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0. General points

This parameterization instruction is subdivided into four chapters:

First chapter

A short introduction into the control unit family ETS 20, its parameters and tools for modifying the parameters. If you don't know the ETS 20 start to read here.

Second chapter

The fundamental possibilities of setting parameters and the most important rules to be observed are mentioned here. You should not skip this chapter.

Third Chapter

Is intended for the user of the manual parameterization device (HAPA).

Fourth chapter

Is intended for the user of the parameterization software PAVIS.

1. Introduction to the ETS 20

Based on the microcontroller 80C166, the ETS 20 offers a customer orientated graduated control concept.

ETS 20 will be installed in all KGD products.

The table in 1.3. shows the components and the combination possibilities within the control unit family.

Depending from the place of installation and beginning with the ETS 20xs, one or more upgrade cards can be added to the basic control unit via the KGD-bus. The allocation of the inputs and outputs to the control functions and messages is done by „parameterization“.

The operating mode of the system is stored in the 80C166 processor program.

The operating mode of the „program“ can be adapted to the current demands by a lot of „parameters“.

It is possible to extend a system before or after its installation / starting in a simple way and at fair conditions.

Future demands can be easily meet by appropriate upgrade cards and/or software extensions.

The „program“ for the installation is safe in case of a black-out and stored in a EPROM (at the ETS 20s) respectively in a flash (at the ETS 20xs + I). The specific data of the installation and the project are also safe in case of a black-out and stored in an EEPROM.

„Turning-on“ loads the „program“ and the „parameters“ into the RAM of the control unit, afterwards the installation is ready for operation.



Important: As a consequence of this large flexibility there are a lot of program versions.

Use only the parameter description fitting to your program

version.

You get the parameter descriptions from us or our service partners.

Parameterization instruction for the ETS 20-family

1.1. Danger advices

Improper modification of parameters can cause dangerous states at the installation.

Parameters may be modified only by experts with the necessary knowledge.

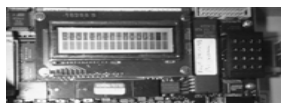
Observe in any case the warning advices of the parameters.

1.2. General view on the ETS 20 - family

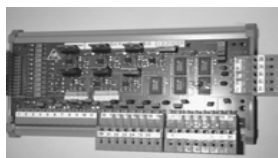
ETS 20s



Power board



MCU-board

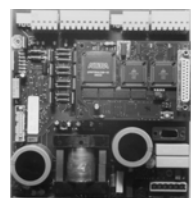


P24V-board



P220V-board

ETS 20xs



ETS 20xs



MCU-board

ETS 20I

-> Layout diagram in preparation

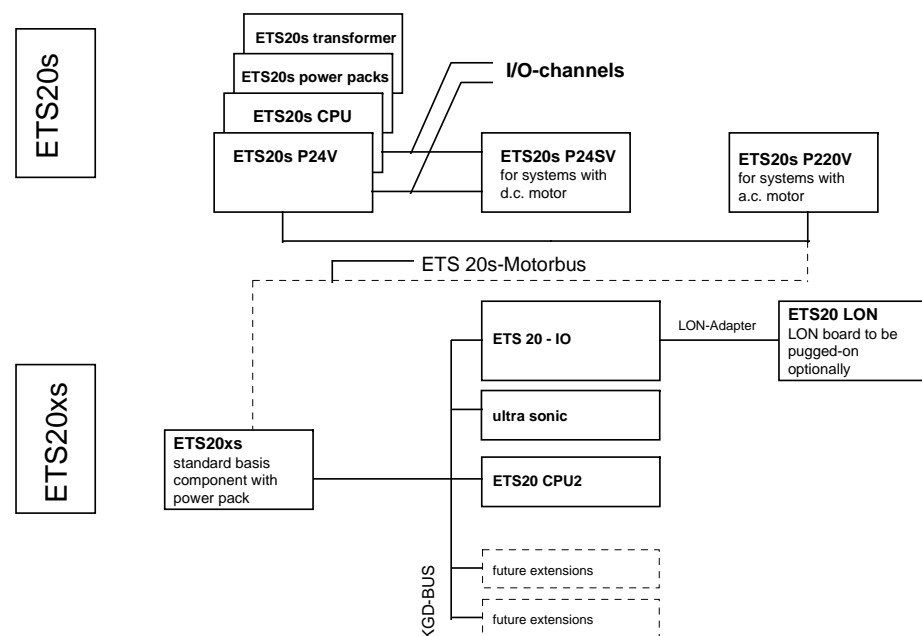
1.3. Range of use of the ETS 20

System	Control unit	Period
Charon RA 50	ETS 20s ETS 20xs	from 1993 - 1996 from 1996 - xxxx
Kerberos SK-EF Kerberos SK-M	ETS 20s	from 1993 - 1995
Kerberos ZB-M	ETS 20s + P24VS ETS 20xs	from 1995 - 1996 from 1996 - xxxx
Argus-Swing Argus-Slide		
Kentaur SK-M Kentaur SK-M Kentaur ZB-M	ETS 20s ETS 20xs ETS 20xs	from 1993 - 1996 from 1996 - xxxx from 1996 - xxxx
Geryon K7-M2 Geryon K8	ETS 20s ETS 20I	from 1994 - xxxx from 1996 - xxxx
Talos	ETS 20I	from 1996 - xxxx
Skylla	ETS 20I	from 1996 - xxxx
Orthos-Swing Orthos-Line		

Parameterization instruction for the ETS 20-family

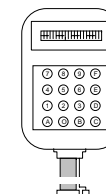


1.4. Combination possibilities within the ETS 20 - family



1.5. Available parameterization tools

1.5.1. Manual parameterization device (HAPA)



Characteristics

The HAPA is a simple parameterization device with a 16 key keyboard (Hexadecimal-keyboard) and a LCD-display with two lines.

A parameter can be displayed and modified by entering a parameter address.

You can control the basic functions via the „Tableaumodus“.

Parameterization instruction for the ETS 20-family



1.5.2. Parameterization program PAVIS for PC

Preconditions for the use:

Standard-PC with

- 80x86 processor
- 570 KB memory disposable
- 5 MB free hard disk storage
- KGD user licence
- Serial connector cable ETS ↔ PC (mouse-extension)
- MS-DOS 6.0 - 6.22

Characteristics

Beyond the functions of the HAPA, PAVIS offers the following possibilities:

- Displaying several parameters on the screen
- Loading model parameter sets for the individual installations
- Storing of the parameter list on a hard disk or diskette in a file
- Entering the project data (customer, installation, project number etc.) to the file mentioned above
- Reading out complete parameter records from the parameter memory
- Reading in program updates without changing the EPROM, beginning with the appliances ETS 20xs or ETS 20l

You can order PAVIS at KGD or one of our service partners.



1.6. ETS-20 parameter classes

**Warning :**

Inappropriate combinations of the parameters listed below causes unforeseen functioning within the system.

**Danger advice:**

Wrongly set parameters can endanger or damage persons. For this reason, a test by a competent expert as defined by accident prevention must be performed before releasing the installation for use.

1.6.1. Key parameters

Defines....

Installation type:	...which installation type is to be controlled (e.g. Kerberos, Charon).
Drive type:	...which drive, admitted to the system, is used.
Characteristics of : the drive motor	...if the number of rotations of the drive motor can be influenced by the user.
Rotation increment:	...the model of the locking element.
Installation model:	...the context between the rotation direction (clockwise, counterclockwise) and the direction of passing (entry/exit).
Behaviour in case of absence of current:	... if the locking mechanism shall keep the system passable or locked.

1.6.2. Entry parameters

Defines...

Channel assignment:	... a physical entry (*2) to a logic entry (*1)
Pulse level inquiry:	... if the logic entry (*1) is waiting for a permanent or a pulse signal.
Range of action:	... the range in which the logic signal (*1) is evaluated
High- or Low active:	... at which state of the external signal (signal existing or not) the logic entry (*1) shall become active.
Storing:	... how much entry signals can be buffered for further processing.

(*1) logic entry -> The entry at the appropriate program function.
(*2) physical entry -> The terminal at a p.c.b. terminal being connected with the desired „logic entry“.

1.6.3. Exit parameters

Defines...

Preallocation on/off:	... if logic exit signals have been allocated to preset signals. This parameter is always valid for a group of following parameters.
Output function number:	... an output function signal of a logic function (*1) which can be allocated to a physical exit by a manual entry.
Actor type:	... the electric limits for a consumer connected to the exit.

(*1) logic function -> A signal generated by the program which can serve as a message or control for an actuator.

1.6.4. Time values

Defines...

Standard allocation:	... if the preset values or customer specific time values are used. This parameter exists only once and is valid for all time parameters.
Time values:	... the period in seconds respectively milliseconds, the set limits must be observed.

Parameterization instruction for the ETS 20-family



1.6.5. Drive parameters

Define...

Start conditions:	... which criteria must be met in addition to a valid release to start the drive.
Start sensitivities:	... how far the locking element in the mode „pushing“ must be moved from the ground position to start the drive.
Motor operation modes:	... behaviour of the drive motors.
Motor torques:	... the torques for the fast and crawling speed.
Eddy current brake operation modes:	... behaviour of the eddy current brake (only ETS 20s).
Eddy current brake torques:	... the brake moments of the eddy current brake (only ETS 20s).
Acceleration angle:	... how fast the drive reaches its maximum speed.
Deceleration angle:	... how fast the drive goes down from its current revolutions to the crawling speed.
Motor fast speed:	... the revolutions of the system at normal operation
Motor-crawl speed:	... the revolutions of the system when positioning to the end position

Eddy threshold value:	... the ratio driving/braking at the deceleration (only ETS 20s)
Motor mode:	... behaviour of the motor.
Eddy deceleration:	... the point where the deceleration function sets in (degrees before end position)

1.6.6. Interface parameters

Defines...

Baud rate:	... at which speed the serial data are transmitted via the RS 485 interface.
Configuration:	... if and in which mode the RS485 interface shall work.

Parameterization instruction for the ETS 20-family



1.6.7. Special parameters

Defines...

Encoder type:	... the modifications in the program to the encoder used	Four wing swing doors:	... which of the four control units is the main control for the wing doors
Number of increments:	... the number of increments in addition to the encoder type	Balance mode:	... if and in which passage direction a weight sensor is controlling the passage
Opening angle swing door:	... how much degrees a swing door may open in entry respectively exit direction (*1).		
Continuous release after restoration of power	... that the appropriate direction will be set to continuous release immediately after „turn-on“.		
Service:	... permanent test functions and ground position adjustment.		
Ground position:	... the functioning of the ground position adjustment.		
Randomiser mode	... if and how randomiser functions are executed		
Randomiser frequency:	... the medium relative selection rate with which releases are filtered from the random function		
Fx_Nachlauf_K7:	... how much an unused release at 180° can be returned to the entry element.		
Modus Freischalten:	... the behaviour in case of the function „release“		

(*1) The swing door knows this position only after having reached once the ground position (after turn-on or reset). When installing from restoration of power or reset, this position is unknown.

2. Principles concerning setting parameters

2.1. General points

Each parameter has been allocated an address to which its value has been stored. You can look at the parameter values and/or overwrite them.



Danger advice:

The system must not be passed during the setting of parameters. Persons or material could be damaged.

2.2. Looking at parameters

Set the control unit to the display mode by means of an appropriate command or download the parameters from the control unit. Select the memory address with the HAPA by entering the parameter address or browse to the parameter address using Pavis.

2.3. Modifying parameters

Set the control unit to the parameter setting mode respectively call the editor. Insert the parameter value at the address. Repeat this procedure for all parameters to be set.

2.4. Rewriting parameters

After having modified the parameters by means of the HAPA, the modifications are immediately at your disposal in the volatile RAM. If you work with PAVIS you must rewrite the complete parameter set from your PC to the volatile RAM of the ETS 20.

2.5. Saving parameters

The data in the volatile RAM are irretrievably lost in case of power failure or switching off the control unit.

Therefore the modified parameters must be written to the non-volatile EEPROM before terminating the modification.



Advice:

Proceed by stages when setting the parameters. Test at first a modified function. After a positive test store this state to a diskette or the non-volatile memory before continuing with modifications

2.6. Loading factory preset parameters

Depending from the key parameters, values preset by the factory can be loaded at the parameter groups where the „Standard is preset to 1“.

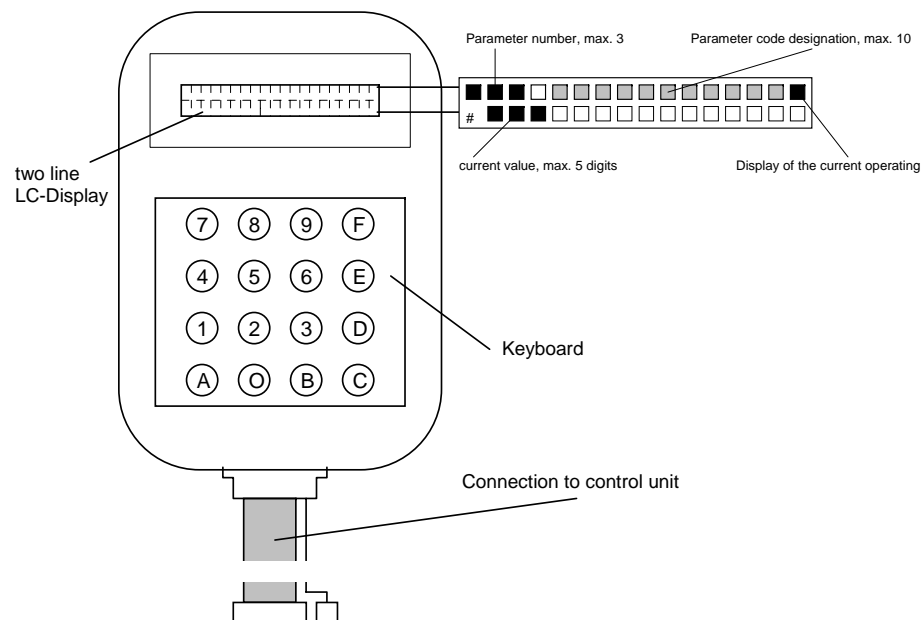


Advice:

After each replacement of a control unit test first the key parameters and the standard settings.
If you have „misparametrized“ a system, load at first the values preset by the factory and begin afterwards with the setting.

3. Working with the HAPA

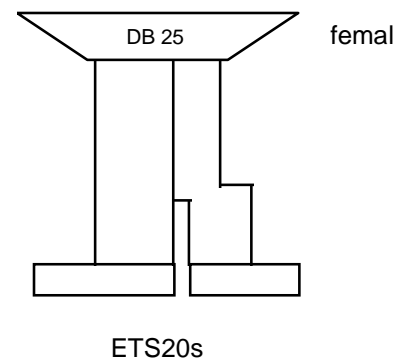
3.1. Layout of the HAPA



3.2. Connector lines of the HAPA

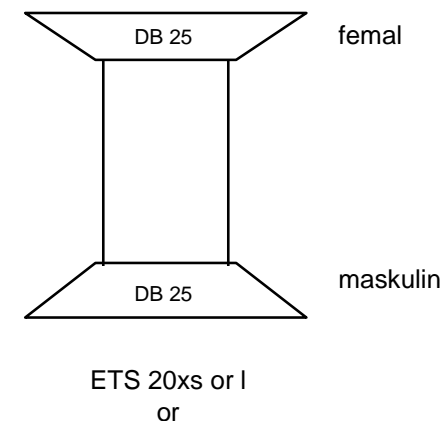
to ETS 20s

connector line
HAPA ↔ ETS 20s
until the end of 1995



to ETS 20xs and I

conector line
HAPA ↔ ETS 20xs
from 1996
with adapter for ETS 20s



**adapter board for
ETS 20s**

ETS 20s

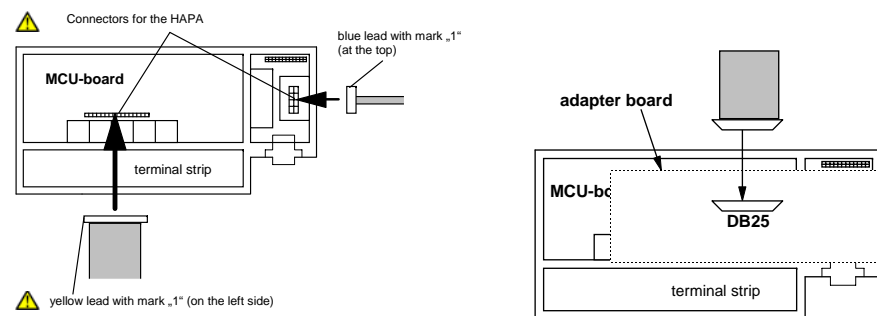
Parameterization instruction for the ETS 20-family



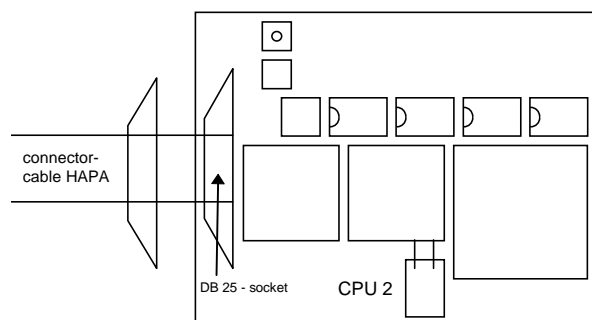
3.3. Connecting the HAPA to the ETS 20 CPU

The HAPA may be connected only in dead state.

3.3.1. Connection to the MCU board of the ETS20s



3.3.2. Connection to the ETS20xs



After having switched-on the following message appears on the display :

(c) 1993 Gallenschütz
V x.y /R x.y

„V“ means version, „R“ means release; „x“ and „y“ increment the software revision.



Pay attention to the fact that the HAPA does not support the software version V2.0 Beta 1 until Beta 5.



Warning:

Pay attention to the line marks in figure 3.3.1 when connecting the old HAPA line to ETS 20s. The pins must be inserted 1:1. Wrong inserting of the pins can cause the destruction of the ETS 20.

3.4. Available modes

Operation mode: Standard mode of the ETS 20, automatically active after switch-on. The system can be OPERATED in this mode.

Display mode: Is called from the operation mode and offers several commands for the DISPLAY of the parameters.

Parameter setting mode: Parameters are MODIFIED in this mode.

Special modes: Are directly called during „power-on“ and pushing simultaneously a key.

Parameterization instruction for the ETS 20-family



3.5. HAPA operation sets

There are commands to be started by a single push to a key and such where you enter a key combination. Compound commands are started by pushing the first key and afterwards the second key.



The keys **MUST NOT BE PUSHED** simultaneously.

3.5.1. Mode-independent commands

Some commands can be activated in any mode. These are:

Display version n° :

E + 1 : Displays the ETS 20 start message and the program version numbers.

Activate tableau mode:

E + 2 : You can activate the current control functions and display the status messages of the functions. The assignment of the keys and the display is shown below.

- 0: EFM Single release centre card reader
- 1: EFE Single release entry
- 2: EFA Single release exit
- 3: Random generator
- 4: DFE Permanent release entry
- 5: DFA Permanent release exit
- 6: Random generator on/off
- 7: BL Blocking
- 8: Freisch Release
- 9: FreiPrio Priority

T	a	b	l	e	a	u	-	M	o	d	u	s		
0	0	0		0	0		0	0	0		0	0		
0	1	2		4	5		7	8	9		6	3		

3.5.2. Operating mode, commands available

E + B : Calling the display mode. As soon as E has been pushed, the HAPA shifts partially to the display mode. If B has been inserted, ETS 20 is in the display mode (enter parameter address)

E + 1 : Display version number

E + 2 : Activate table mode

E + F : Save parameters from the RAM to the permanent parameter memory.

Parameterization instruction for the ETS 20-family



3.5.3. Display mode, available commands

- E : SHIFT-key for compound commands. Terminates the last entering and starts a new one.
- B : Delete last character in the input.
- D : Display next parameter value. Pushing the key D increments respectively decrements the parameter pointer. Shifts from increment to decrement by the key combination E + D. The display shows D+ resp. D-.
- F : ENTER key to confirm the input.
- E + D : Shifts the parameter pointer from increment to decrement and reverse
- E + B : Search for parameter record (enter the parameter class after E + B)
- E + F : Save the parameter to the permanent parameter memory.
- E + C : Call the parameterization mode

3.5.4. Parameterization mode, available commands

- E + C : Call parameterization mode
- F : ENTER key to confirm the input, return to the display mode
- E + F : Parameterization terminated, all parameters are stored into the EEPROM
- E + 0 : Reloads the standard parameters according to the set key parameters
- E + 1 : Displays the version message
- E + 2 : Activate table mode

Parameterization instruction for the ETS 20-family



3.5.5. Special modes, available commands

3.5.5.1. Service mode encoder Mode 1

Keep pushed „1“ during „power-on“:

This mode is effective for all products of the ETS 20 family, but has lost importance at installations with DC drive. Setting the zero index is done according to 3.5.5.2.

In this mode, the holding brake is closed as long as the zero index signal is active. Relay 1 is driven additionally. This relay drops out only ca. 8° after the ground position.

The service mode encoder is terminated by actuating the reset key on the CPU board.

System	Drive unit
Kerberos	SK-EF SK-M; ZB-M
Kentaur and bikeway	SK-M; SK-M DC 1 SK-M1-94.01
Geryon	K7
Charon	RA-50 RA-50 DC 1
Schwenktür	RA-50 RA-50 DC 1 SK-M2 - 94.01 SK-M



Warning:

Relay 1 is usually used for transmitting messages to other systems. Remove in any case the connector line to these systems using this function. Otherwise error messages causing damages could occur.

3.5.5.2. Service mode encoder Mode 2

This mode is effective for all products with DC drive.

Parametrize the parameter value 3000 to the memory location [323]. Put the barrier segment to the physical normal position. Press E + F, the actual encoder value will be saved in a memory location. The memory location [323] is set to „0“. Make a release in entry and exit direction to test the function.

System	Drive unit
Kerberos	ZB-M
Kentaur and bikeway	SK-M DC 1
Charon Schwenktür	RA-50 DC 1

3.5.5.3. Loading basic values

Keep pushed „3“ during „power-on“:

A „basic parameter record“ is loaded from the EPROM to the RAM.

You always need this function if no or foolish values are written to the EEPROM.

Until model 1995, the parameters of a Kerberos with SK-M drive are loaded, from 1996 (ETS 20xs) on the parameters of a Kerberos Basic ZB-M are loaded.

After having loaded the basic values the system activates automatically the operating mode.



Warning:

Please do not forget to save the parameters in the RAM permanently in the parameter memory by entering E + F!

Parameterization instruction for the ETS 20-family



3.5.6. Operating examples

3.5.6.1. Working in the display mode

Push the key combination „E + B“. The display shifts from the operating mode to the display mode and goes to the first parameter record. The following display will appear:

1	0	0		T	y	p							A
#	x	x	x					*					

100 Current parameter number
Typ Parameter abbreviation for the system type
A Display mode
Character for parameter output
x Parameter
* Character for input

3.5.6.2. Setting new parameters

In the display mode call first the parameter to be changed. Push the keys E and C and the system will shift to the parameterization mode. The LC-display shows:

1	0	3		D	r	e	h	t	a	k	t		P
#	x	x	x					*					

103 Current parameter number
Drehtakt Parameter abbreviation for the rotation increment
P Parameterization mode
Character for the parameter output
x Parameter value according to the current parameterization
* Character for the input

3.5.6.3. Adjusting the rotation increment

If you want to modify the setting to a 90° rotation increment, then enter 90 behind the asterisk.

1	0	3		D	r	e	h	t	a	k	t		P
#	1	2	0					*	9	0			

103 Current parameter number
Drehtakt Parameter abbreviation for the rotation increment
P Parameterization mode
#120 Current rotation increment
* Character for the input
90 New parameter setting

Pushing the F key confirms the input. You are now again in the display mode. The modified parameter is now in the RAM. It will be lost after being disconnected from the mains.

Afterwards, the installation is in the display mode.

1	0	3		D	r	e	h	t	a	k	t		A
#	9	0						*					

Pressing the keys E + F transfers the parameter into the EPROM.

Parameterization instruction for the ETS 20-family



4. Working with PAVIS Version 1.0, 1.1, 1.2

4.1. Connecting the ETS 20 to a PC

From April 1996 on (incl. DB9-DB27-Adapter!) the connector lines between the ETS 20 and the PC are part of the delivery.
The connector line is connected at COM1 to the PC; or to the COM2 interface.

4.2. PAVIS basic operating modes

4.2.1. Operating by means of the mouse or the keyboard

PAVIS can be operated by the mouse or the keyboard.

Mouse operating:

Click once the appropriate point to activate the menu point or to confirm a soft key within a window. Windows opened have a square between brackets. Clicking the mouse on this square closes the window.

4.2.2. Handling the keyboard

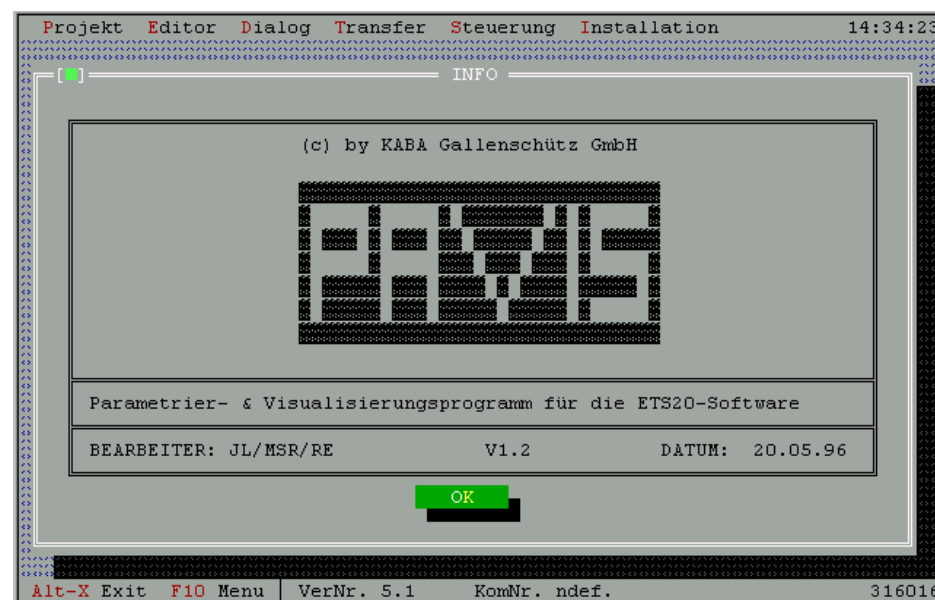
4.2.2.1. Possibilities

All functions and menu points can be reached by short cuts. Some commands can be called directly by pushing one of the function keys F1 -

The F10-key activates the menu bar to select functions. You can use these call possibilities combinedly.



Use a Pavis version \leq V1.1 for ETS 20xs installations with a program version \leq 5.0!



Parameterization instruction for the ETS 20-family

4.2.2.2. Calling by short cuts

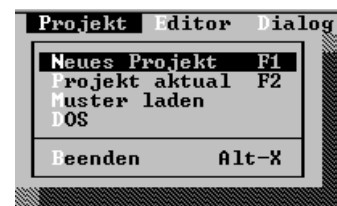
At each selection position within the selection menu, a character (usually the first) is accentuated by colour, inverse or brightly lightening presentation.

Actuating the appropriate key and keeping the „ALT key“ pushed down opens the menu.

Some selection positions have the function keys for the direct calling at their right margin.

You reach the select positions in the same manner.

You close the selection or message windows by actuating the ESC key or activating the appropriate soft key.



4.2.2.3. Calling the menu bar with F10

After having pushed the F10 key, the menu bar is accentuated in the head line. Confirming with RETURN opens the corresponding menu point. Select the desired menu point by means of the arrow keys and call it by confirmation with RETURN.

You can select the individual positions within the option frames or confirmation windows and confirm them by actuating the space bar or the RETURN key.



Parameterization instruction for the ETS 20-family



4.3. Software installation

Preconditions see point 1.5.2.

Insert the installation diskette to drive A.

Installation

Copy the file PAVISxx\$.EXE (xx represents the version number), e. g. the file „PAVIS12\$.EXE“ to the root (the main directory of the drive) e. g. to C:\ using the instruction

```
COPY A:\PAVIS12$.EXE C:\
```

and acknowledge by pressing the [RETURN] key.

If you are not yet in the directory C:\ please change to this directory by taping

CD\ an acknowledge by pressing the [RETURN] key.

Type now

PAVIS12\$ -Y and acknowledge by pressing the [RETURN] key.

The installation will be started.

Type the switch „-Y“ in any case, otherwise you will be inquired at each new directory being created during the PAVIS installation if you really want to create it. In this case, you had to answer always „J“ (=yes).

The directory „PAVIS“ is now installed with all files and subdirectories.

If you have not installed „PAVIS“ on drive C: but on another drive, you must also change the character of the drive in the file „PAVIS.CFG“ at the directory „PAVIS“. You can do this by means of an editor of your choice, e. g. the DOS editor „EDIT“.

After having installed PAVIS, change to the directory „PAVIS“ by typing

CD\PAVIS and acknowledge by pressing the [RETURN] key.

After having typed

PAVIS and acknowledged by pressing the [RETURN] key, the program will be started.

Parameterization instruction for the ETS 20-family



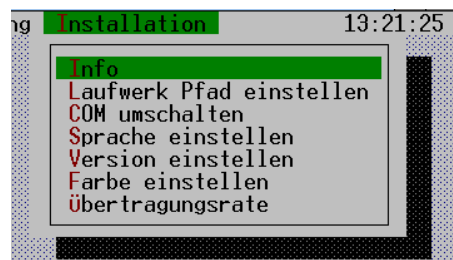
Further proceeding

Open the menu installation in the menu bar by pushing simultaneously ALT + I. The following selection menu will appear:

Pavis versions < 1.2



Pavis versions \geq 1.2



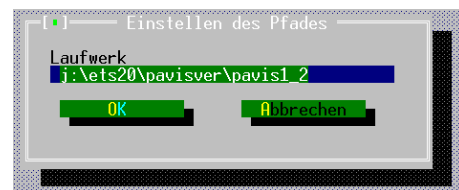
Check by „COM umschalten“ if you have set the proper interface and correct if necessary.

Acknowledge the message window which will open after having terminated the setting by activating „OK“.



If you do not know which interface is available at your device, look at the CPU manual or ask your deliverer.

If you are in possession of a Pavis version \geq 1.2, activate now the menu line „Laufwerk Pfad einstellen“ (= set path at the drive).



Set an eventual different drive respectively path. After terminating by „OK“ no further error messages should occur.

In case of Pavis versions < 1.2 read chapter 4.4. Special Adjustments.

Parameterization instruction for the ETS 20-family



4.3.1. Setting the menu point „language“

You can select German or English by activating the menu point „Sprache auswählen“. Further languages are not yet available. This menu point refers only to the parameter comments. The language of the prompting is always German.

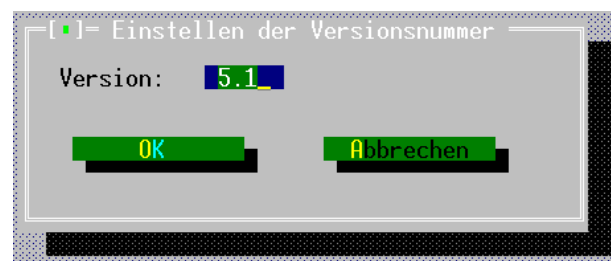


4.3.2. Setting the menu point „version“

You can set the current program version (e.g. 5.1) by activating the menu point „Version einstellen“.



The input must be identical with the version number of the ETS 20. PAVIS can work with the software release 2.0 only from EPROM versions on. Select version 2.0 for the software version 2.0 Beta. You will find the version number on the EPROM sticker or by reading out according to 4.7.4 (reading firmware release)

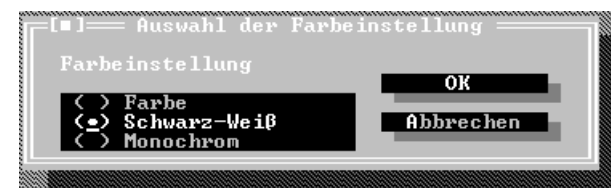


4.3.3. Setting the menu point „colour“

You can select three settings by activating the menu point „Farbe einstellen“:

1: () colour 2: ()black and white 3: () monochrome

Using notebooks with monochrome LCD-Display, test which setting, black and white or monochrome, is the better alternative for your device.

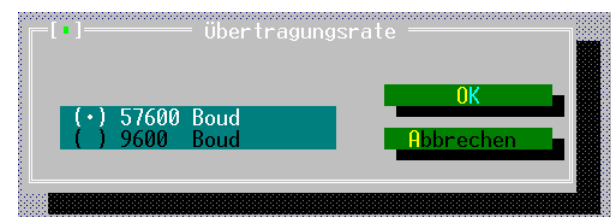


4.3.4. Menu point baud rate (from Pavis V1.2 on)

The data between the PC and ETS 20 are normally interchanged at 9.600 baud. To transfer the program from the PC to ETS 20 (from Pavis V1.2 on) you can switch to a baud rate of 57.600 baud.



In case of an error message during the data transfer with 57.600 baud, transfer again with the lower baud rate.



Parameterization instruction for the ETS 20-family



4.4. Special adjustments

(in case of Pavis versions ≤ 1.2 see chapter 4.3. Further Proceeding)

If you install in another directory or drive than the preset one you must modify the file PAVIS.CFG as described below.

Open PAVIS.CFG by means of an editor and modify the line with the path information according to your requirements.

System files:

PAVIS creates the following directory structure:

...\PAVIS

Here are the program files

...\PAVIS\KUNDEN\VERSION\

Dependent from the version, the project files are stored here by PAVIS.

...\PAVIS\MUSTER\VERSION\

Dependent from the version you find here the model parameters of the individual installation types x.MST

...\PAVIS\TEXTE\VERSION\

You find here the PAVIS user prompting texts according to their versions.

4.5. Update to new PRGM version

You must install new version paths at the paths

```
..\Pavis\Kunden;  
..\Pavis\Texte;  
..\Pavis\Muster  
.. \Pavis\Programme (in case of Pavis  $\geq 1.2$ )
```

Syntax: ::\VERS_n_m

n represents the main version number and m is the digit after the point.

Example: Update to version 5.1

By means of the instruction MD one directory VERS_5_1 each must be created in the files

```
..\Kunden;  
..\Texte  
..\Muster  
..\Programme (in case of Pavis  $\geq 1.2$ )
```

The files Muster will be copied to the directory ..\Muster\VERS_5_1, the prompting will be copied to ..\texte\VERS_5_1.

Pavis saves the program Kunden under Kunden\VERS_5_1.



Please do not forget to set the correct version number in the installation window after having copied the files.

Parameterization instruction for the ETS 20-family



4.6. Presentation of the PAVIS selection menus

Projekt:

Administration of project information.



Editor:

Manipulates and prints existing projects respectively manipulates ETS parameters read-out.



Warning:

The characters # and > in the window of the editor are control characters. These characters must not be modified or used as comment.

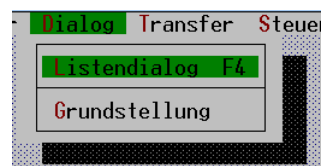
Dialog:

Is a possibility similar to HAPA to modify directly several parameters into the ETS memory.

Pavis Versions < 1.2



Pavis Versions ≥ 1.2



Transfer:

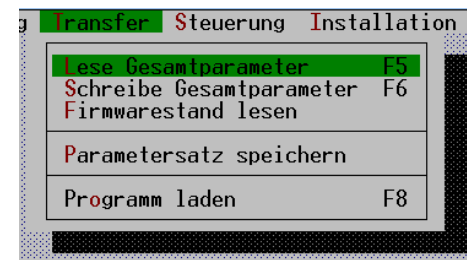
Reads and writes out the parameter list from respectively to a ETS 20 control unit.

Pavis Versions < 1.2



Pavis Versions ≥ 1.2

Writes the program into a ETS 20 control unit (only from Pavis V1.2 on)



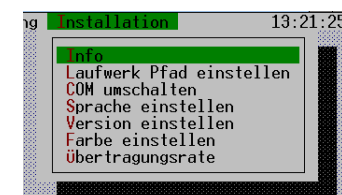
Steuerung:

Offers the most common control functions from the PC.



Installation:

Serves to adapt the PAVIS environment.



[illegible]

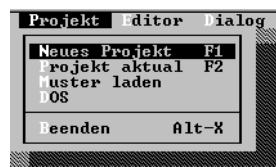
Parameterization instruction for the ETS 20-family

4.7. Interaction of the PAVIS-modules

There are three possibilities to access to the parameter lists.

4.7.1. Create new project

You can create a project specific parameter list via „Projekt“ „Neues Projekt“.



In the window „Erstellung eines neuen Projektes“ the project information is written as comment in the head of the parameter file. Afterwards the window „Musterdatei laden“ will be opened. Select here the model file which fits to your installation. The standard parameter record of your target installation is being loaded to the PC.

After having terminated the loading procedure PAVIS immediately starts the parameter editor. From Address 100 on the model parameters are written to the model files. The parameters between address 50 and 100 are reserved for the ETS version administration and cannot be influenced by PAVIS. The storage location and the name of your parameter file will be presented in the head bar of the editor as follows:

Laufwerk: \...\PAVIS\Kunden\Versionsverzeichnis\Parameterdatei

You save the parameters by „Editor“ „Sichern“ to the file displayed.



Advice:

The contents of the model files with the suffix *.MST is described in the appendix.



Warning:

Having terminated PAVIS without preceding storage will cause data loss.



Parameterization instruction for the ETS 20-family

4.7.2. Reading in a new project from the hard disk

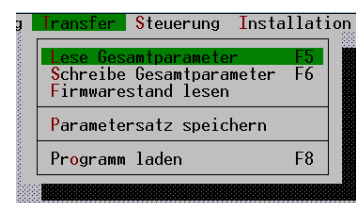
By means of „Editor“ „öffnen“ you can load an existing parameter file and manipulate it. The file name is displayed in the header of the editor in the same way as „Neues Projekt erstellen“.



4.7.3. Reading out a parameter list from an ETS 20

The parameter list in the ETS20-RAM from address 50 on is being read into the PC memory by means of „Transfer“ „Lese Gesamtparameter“.

After having selected this menu point the window „Lese Gesamtparameter“ will be opened. Execute this function via „Start“, abort it via „Abbrechen“.



The parameter list is now into the memory and can be called for manipulation. Select „Projekt“ „Projekt aktuell“ and afterwards „Editor“ „Transferdaten“.

Attention:

In both cases the window „Information“ „Lesen der Gesamtparameter erfolgreich!“ will be displayed. Confirm with „ESC-Taste“ or by clicking „OK“.

The read status bar displays the read status during the reading of the parameter lists.



It can occasionally occur that a window „Warning“ with the information „Lesen der Gesamtparameter noch nicht abgeschlossen“ is spotted. Continue reading with „Yes“, abort with „Cancel“.



Advice:

As far as possible, try to work with parameter lists being read in without this warning.

Parameterization instruction for the ETS 20-family



Advice:

The parameter list on the display presents in the sections „version“ and „revision“ the corresponding data with the version and revision date read out from the control unit.



Warning:

The characters # and > are control characters and must not be modified.

If the parameters 62-65 are also allocated, this means that it is a customer specific program which can behave differently from the standard!

These programs must not be replaced by a standard program without the consultation of the user respectively the person responsible for the installation.

```
projekt Editor Dialog Transfer Steuerung Installation 08:49:08
[ ] D:\PAVIS\PAVIS.TMP [F1]
***** Version 2.0 ETS20-S *****
#50 >2 Versionsnummer, Vorkommastelle
#51 >1 Versionsnummer, Nachkommastelle
#52 >0 Tag
#53 >0 Monat
#54 >0 Jahr
----- Revisionskennzeichen -----
#55 >0 Revisionsnummer, Vorkommastelle
#56 >0 Revisionsnummer, Nachkommastelle
#57 >0 Auftragsnummer
#58 >0 Auftragsnummer
#59 >0 Tag
#60 >0 Mon
#61 >0 Jahr
----- Projektangaben -----
#62 >817 Auftragsnummer
#63 >700 Auftragsnummer
#64 >0 Tag
#65 >0 Mon
#66 >0 Jahr
1:1
Alt-X Exit F10 Menu | VerNr. 2.1 KomNr. 700817 273488
```

Parameterization instruction for the ETS 20-family



4.7.4. Storing parameter lists on the hard disk

Dependent from the way you have called the parameter lists (as project data or transfer data) different storage locations are at your disposal.

4.7.4.1. Storing project data

In the case of project data you find the project information before the actual parameter table.

The designation entered under „Kommissions-Nr.“ will be used as file name. You can enter maximum 8 numbers or characters. PAVIS adds automatically the extension DAT. Select „Editor“ and „Sichern“ for storing.



Advice:

Besides of the hyphen or underline do not use special characters, blanks and mutated vowels in a file name (project-no.)



Storage location

Laufwerk:\...\PAVIS\Kunden\Version\Dateiname.DAT

The drive and the directories depend from their installation.

The version of the directory will be selected according to the „Version“ set by „Installation“.



Parameterization instruction for the ETS 20-family



4.7.4.2. Buffering transfer data

If you select the menu point „sichern“ during the manipulation of transfer data, the temporary file PAVIS.DAT will be stored under

PAVIS/PAVIS.TMP

**Advice:**

Have in mind that this file name cannot be modified and will always be overwritten.

4.7.5. Transferring transfer parameters to a project file

The difference between transfer data and project data lies in the additional project information head in case of the project data.

This additional project information head must be added to the transfer data. Select „Projekt“ and „Neues Projekt“ in the editor window.../PAVIS/PAVIS.TMP

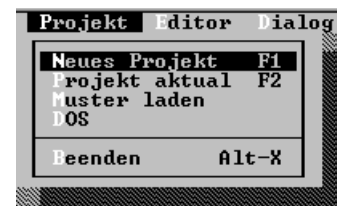
The window „Erstellung eines neuen Projektes“ will be displayed. Fill it out and confirm by „OK“.

Afterwards you are offered to load a model file. You must reject by „Cancel“.

**Warning:**

If you select „OK“, your transfer data will be replaced by the data of the model file in a new „Editorfenster“!

You can write this record to the hard disk by „Editor“ „Speichern“.



4.7.6. Writing parameters to the ETS20-RAM

**Advice:**

Store at first the data in the editor! If the data are not stored, they cannot be transferred to the ETS 20!

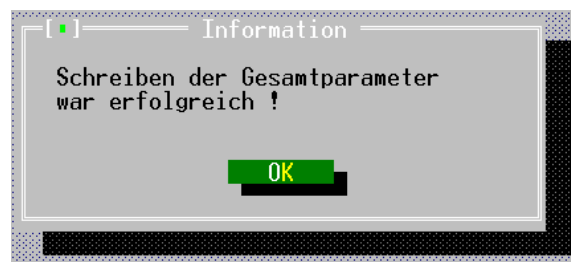
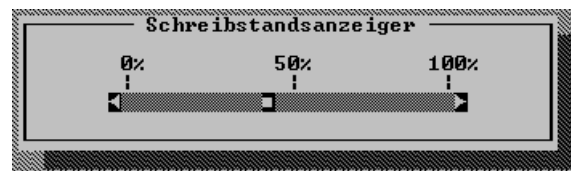
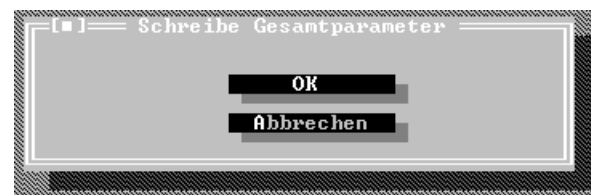
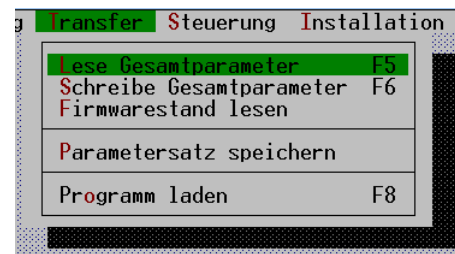
Select „Transfer“ „Schreibe Gesamtparameter“ in the editor window.
The confirming window „Schreibe Gesamtparameter“ will be opened.

Start writing by „OK“, return to the editor by „Abbrechen“ without having written the parameter list.

During writing, the writing status is displayed in the window „Schreibstands-
sanzeiger“

**Advice:**

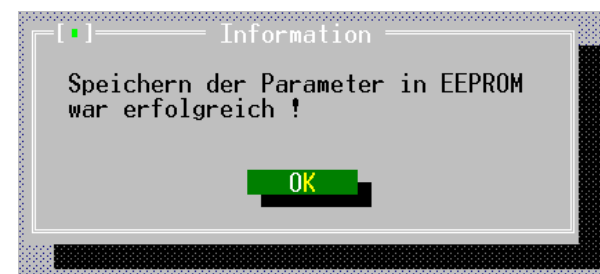
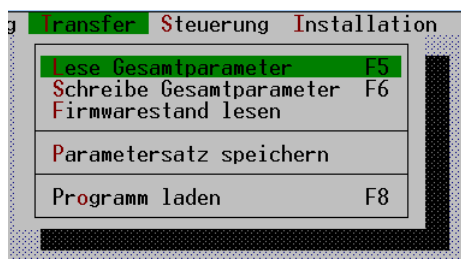
The parameters are now in the volatile ETS20-RAM! They must be saved for permanent storage to the non-volatile parameter memory (EPROM respectively Flash).



Parameterization instruction for the ETS 20-family

4.7.7. Writing a parameter record from the ETS20-RAM to the parameter memory

After their transfer to the ETS20 the modified parameters are always in the RAM and are executed immediately by the control unit. Select „Parametersatz speichern“ in the menu „Transfer“. The confirmation window „Parameter speichern“ will be opened. Start storing by „Start“, return to the editor by „Abbrechen“ without having stored.



4.7.8. Closing the editor window

The active editor window is closed by „Editor“ „Editor schließen“. If parameters have been modified, you can save the data by entering „Yes“ in the information window which is opening now, you can close the editor window without having stored and return to the editor window with „Cancel“



Advice:

Several overlapping windows can be opened.



Warning:

Work only with several windows opened if you are experienced in parameterization!



4.7.9. Printing the editor screen

You can type out the contents of an active editor window to a printer by „Editor“ „Drucken“.

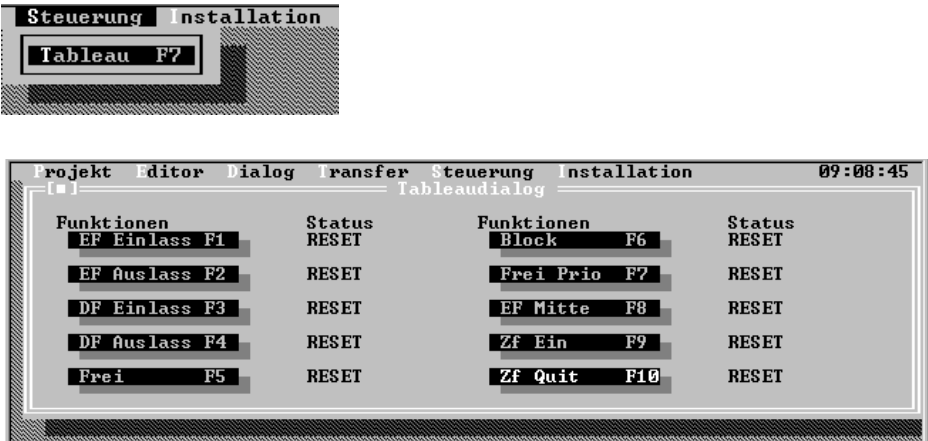


4.8. PAVIS special functions

4.8.1. Table function

Open the window „Tableaualog“ by „Steuerung“ „Tableau“.

Activate the appropriate function by actuating the appropriate function key or clicking with the mouse.
The status will show you if a function is inactive (RESET) or active (SET).
Close the window „Tableaualog“ before activating another function.



Parameterization instruction for the ETS 20-family



4.8.2. Calling DOS

Without closing PAVIS, you can shift to DOS by „Projekt“ „DOS“.
You shift back to PAVIS by entering „EXIT“ at DOS and confirm by. RETURN respectively ENTER.



Advice:

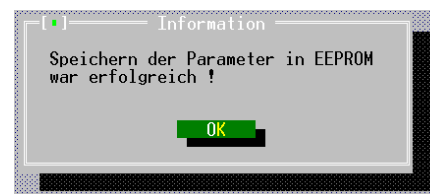
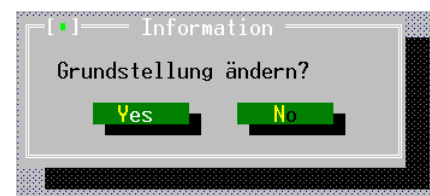
This function has been tested only under DOS 6.22.



4.8.3. Parameterizing directly the rest position

Beginning from Pavis version 1.2 on, the rest position of the installation can be entered by the software.
After having activated the menu line „Dialog“ „Grundstellung“ (=rest position) you are once more inquired if you want really modify the rest position.

If you select „Yes“ another window will open, afterwards the barrier segment can be manually pushed to the rest position to be saved. After acknowledgement by „OK“ respectively RETURN, the information window reports the successful parameterization of the rest position.



Parameterization instruction for the ETS 20-family



4.8.4. Modifying parameters directly in the ETS 20-RAM

Open the list dialogue window by „Dialog“ „Listendialog“. You can modify here individual parameters in the ETS 20-RAM.



Advice:

After a direct modification of parameters in the ETS20-RAM, they must be rewritten to the non-volatile parameter memory.



Warning:

This menu point does not work 100% trouble-free. It should be used only by experienced technicians!

Information for the HAPA user using PAVIS

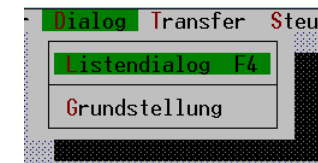
Differently from HAPA, PAVIS does not manipulate the parameters directly on the ETS-CPU-board, but in the memory of the PC

This leads to the fact, that all parameters must be „read“ in the PC before they can be manipulated. After the manipulation, they must be transferred to the memory.

Pavis Versions < 1.2



Pavis Versions ≥ 1.2

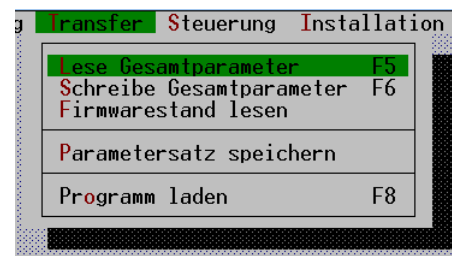


Parameterization instruction for the ETS 20-family



4.8.5. Reading firmware status

The version and revision number of the program version currently stored in the ETS20 is displayed in the window „Softwarestand“. Select first „Transfer“ „Firmwarestand lesen“, afterwards actuate „Start-Fläche“ in the window „Lese Gesamtparameter“.

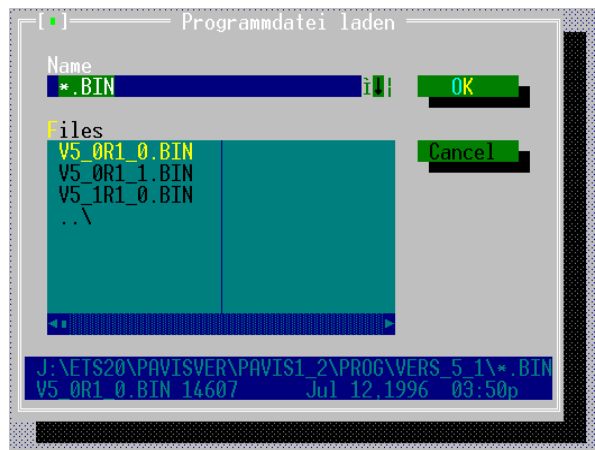


Parameterization instruction for the ETS 20-family

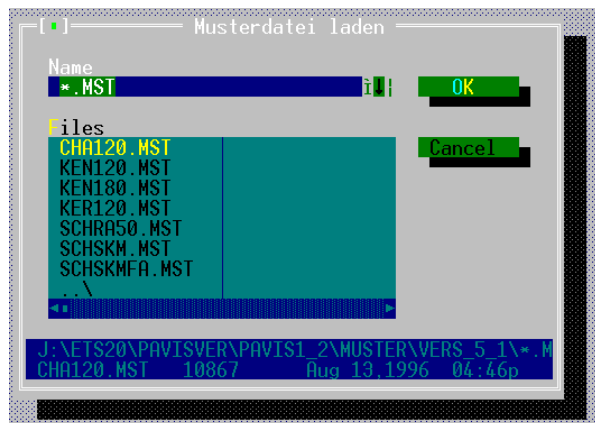


4.8.6. Loading a program (Pavis version 1.2 and higher)

By activating the menu point „Transfer“ „Programm laden“ (Load program) you can select the necessary program file on the window appearing afterwards. If you do not want to load a program file, continue with „Cancel“.



If you have selected a program file, a selection window of the Muster files will appear.



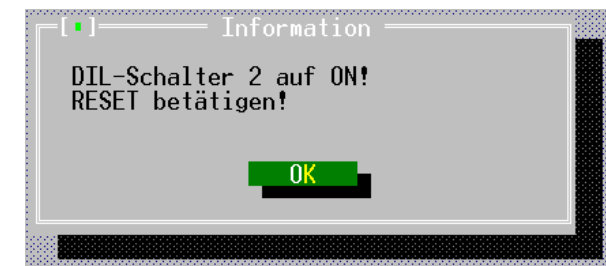
If you want also to transfer a Muster file, select this file here or continue with „Cancel“.

The last window to appear is that showing eventually saved Kunden files, which can also be transferred.

The following information window lists once more the selected files.



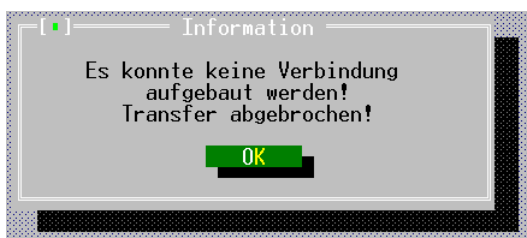
After having continued the procedure with „Yes“, the DIL switch 2 of the CPU board must be set to „ON“ and you must press the return key. The following information window reminds you to do this.



Parameterization instruction for the ETS 20-family

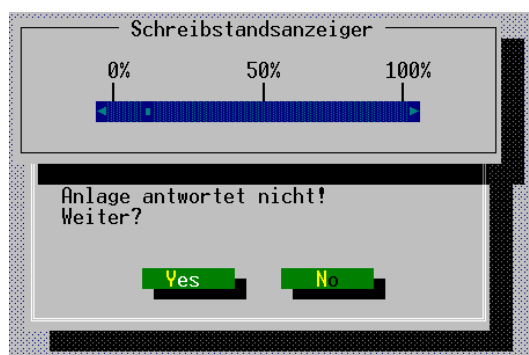


By means of the following write status display you can pursue the transfer.
If the error message „Es konnte keine Verbindung aufgebaut werden“ (connection failure) appears.



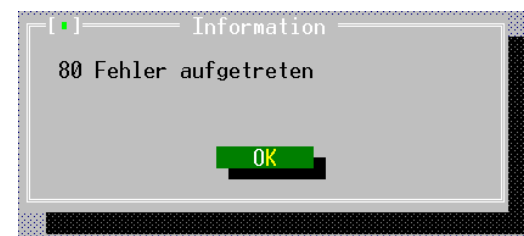
please check if - the DIL 2 switch is at „ON“
- the correct interface has been selected (COM1 or COM2)
- the connection cable PC - ETS 20 has been plugged in correctly at both sides
- the reset key has been pushed

If the error message „Anlage antwortet nicht! Weiter?“ (No response! Continue?) appears



please check the connection cable PC -ETS 20.

If the error message reappears or the information window below appears



and reports transfer errors, please repeat the procedure with a baud rate of 9.600.

If no further error messages occur, set the DIL 2 switch back to „OFF“ and push once more the reset key.



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Version: 10-96 / GO/GD-rsr
Subject to technical modification