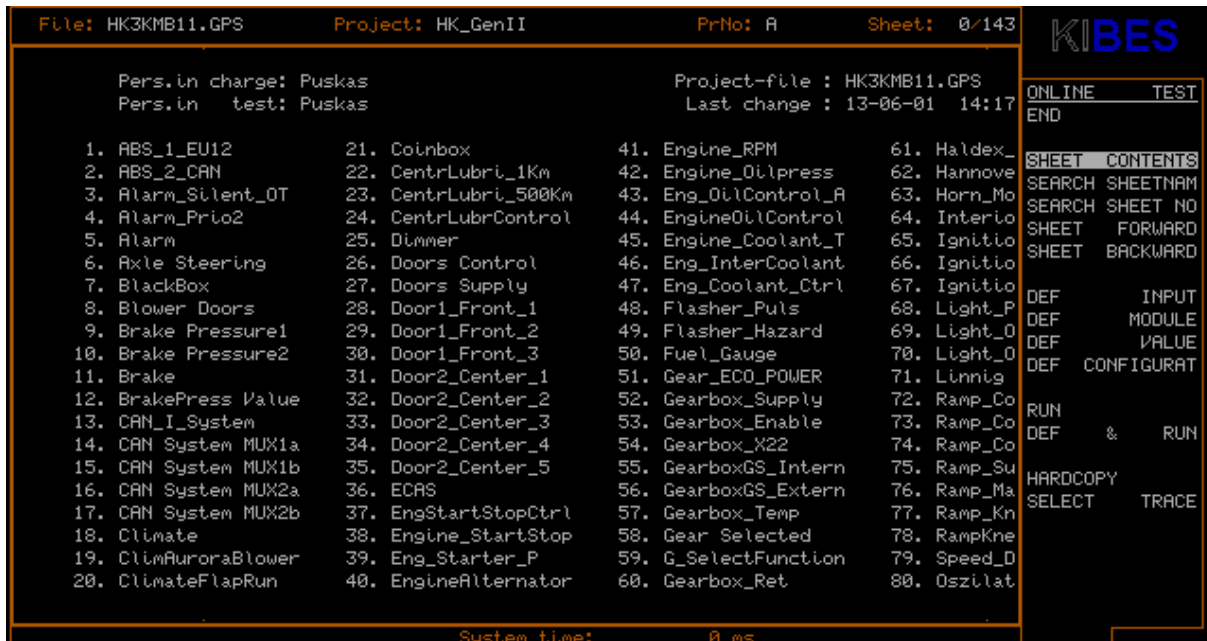
You can make preselections in the configuration menu which affect the operation of the online test as well as the display of the modules and the conditions of each line and value.

Selection of the online test
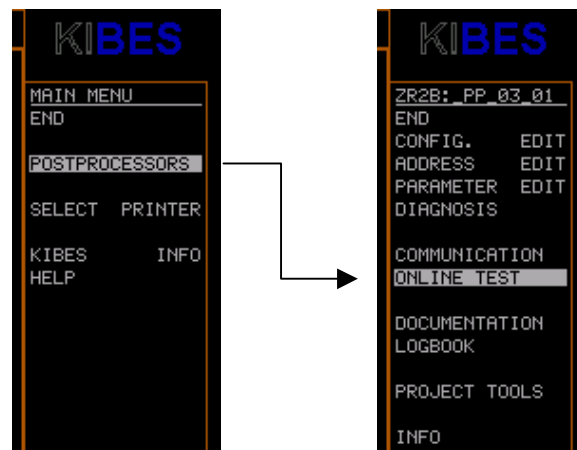
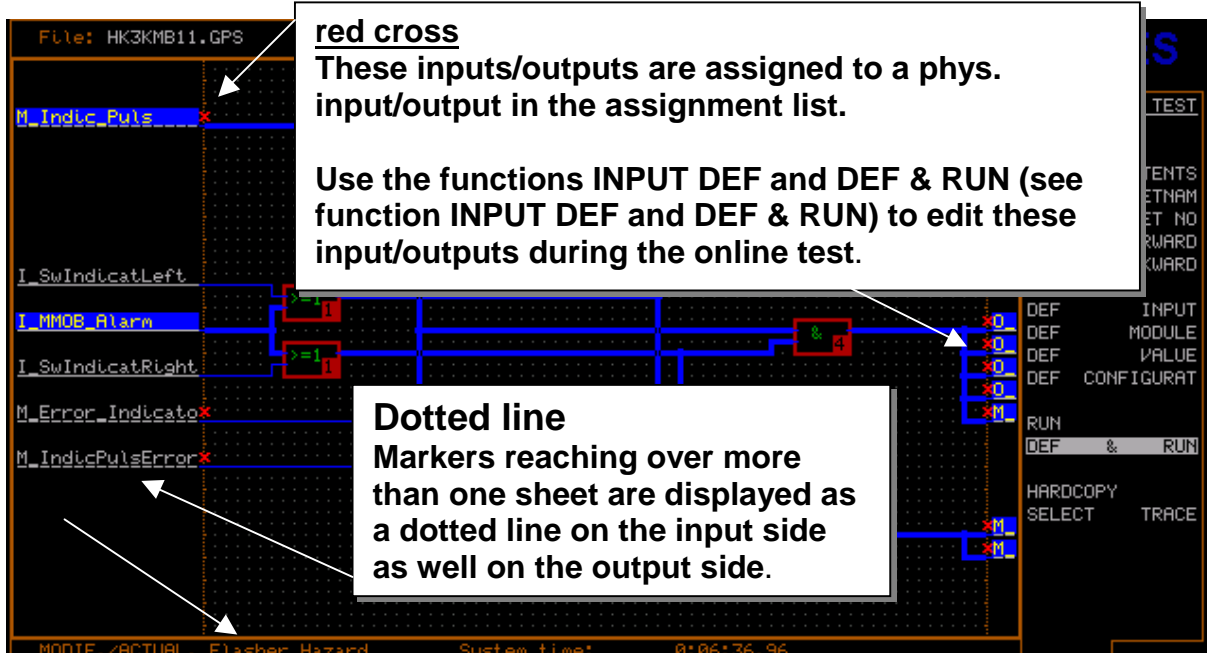Selection of the configuration menu:

1.)   Select "Post Processor" in the main menu.

2.)   In the following menu click on "Online Test".

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Menu overview in online test
On the start page you will find an overview of all sheets in this project.

red cross
These inputs/outputs are assigned to a phys. input/output in the assignment list.

Use the functions INPUT DEF and DEF & RUN (see function INPUT DEF and DEF & RUN) to edit these input/outputs during the online test.

Dotted line
Markers reaching over more than one sheet are displayed as a dotted line on the input side as well on the output side.

Displayed project sheet in online test

Use the menu functions Sheet Forward (function key F10) and Sheet Backward (Funktionstaste F9) to scroll through the project.
The EAM's (Input Output Markers) are located on the right and left side of the screen. If an EAM is underlined by a dotted line, it is a marker for more than one sheet. That means, that this marker is already an input or output on a preceding page.

If an EAM is marked with a red cross, this EAM is not assigned to a physical input or output. This can also be checked in the address menu (see chapter address menu).

6.2 Function keys

You can use some important or often used keyboard functions of the online test by pressing a single key.
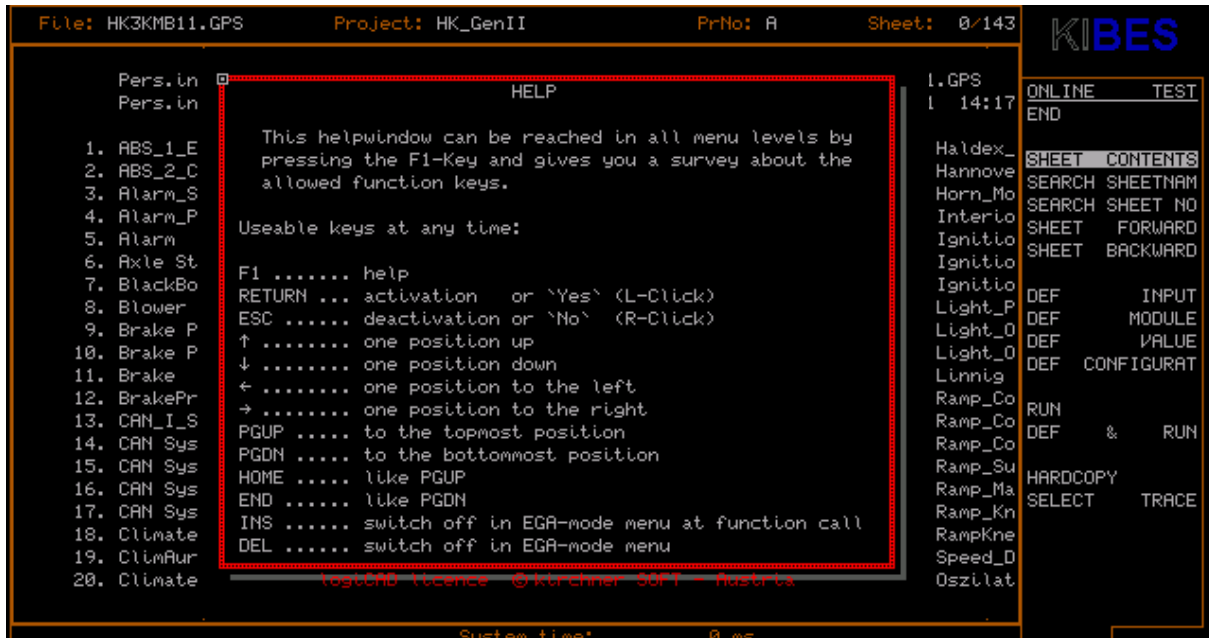
Display of the information page

For a table with all available function which can be used via pressing a single key see the page "Help" (Support).

➔ **The "Help" (support) is started by pressing _F1_.**

➔ **Press the Esc key to exit this page.**

➔ **Function key F1 ″Help″ (Support)**

This function lists all function keys in this menu.

➔ **Function key F2 (switching of Input DEF / MODUL DEF)**

This function key is used to switch between EINGANG DEF and MODUL DEF modes.

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➔ **Function key F3 (Contents)**

   Use this function key to return to the table of contents (sheet 0)

➔ **Function key F4 (Determine input)**

   Use this function key to determine inputs similar to the menu function
   DEF INPUT

➔ **Function key F7 (Modify ON/OFF)**

   Use this function to turn on or off the modifying ability of the
   inputs/outputs or the modules. This is indicated by the word "MODIF"
   (modifying possible) in the status line at the left bottom.

➔ **Function key F8 (Update ON/OFF)**

   This function may also be used anytime with DEF & RUN. Update display
   can be turned on or off. This is indicated by the word "ACTUAL" (value
   displays are updated continuously) in the status line at the left bottom.

➔ **Function key F9 (Page up)**

   Use this function key to scroll up a sheet.

➔ **Function key F10 (Page down)**

   Use this function key to scroll down a sheet.

➔ **Function key ALT-F1 (Reboot)**

   This function key is similar to the function NEW START

➔ **Function key ALT-F2 (Determine configuration)**

   This function, similar to the menu function DEF CONFIGURATION, opens
   the window for setting various switches and default values.

➔ **Function key ALT-F9 (Search sheet number)**

   This function key is similar to the menu function SEARCH SHEET
   NUMBER

➔ **Function key ALT-F10 (Search sheet name)**

   This function key is similar to the menu function SHEET NAME SEARCH
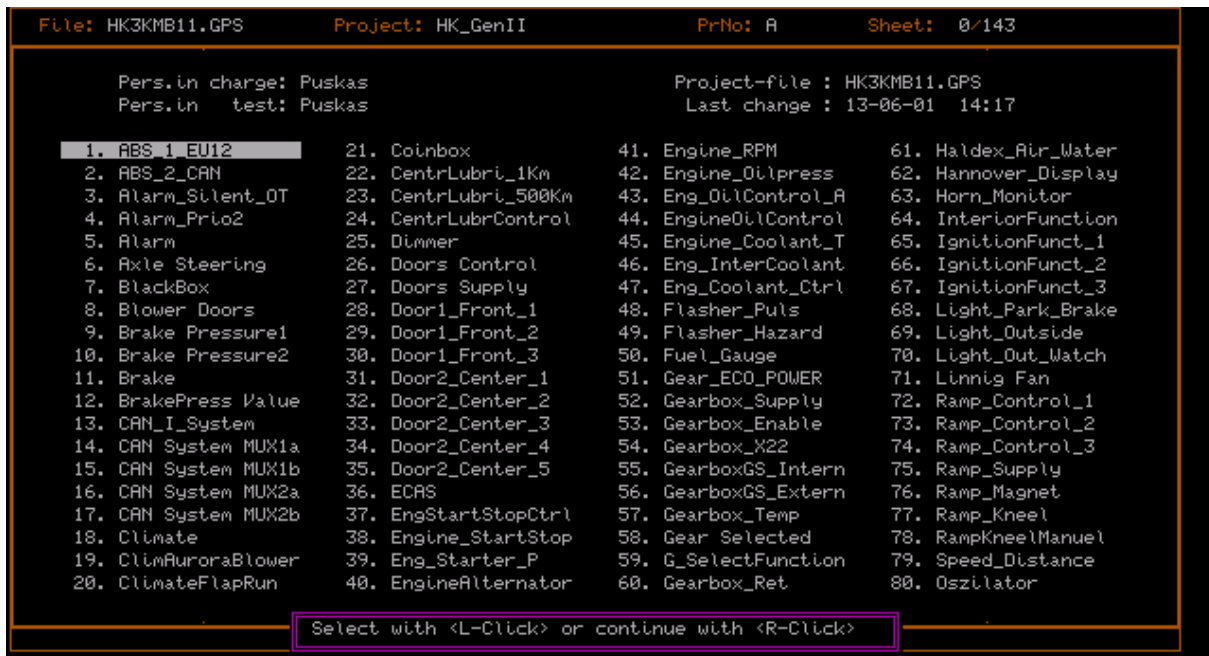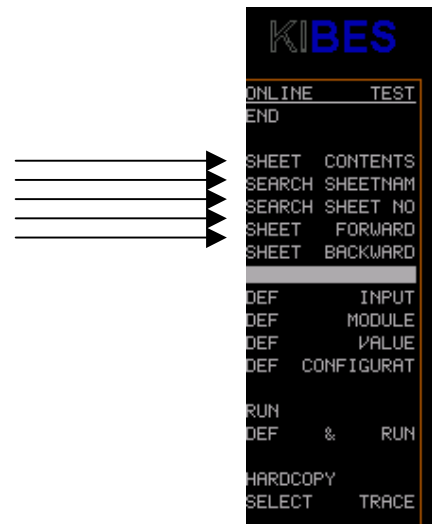
6.3   Online test menu

6.3.1 Contents, sheet number, sheet name, page up and page down

- **SHEET CONTENTS**

**If you select "Sheet Contents" , KIBES will return to the page overview on
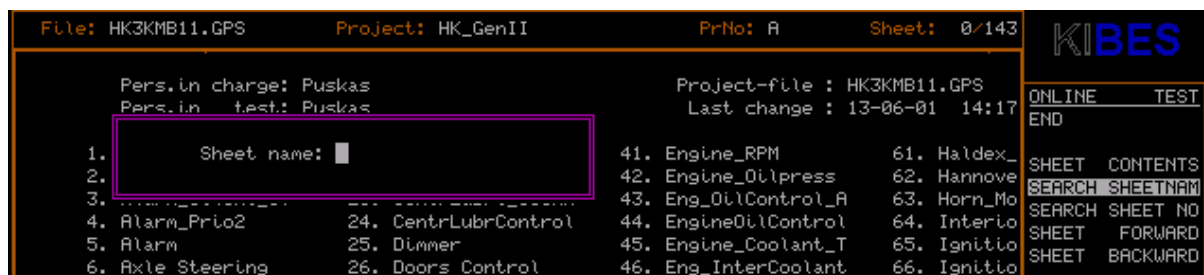<u>sheet 0</u> of the corresponding project.**

➜   **This function can also be called by pressing the *F3* key.**

Selection of a program page in the table of contents

**Use the mouse or the arrow keys to move the highlight bar to the desired page;
press the left mouse button or the Return key to activate the corresponding
page and display it on the screen.**

➔   Search sheet name

Search for sheet name

Use this menu item to access a page in the PLC program directly by entering the *page name*. Therefore it is required that the name to be searched has been specified for a certain sheet.

1.)   Press the left mouse button or press the Return key to open the function.

Then a window named "Sheet name" appears.

2.) Enter a valid sheet name with 16 characters max. using the keyboard.

If this sheet exists in the project, the entered sheet name is displayed on the left side of the comment line, and the corresponding sheet is displayed on the screen.

If the entered sheet name does not exist, the message Sheet name does not exist <key> is displayed. Press any key or the mouse buttons to return to the normal operation.

➔   Access this function also by pressing the key combination ALT

➔ Search sheet number


```
File: HK3KMB11.GPS        Project: HK_GenII        PrNo: A        Sheet:  0/143    KIBES

        Pers.in charge: Puskas              Project-file : HK3KMB11.GPS     ONLINE      TEST
        Pers.in   test.: Puskas             Last change : 13-06-01  14:17   END

    1.                                   41. Engine_RPM        61. Haldex_  SHEET   CONTENTS
    2.          Sheet number: 0          42. Engine_Oilpress   62. Hannove  SEARCH SHEETNAM
    3.                                   43. Eng_OilControl_A   63. Horn_Mo  SEARCH SHEET NO
    4. Alarm_Prio2       24. CentrLubrControl   44. EngineOilControl   64. Interio  SHEET   FORWARD
    5. Alarm             25. Dimmer             45. Engine_Coolant_T   65. Ignitio  SHEET   BACKWARD
    6. Axle Steering     26. Doors Control      46. Eng_InterCoolant   66. Ignitio
```
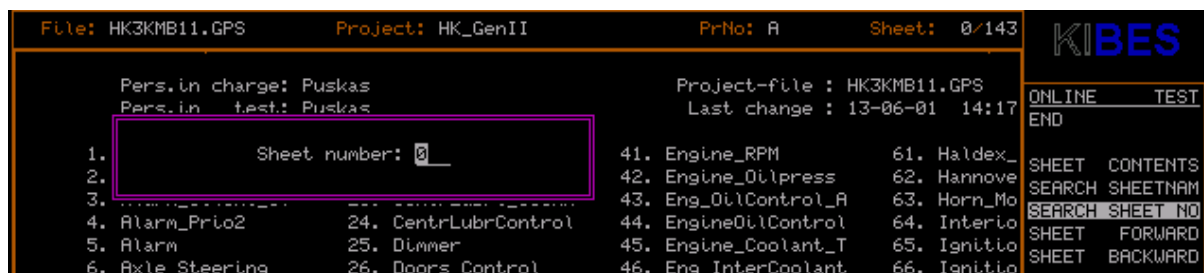
Search for sheet number

Use this function to search for created sheet by sheet number and display them on the screen.

1.) Press the <u>left mouse button</u> or press the <u>Return</u> key to open the function.

Then a window named "Sheet number" appears.

3.) Enter a valid sheet number in the range between "0" and "999".

If this sheet exists, the page with the corresponding sheet number is displayed.

If the entered sheet number does not exist, the message <u>Sheet number does not exist <key></u> is displayed. Press any key or the mouse buttons to return to the normal operation.

➔ Access this function also by pressing the key combination *ALT-F9*.

➜ **Page up/Page down)**

Use this function to scroll chronologically through the whole project.

Use the function Page up or Page down to display the next sheet on the screen, as long as there are next sheets in the project.

➜ **Access this function also by pressing the keys F10 Page Down and F9 Page Up.**

6.4   Settings

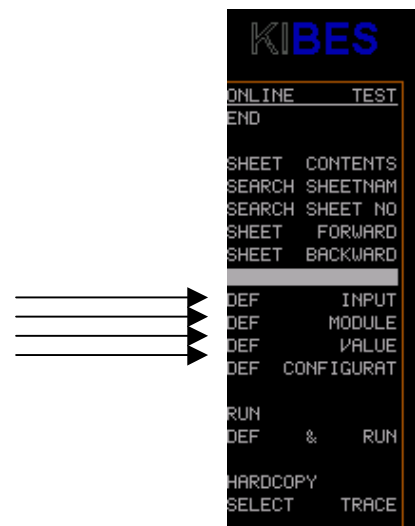### 6.4.1 Definition input, module, value, configuration

DEF INPUT

Use this function to <u>modify logical conditions</u> of each input.

Inputs/outputs which may be modified are displayed with a red cross at the side input or output.

You can set and reset a binary or word input.

->   Click the left mouse button or press the *F4* key to access this function.

Definition of an input:

1)   After activating the function the cursor is in I/O mode.

3.)   Use the mouse or the arrow keys to move the displayed menu bar above the desired input.

3.)   Press the <u>left mouse button</u> or press the <u>Return</u> key to change the condition of the selected input.

➔ Module Def

Use this function to modify modules during the online test.

➔ **Please bear in mind that not all modules may be modified. Find a list of modules which can be modified at the end of the description.**

1.) Press the <u>left mouse button</u> or press the <u>Return</u> key to open the function.

After activating the function the cursor is in character mode. It can be moved now everywhere in the character field. If the character cursor hits a module, this is displayed inverted.

2.) If a module is displayed inverted, you can start modifying the module by clicking the left mouse button.

➔ **If you click on a module which cannot be modified with the left mouse button, you will hear a warning sound.**

➔ **If the online test was started with the <u>Def & Run</u> function, you can access the function <u>Modul Def</u> during the online test by pressing the function key <u>F2.</u>**

List of the currently modifiable modules:

RS FLIP-FLOP	**The condition of output "O" is either set (logical 1) or reset (logical 0)**
JK FLIP-FLOP	**The condition of output "O" is either set (logical 1) or reset (logical 0)**
B-COUNTER BINARY	**The current counter value can be overwritten with a new value.**
B-COUNTER ANALOG	**The current counter value can be overwritten with a new value.**
F/B-COUNTER WORD	**The current counter value can be overwritten with a new value.**
F/B-COUNTER ANALOG	**The current counter value can be overwritten with a new value.**
CONSTANT BINARY	**The condition of output "O" is either set (logical 1) or reset (logical 0)**
CONSTANT WORD	**The word value of the constant module can be overwritten with a new value.**
CONSTANT ANALOG	**The analog value of the constant module can be overwritten with a new value.**
CONSTANT HEX	**The hexadecimal word value of the constant module can be overwritten with a new value.**
TRANSTITION	**If the preceding action is active, the procedure is switched automatically; if not, a + sign is added into the transition module in order to display the activation. In this case it is switched, if the preceding action is activated.**
TRANSTITION UP	**If the preceding action is active, the procedure is switched automatically; if not, a + sign is added into the transition module in order to display the activation.**
TRANSIT. & UP	**See *Transistion up***
CANCEL POINT	**A cancel point module can either be activated or deactivated. The activation of this module is marked by writing the word "active" into the module. If not, the cancel point module is not activated, i.e. there is no program interruption by this module.**
TEST-VAR BINARY	**The condition of output "O" is either set (logical 1) or reset (logical 0)**
TEST-VAR WORD	**The word value of the constant module can be overwritten with a new value.**
TEST-VAR ANALOG	**The analog value of the constant module can be overwritten with a new value.**
TEST-VAR HEX	**The hexadecimal word value of the constant module can be overwritten with a new value.**

The list of modifiable modules is enhanced continuously, dependent of the status of program development.

➔ **Press the right mouse button to terminate the function.**

➔ Value Def

Use this function to modify binary conditions and analog values.

1.)   Press the left mouse button or press the Return key to open the function.

After activating the function a window named "Variable name" is displayed.

2.)   Use the following context menu to enter the variable name.

The corresponding module is displayed inverted. In this case it is automatically displayed, if it is not on the currently displayed project sheet.

The modifications which can be performed are dependent from the corresponding module.

Configuration

Use this function for setting various switches and default values, which could influence the simulation sequence.

➔ This function can also be accessed by pressing the key combination ALT+F2 key.

```
File: HK3KMB11.GPS        Project: HK_GenII              PrNo: A       Sheet: 0/143     KIBES

    Pers.in charge: Puskas                    Project-file : HK3KMB11.GPS       ONLINE      TEST
    Pers.in    test: Puskas                   Last change : 13-06-01  14:17     END

    1. ABS_1_EU12         21. Coinbox             41. Engine_RPM        61. Haldex_
    2. ABS_2_CAN        ┌─────────────────────────────────┐ e_Oilpress   62. Hannove    SHEET   CONTENTS
    3. Alarm_Silent_O   │Delay of display refresh :  0.0000000│ ilControl_A   63. Horn_Mo   SEARCH SHEETNAM
    4. Alarm_Prio2      │Display input value      : ON   │ eOilControl   64. Interio   SEARCH SHEET NO
    5. Alarm            │Display output value     : ON   │ e_Coolant_T   65. Ignitio   SHEET   FORWARD
    6. Axle Steering    │Binary I/O marking       : ON   │ nterCoolant   66. Ignitio   SHEET   BACKWARD
    7. BlackBox         │In-/Output switch        : ON   │ oolant_Ctrl   67. Ignitio
    8. Blower Doors     │Display current sheet    : OFF  │ er_Puls       68. Light_P   DEF       INPUT
    9. Brake Pressure   │Time-display-unit        : Hours│ er_Hazard     69. Light_O   DEF      MODULE
   10. Brake Pressure   │Invalid display mode     : OFF  │ Gauge         70. Light_O   DEF       VALUE
   11. Brake            │Display invalid data     : OFF  │ ECO_POWER     71. Linnig   DEF  CONFIGURAT
   12. BrakePress Value  └─────────────────────────────────┘ Gearbox_Supply   72. Ramp_Co
   13. CAN_I_System      33. Door2_Center_3      53. Gearbox_Enable    73. Ramp_Co   RUN
   14. CAN System MUX1a  34. Door2_Center_4      54. Gearbox_X22       74. Ramp_Co   DEF    &    RUN
   15. CAN System MUX1b  35. Door2_Center_5      55. GearboxGS_Intern  75. Ramp_Su
   16. CAN System MUX2a  36. ECAS                56. GearboxGS_Extern  76. Ramp_Ma   HARDCOPY
   17. CAN System MUX2b  37. EngStartStopCtrl    57. Gearbox_Temp      77. Ramp_Kn   SELECT      TRACE
   18. Climate           38. Engine_StartStop    58. Gear Selected     78. RampKne
   19. ClimAuroraBlower  39. Eng_Starter_P       59. G_SelectFunction  79. Speed_D
   20. ClimateFlapRun    40. EngineAlternator    60. Gearbox_Ret       80. Oszilat

                          System time:       1:31:13.43
```

Configuration menu

➔ **Update display**

This field indicates the time in seconds in which the data from the central processor are requested cyclically.

➔ **Display input values**

If this switch is turned on (IN), the digital value of the analog input which is highlighted by the bar is displayed, if not, its identifier. If this switch is turned off (OUT), the identifier of the analog input which is highlighted by the bar is displayed; if not, its digital value is displayed.

➔ **Display output values**

If this switch is turned on (IN), its digital value is displayed above its analog output. If this switch is turned off (OUT), its identifier is displayed above its analog output.

➔ Binary INPUT/OUTPUT Mark

If this switch is turned on (IN), the binary inputs/outputs are displayed with an inverted bar, if they are logically 1. In case of logically 0, they are not inverted. If this switch is turned off (OUT), the binary inputs/outputs are never inverted. The logical condition of the binary lines can only be realized by the wider or narrower lines.

➔ Switching input and output

If this switch is turned on (IN), either the identifier or the value is displayed, dependent of the position of the cursor bar. If the switches for "In-/Output value displayed" are turned on (OUT), then usually the values are displayed. However, if you move the bar above them, the identifiers are displayed. If the switches are turned off (OUT), everything is vice versa.

➔ Time representation in..

If this switch is set to "MILLISEC", the system time, which is updated continuously in the comment, is displayed in ms (milliseconds). However, if the switch is set to "HOURS", the time is display in hours.

➔ Invalid representation

If this switch is turned on (IN), lines with an invalid value are marked. Binary lines are marked by a slashed display, word and analog lines in their DDW's, if these were created. In these DDW's "UNDEF" is entered for invalid lines.

➔ Invalid Data display

If this switch is turned on (IN), the actual, although invalid data are output in the DDW's for word and analog lines instead of the "UNDEF" entries.

If both switches "Invalid representation" and "Invalid Data display" are turned on, the invalid data are displayed because their settings have a higher priority.

6.5 Program Sequence

6.5.1 Cycle Step, Run, Def & Run

- **Cycle Step**

This kind of online test allows a single cyclical processing of the logic of a project sheet, dependent of the input definition.

-> Press the left mouse button to access the function.

If you click the mouse again, another program cycle is processed.

➔ The current system time in milliseconds is displayed anytime in the center of the comment box.
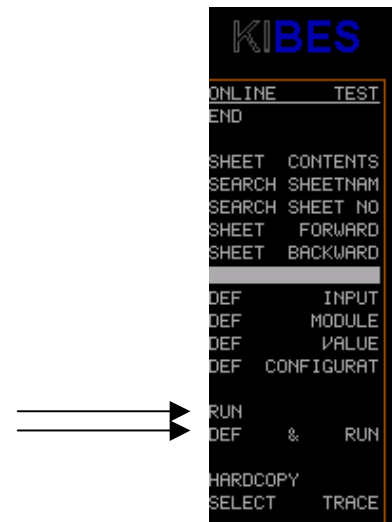
RUN

This kind of online test allows a continuous cyclical processing of the logic of a project sheet, dependent of the input definition.

1.) Press the left mouse button to access the function.

2.) Press the right mouse button to terminate the process.

➔ Press the Escape key (Esc) to terminate the function.

KIBES RUNTIME VERSION

The following display types are used:

- **<u>Binary lines</u>**

They are shown thicker, if the condition is <u>logical 1.</u>

- **<u>Binary inputs/outputs</u>**

They are shown inverted, if their condition is <u>logical 1.</u>

- **<u>Counter values</u>**

They are displayed in decimal form in the corresponding module below the nominal value.

- **<u>Time values</u>**

They are displayed in decimal form in the corresponding module below the nominal value.

- **<u>Steps</u>**

The module is display inverted, if the step is active.

- **<u>Word inputs/outputs</u>**

The values are displayed in decimal form in the input/output box.

->   The current <u>system time in milliseconds</u> is displayed anytime in the center of the comment box.

➔ Def & Run

This menu function combines the functions <u>Input Def.</u> and <u>Lauf</u> in one cycle, i.e. immediately after activating the input, the cyclical processing of the project sheet logic is started. During the simulation process the conditions of the inputs may be changed anytime.

➔   **Press the left mouse button to access the function.**

Now, the cursor is in I/O mode. Move the appearing menu bar with the mouse or the arrow keys above the desired input.

1.)   **Press the left mouse button or press the Return key to define an input.**

➔   **The current <u>system time in milliseconds</u> is displayed anytime in the center of the comment box.**

6.6 Dynamic-Display-Window (DDW's)

Dynamic Display Windows (DDW's) are used for the dynamic value display of arbitrary data points in the project during the online test.

During a module definition this function can be activated by calling the MODUL DEF function <u>or</u>, during the simulation process, by pressing function key <u>F2.</u>

In the latter case the simulation has to be started using DEF & RUN.

Creating DDW's using the MODUL DEF. online test function:

1.)   In the online test menu click on "MODUL DEF".

2.)   Click on an integer line with the graphic cursor appearing now in the project sheet.

The position of the displayed DDW can be changed using the mouse or the arrow keys.

3.)   Press the left mouse button or press the Return key to change the position and, if necessary, create another DDW.

Creating a DDW using DEF & RUN and F2:

1.)   In the online test menu click on "DEF & RUN".

Now you are in the online test !

2.)   Press the function F2 to activate the graphic cursor in the project sheet.

3.)   Now you can click on an integer line with the graphic cursor.

The position of the displayed DDW can be changed using the mouse or the arrow keys.

4.)   Press the left mouse button or press the Return key to change the position and, if necessary, create another DDW.
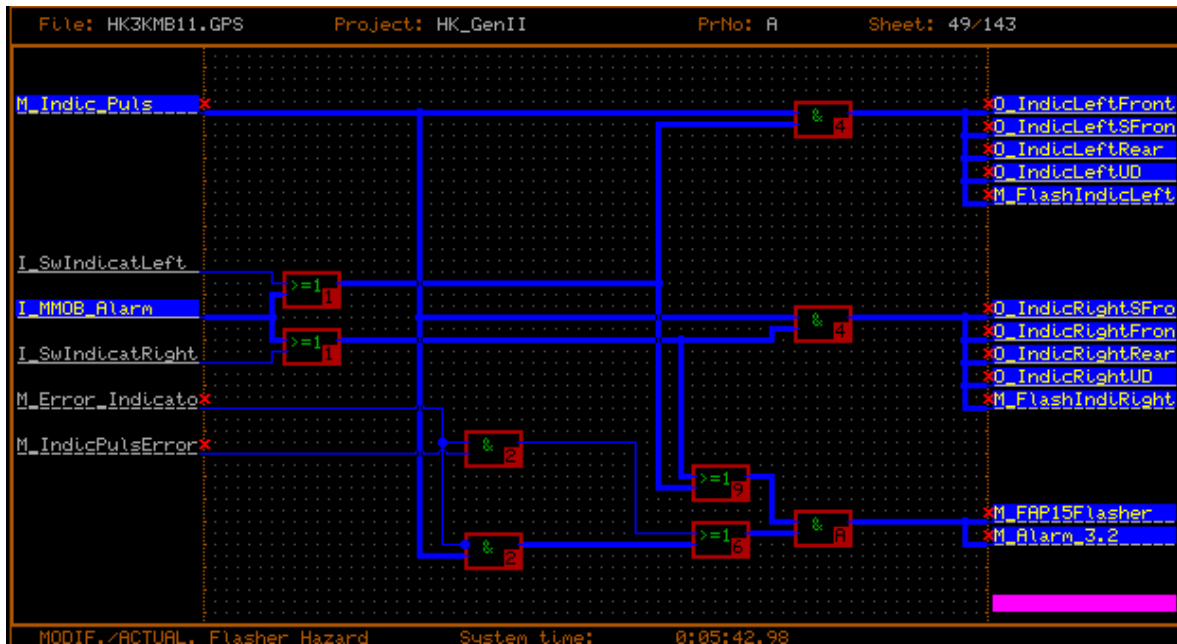
Example for 4 DDW's created during the online test.

7 Documentation

Using the menu item "Documentation" you can display an <u>*address* or *parameter*</u> list.

Using the function "Output Options" you can select, if necessary, the output medium and the sort criteria for these lists.

➔ The parameter and the address menu were described in detail some paragraphs above.

Selection of the menu function "Documentation"
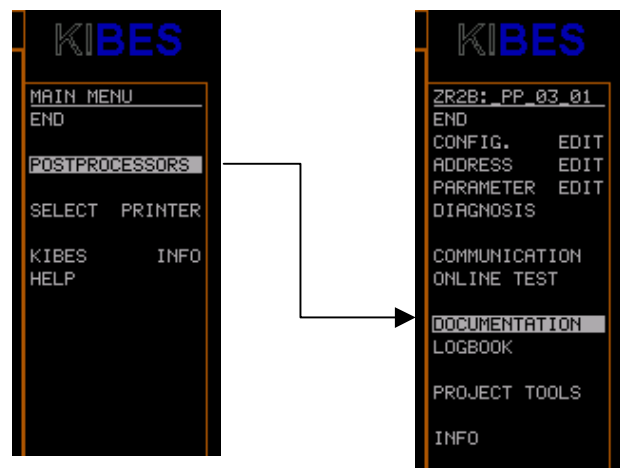
Selection of the documentation menu:

1.) Select "Post Processor" in the main menu.

2.) In the following menu click on "Documentation".

7.1 Address list (assignment list)
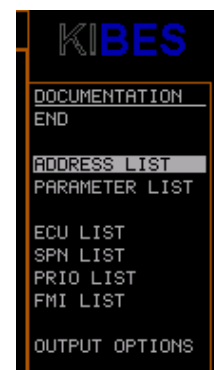
This function is used to display a list of the inputs and outputs used by the corresponding PLC program.

The following information is available.

➔ **Identifier**

Name of the input or output which was given at the creation of the PLC program.

➔ **Type**

Data type of the input or output.

➔ **Device name**

Type and name of the device used to control the input or output.

-> For a list of all devices used by this program see "Parameter List" in the DOCUMENTATION menu.

➔ **Remark**

This remark is appended to the inputs and outputs in the assignment lists of each device.

➔ **Comment**

This comment was entered with the definition of an input or output; it can be edited only in the KIBES full version.

➔ **Connector**

Name of the connection used to control the input or output.

Parameter

Here the properties/parameter of each input and output are listed.

➔ **These parameters can be edited only with the assignment editor in the KIBES full version.**

➔ **Art (Type)**

This is used to indicate whether it is an input or an output.
Example for an address list displayed on the screen

7.2 Parameter List

This function is used to display a list of the *devices* used by the corresponding PLC program.

The following information is available:

- **Device**

Here the name of the corresponding device is displayed and the following device properties may be displayed (if available).

- **Error time of status input**

This value indicates the time which the status input can stay in error mode before an error message is activated

-> An input is, for example, in error mode when the voltage is between the lower and upper limit.

-> The value is displayed in *ms*

- **Period duration Emergency run BI**

If an output is in emergency run mode and was set to *flash* in emergency run mode, this value indicates the period duration of the output blinks.

- **PWM base frequency**

If an analog output is controlled via a PWM signal, in this column is displayed the base frequency of the PWM signal.
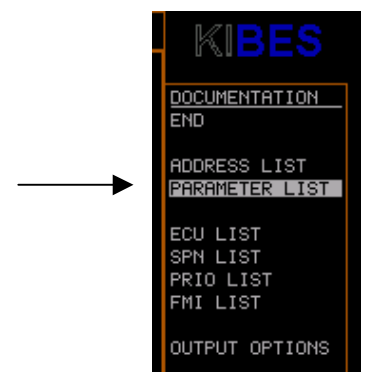
Example for a parameter list displayed on the screen.

7.3   Output options

Use the menu item OUTPUT OPTIONS to set the parameters output medium, company data as well as two sort criteria for the *Address list* (assignment list). Use the arrow keys or the mouse to select an option; press the Return key or the left mouse button to *activate* the corresponding menu.

Output medium

Use this menu item to select the output medium.

Selection of an output medium:

1.)   Select the line output medium using the mouse or arrow keys and confirm the   selection clicking on the left mouse button or on Return.
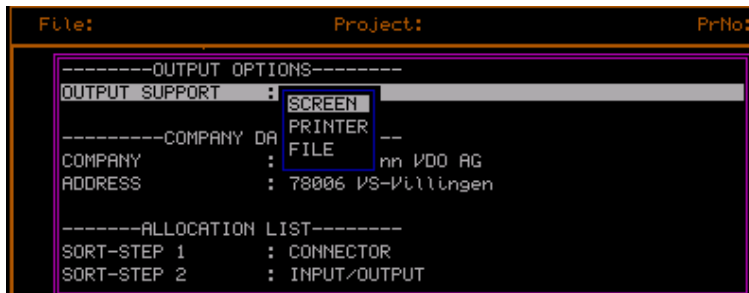
Menu OUTPUT OPTIONS with activated selection menu OUTPUT MRDIUM

2.)   In the selection menu appearing now, move the highlight bar with the arrow keys or the mouse to the desired output medium.
Select among the following output media:

• **Screen**

• **Printer**

Caution !!

Observe corresponding printer settings

• **File**

The file is written into the KIBES directory named DOC.

3.)   Click the left mouse button or press Return to confirm your selection.

If you activate the function ADDRESS LIST (assignment list) or PARAMETER LISTE, the output is done on the selected output medium.

Company data

Use this menu item to enter and edit company data.

The company data are written into the footer of the assignment and parameter lists.

Editing company data:

**1.)   Select the line Companies or ADDRESS using the mouse or arrow keys
            and confirm the selection by clicking the left mouse button or on
            Return.**

2.)   Use the cursor which appears now to edit the selected line.

**3.)   Confirm your selection using the Return key in order to exit the input
            mode.**

- **Address List (assignment list)**

Use this menu item to select the sort criteria for the address list.

Sorting is possible on two levels.

**1.)   Select the line SORT LEVEL 1 or SORT LEVEL 2 using the mouse or
            arrow keys and confirm the selection by clicking the left mouse button or
            on Return.**

**2.)   In the selection menu appearing now, move the highlight bar with the
            arrow keys or the mouse to the desired sort criterion and confirm the
            selection by clicking the left mouse button.**

Select among the following sort criteria:

- **Unsorted**

- **Name**

- **Input/output**

- **Device**

- **Connector**
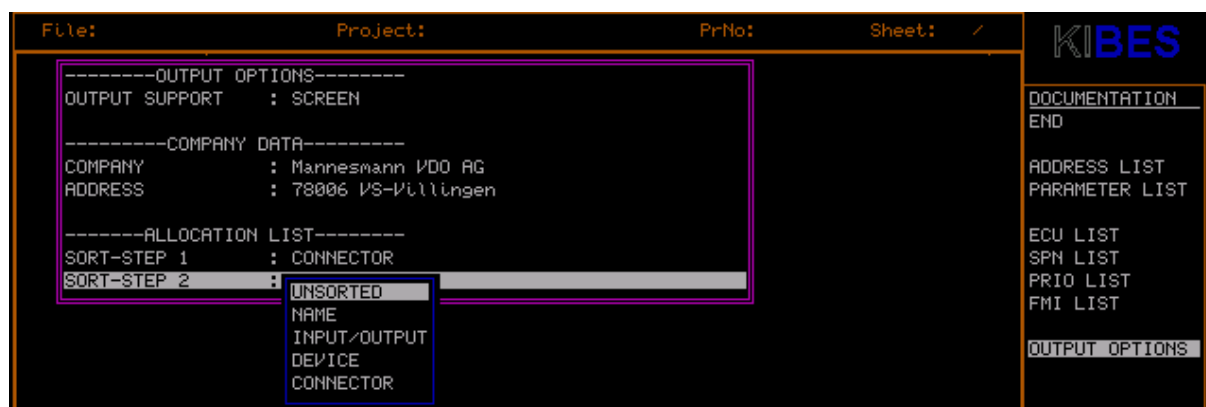
Menu OUTPUT OPTIONS with activated selection menu SORT-LEVEL 2

3.)   Confirm your selection using the Return key in order to exit the input mode.

8   Log book

Use this function to display a list of error messages which have been output so far.

->   This list can contain 50 error messages max.

Selection of the log file:
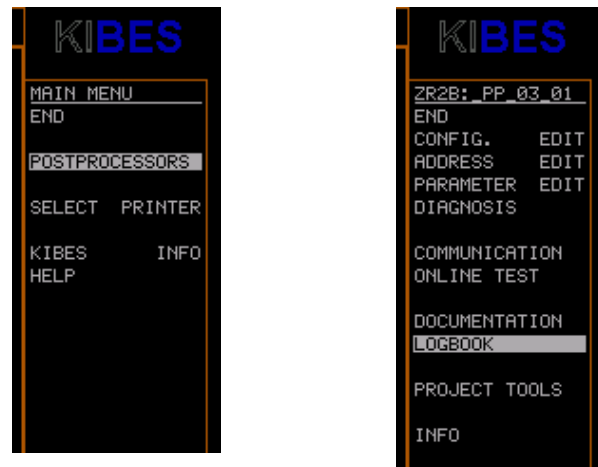
Selection of the log file:

1.)   Select "Post Processor" in the main menu.

2.)   In the following menu click on "Logbook" (log file).

Example for a log file "entry".

9   Project tools

This sub menu consists of functions for saving, restoring and listing all files belonging to a project.

Selection of the project tools
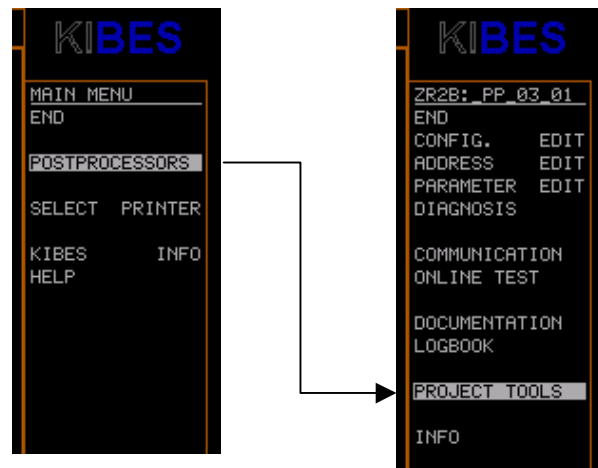
Selection of the project tools:

1.)   Select "Post Processor" in the main menu.

2.)   In the following menu click on "Project Tools".

9.1 Delete complete project

Use this function to delete a complete project with all related files.

Delete a project:
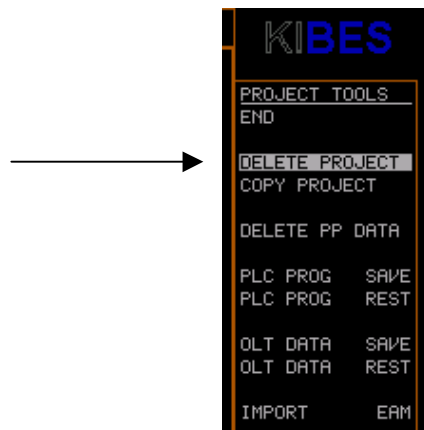
1.)   **Click on the menu item "Delete Project" in the menu "Project Tools".**
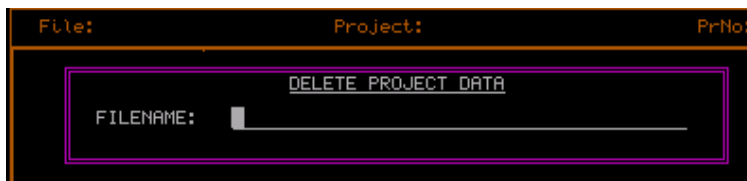
Input menu "Delete Project Data" (delete project files)

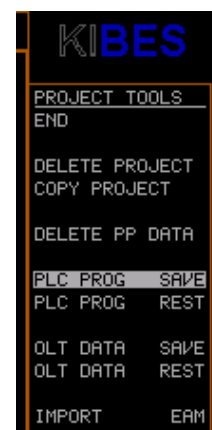**2.)**   **In the following input menu "Projektdateien löschen" enter the name of the project you want to delete.**
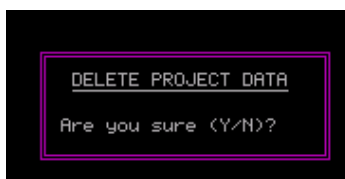
3.)   **In the following context menu confirm the deletion by pressing the "Y" key.**

   Press the "N" key to cancel the deletion.

9.2 Copy complete project

Use this function to copy a complete project with all related files.
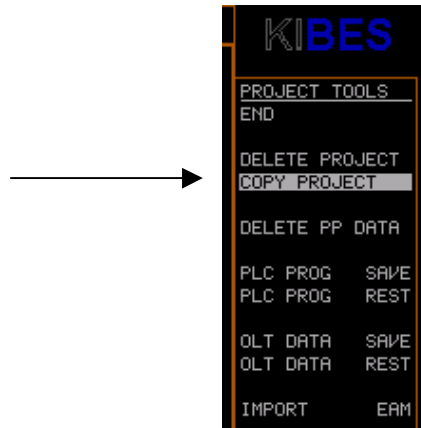
Caution !!

This function is not fully supported in the KIBES Runtime version.

Copy a project:

1.)   Click on the menu item "Copy Project" in the menu "Project Tools".

Input menu:Projekt Source (select source project)

2.)   In the following input menu enter the name of the target project.

The project is saved under this name and copied to the corresponding directories.

Input menu: Target-Projekt Selection (select target project)

9.3 Delete post processor data

This function is used to delete separately the post processor data belonging to a project except the GPS program file.

->   These files are located in the PST directory.

Deleting the post processor related files:
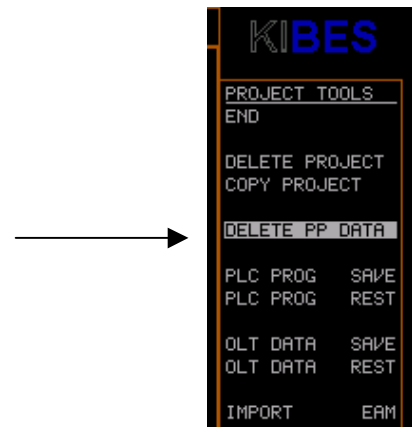
1.)   Click on the menu item "Delete PP Data" in the menu "Project Tools".
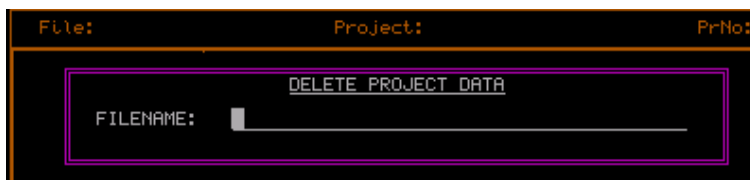
Input menu "Delete Project Data" (delete project files)

2.)   In the following input menu "Projektdateien löschen" enter the name of the project you want to delete.

3.)   In the following context menu confirm the deletion by pressing the "Y" key.

          Press the "N" key to cancel the deleting process.

9.4 Save PLC program

Use this function to copy the PLC file (PRG) of a project. This file is required to perform a download to the central processor.

->   The PRG file of a project is located in the PST directory of KIBES

Saving a PLC program:

1.)   Select "PLC Prog Save" in the menu "Project Tools".

Input menu: Saving PLC Program (save PLC program)

2.)   In the following input menu "Saving PLC Program" enter the name of the PLC program you want to save.
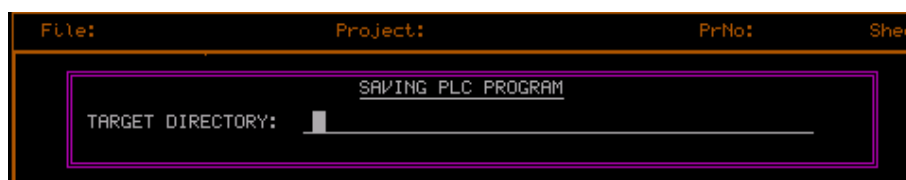
Input menu: Target directory of the PLC program to be saved

3.)   In the following context menu enter the target directory the PLC program should be saved in.

9.5   Restore PLC programs

Use this function to copy the PLC file (PRG) from an external directory to the KIBES directory.

➔   **The PRG file of a project is located in the PST directory of KIBES**
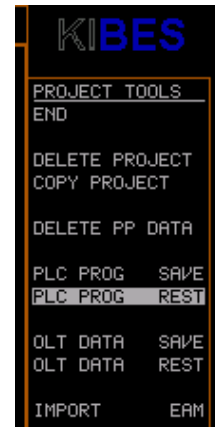
Restoring a PLC program:

1.)   Select "PLC Prog Rest" in the menu "Project Tools".
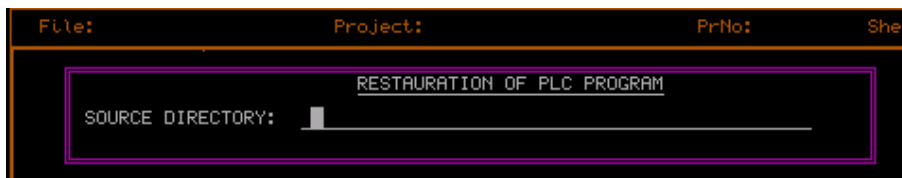
Input menu: Source directory of the project to be restored

2.)   In the following input menu enter the complete path of the project to be restored.

Input of the file name of the project to be restored

3.)   In the following input menu enter the name of the project to be restored.

9.6 Online-Test(OLT)Save online test data (OLT)

Use this function to save the online test related data.

These files are compressed to a ZIP file and saved in the specified directory.
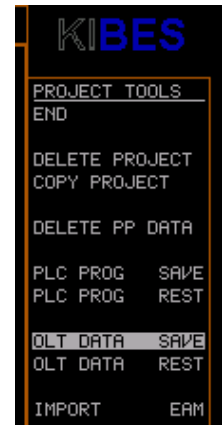
Saving online test data (OLT)

1.)   Select "OLT DATA SAVE" in the menu "Project Tools".
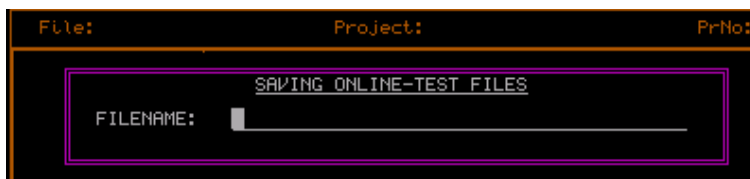
Input menu: Target directory of the online-test file to be saved

**2.)   In the following input menu enter the project name of the PLC program
         you want to save.**
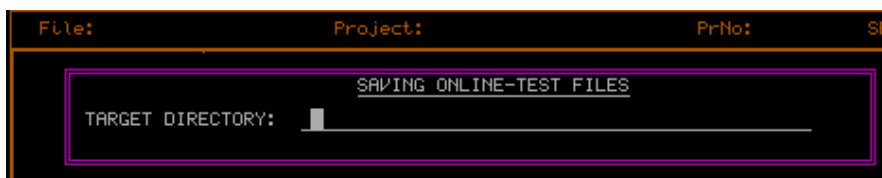
Input menu: Save Online-Test File

**3.)   In the following input menu enter the target directory which the online
         test data will be saved in.**

➔   **These files are saved as a ZIP file !**

9.7 Online-Test(OLT) Restore online test data (OLT)

Use this function to copy the files required for the online test to the KIBES directory.

->   The files may also be in ZIP format.
In this case the ZIP file is extracted automatically.
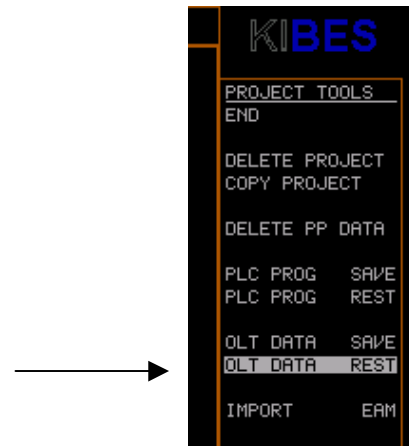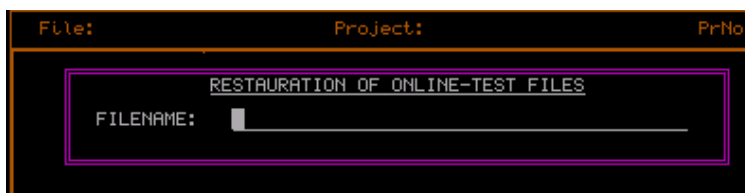

Restoring online test data:

1.)   Select "OLT DATA REST" in the menu "Project Tools".
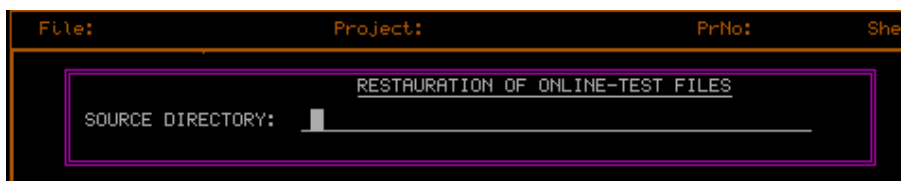
Input menu: Source directory of the online test files to be restored

2.)   In the following input menu enter source directory containing the online test file.

Input menu: File names of the online test file to be restored

3.)   In the following input menu enter the name of the online test file to be restored.

9.8 Import EAM
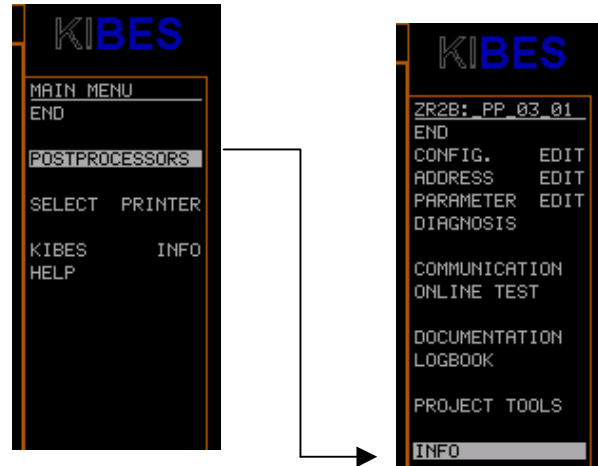
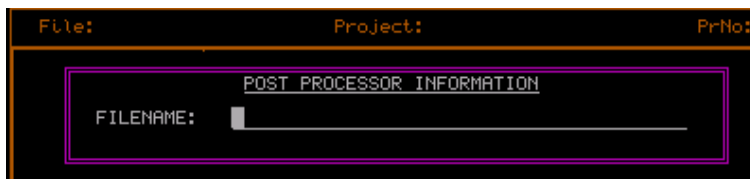**This function is not supported by the KIBES Runtime version.**
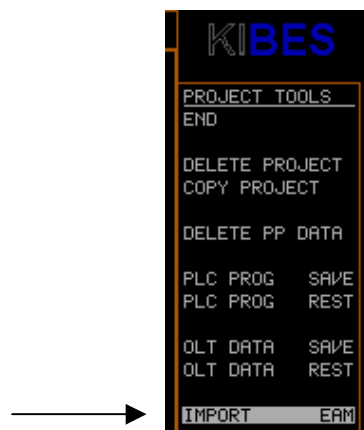
10   Post Processor information page

Selection of the Post Processor information page

Selection of the Post Processor information page:

1.)   Select "Post Processor" in the main menu.

2.)   In the following menu select "Info".

Input of file name

3.)   In the following input menu enter the file name of the project about which you need information.

Post Processor version

Costumer Code:		
PP_	XX	XX
Post Processor Software		Costumer number

Software status:
01_____Converter
02_____KIBES 2N
03_____KIBES 2B with KWP2000

11 Error messages

11.1 Communication errors

➔ **Error description**

➔ **Possible causes**

    Wake up not activated

➔ **Remedies**