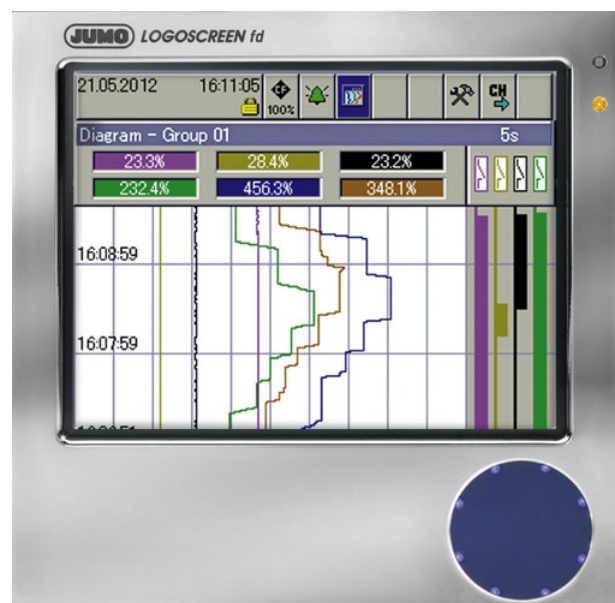


JUMO LOGOSCREEN fd

Secure Data Management and FDA-Compliant Measured Data Recording



B 706585.6
Setup Program



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1.1 Preface

The setup program is used for the easy creation of configuration files, and to configure the instruments from a PC.



Please read these instructions before commissioning the software. Keep the instructions in a place which is accessible to all users at all times.

Please assist us in improving these instructions where necessary.

Your comments will be appreciated.



However, if any difficulties should arise during start-up, please do not carry out any unauthorized manipulations. You could endanger your rights under the instrument warranty!

Please contact the nearest subsidiary or the head office in such a case.

1 Introduction

1.2 Arrangement of the documentation

The documentation for this instrument is addressed to equipment manufacturers (OEMs) and users with appropriate technical expertise. It consists of the following parts:

Instrument documentation in printed form

B 706585.1 Operating Instructions

The operating instructions are an extract from the operating manual and cover the basic operation of the paperless recorder.

B 706585.4(.1) Installation Instructions

The installation instructions describe the installation of the recorder and the connection of the supply and signal cables. The instructions also contain a list of the technical data.

B 706585.4 Installation instructions for recorders with die-cast zinc front

B 706585.4.1 Installation instructions for recorders with stainless steel front

Instrument documentation in the form of PDF files

The “Instrument documentation in the form of PDF files” is on the CD that is included in the delivery.

B 706585.0 Operating Manual

It contains information about commissioning, operation, parameterization and configuration on the instrument.

B 706585.1 Operating Instructions

The operating instructions are an extract from the operating manual and cover the basic operation of the paperless recorder.

B 706585.2.0 Interface Description (serial interfaces)

This provides information on the communication (RS232/RS485) with supervisory systems.

Interface Description (Ethernet interface)

This provides information on the connection of a paperless recorder to a company-internal network. This description is integrated into B 706585.2.0.

B 706585.2.3 Interface Description (PROFIBUS-DP interface)

This provides information on the connection of a paperless recorder to a PROFIBUS-DP system.

B 706585.4(.1) Installation Instructions

The installation instructions describe the installation of the recorder and the connection of the supply and signal cables. The instructions also contain a list of the technical data.

B 706585.4 Installation instructions for recorders with die-cast zinc front

B 706585.4.1 Installation instructions for recorders with stainless steel front

B 706585.6 Setup Program

The manual describes the function of the setup program. The setup program is available as an option.

T 706585 Data Sheet

The data sheet contains general information, the order details and the technical data.

B 709701.0 PC Evaluation Software (PCA3000)

The operating manual describes the operation and the features of the PC Evaluation Software.

PCA3000 serves to visualize and evaluate process data (measurement data, batch data, messages, instrument audit trails, ...). The process data can be read in via the CompactFlash memory card, or made available through the PCC software.

B 709702.0 PCA Communication Software (PCC)

The operating manual describes the operation and the features of the PCA Communication Software.

PCC is responsible for the data transfer from the recorder to a PC, or to a network.

B 709703.0 PC Security Manager Software (PCS)

The operating manual describes the operation and the features of the PC Security Manager Software.

The PCS ensures that only authorized persons can gain access to the system components (instrument, PC software) and use electronic signatures on electronic documents.

The configuration of the Security Manager can only be performed by the system administrator.

1 Introduction

B 709704.0

PC Audit Trail Manager Software (PCAT)

The operating manual describes the operation and the features of the PC Audit Trail Manager Software.

PCAT documents actions performed in the PC software components, which lead to modifications of files, user lists (rights files), device lists etc. The different message types are: "Information", "Warnings" and "Errors".

Audit trail records cannot be modified.



Device audit trail data are not shown in PCAT, only in PCA3000.

Internet



All documents are available for downloading at www.jumo.net

1.3 Typographical Conventions

Warning signs

The signs for **Danger** and **Caution** are used in this manual under the following conditions:

Warning



This symbol is used when there may be **damage to equipment or data** if the instructions are ignored or not followed correctly!

Note signs

Note



This symbol is used when your **special attention** is drawn to a remark.

Reference



This symbol refers to **further information** in other manuals, chapters or sections.

Footnote

abc¹

Footnotes are remarks that **refer to specific points** in the text. Footnotes consist of two parts:

A marker in the text, and the footnote text.


The markers in the text are arranged as continuous superscript numbers.

Action instruction

*

This symbol indicates that an **action to be performed** is described.

The individual steps are marked by this asterisk, e.g.

* Press the  key

* Confirm with 

1 Introduction

Presentation modes

 + 

Keys

Keys are **shown in a box**. Both **symbols and text** are possible. If a key has a multiple function, then the text shown is the one that corresponds to the function **that is active at the moment**.

Edit →
Device data

Menu items

Menu items in the software which are referred to in this operating manual are shown in italics. Menu name, menu item and submenu item are separated from each other by “→”.

1.4 Hardware and software requirements

The following hardware and software requirements must be met to install and operate the setup program:

Minimum configuration

- Intel Pentium¹ 4 or higher
- Microsoft Windows² 2000, Windows XP, Windows Vista, Windows 7 (32-bit and 64-bit version)
- 512 Mbyte main memory
- CD drive
- mouse
- one free serial interface or network connection, or CompactFlash memory cards or USB flash drive (depending on the type of data transmission to the paperless recorder), and
- 700 Mbyte available on hard disk

¹ Intel and Pentium are registered trademarks of Intel Corporation

² Microsoft and Windows are registered trademarks of Microsoft Corporation

The setup software is used for the easy creation of configuration files, and to configure the devices from a PC. It is on a CD, together with the PC software components:

- PC Evaluation Software (PCA3000)
(visualization, evaluation and archiving of process data on the PC),
- PCA Communications Software (PCC)
(transfer of the data from the device to the PC),
- PC Security Manager Software (PCS)
(creation and administration of user lists or PC and device rights files) and
- PC Audit Trail Software (PCAT)
(documentation of operator actions).

2.1 Starting the Installation

Running the installation program

- * Start Microsoft Windows



If Microsoft Windows has already been started, all Windows programs must be shut down before installing the setup program.

- * Insert the CD into the drive, then close the drive.

After the CD has been inserted, the installation program will start automatically. If not, proceed as follows:

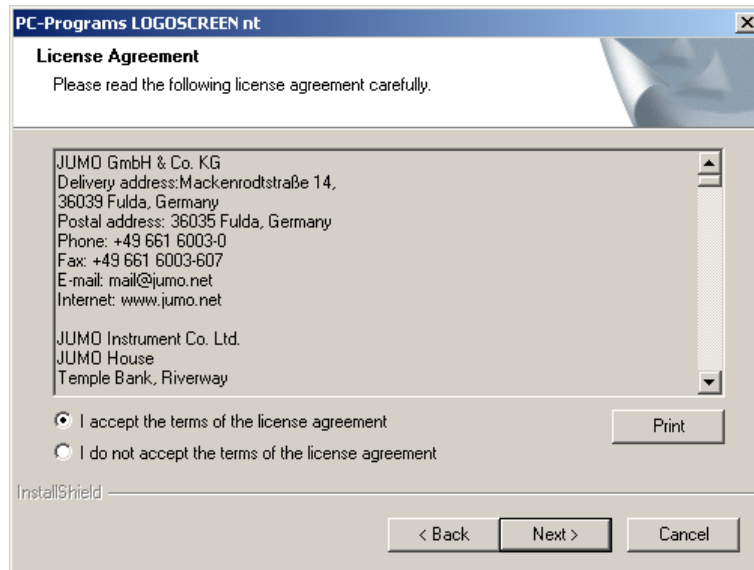
- * Start file "Launch.exe" in the main directory of the CD.

Screen messages from the installation program will now lead you through the rest of the installation.

2 Installation

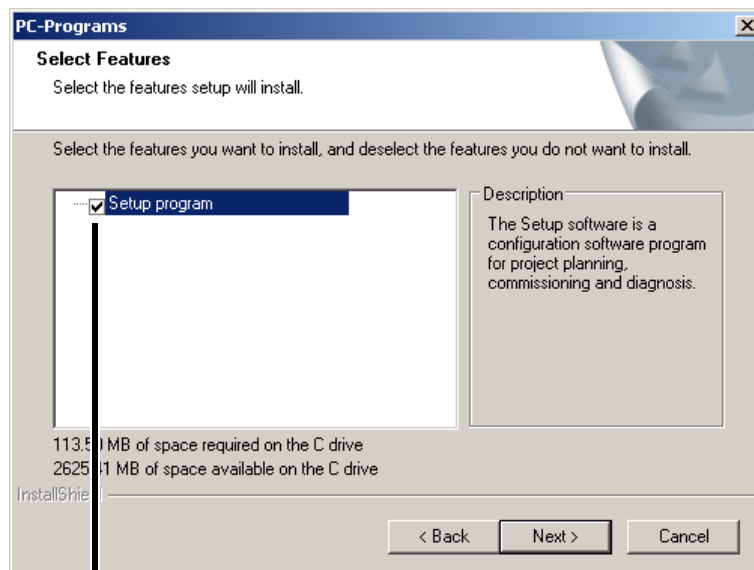
License agreement

- * Read and confirm the license agreement. Accepting the agreement is the basic precondition to be able to install the software.



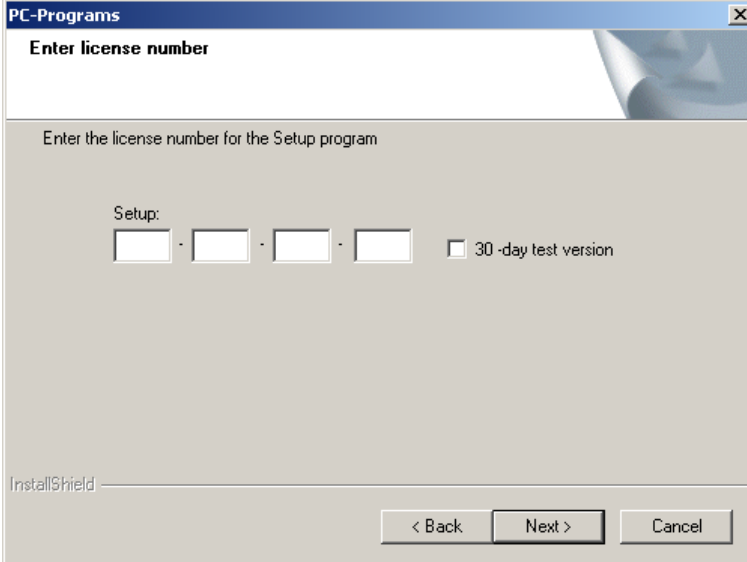
Available software

- * Select the components that need to be installed.



Software that is to be installed must be marked by a tick (☑).

- License number** * Now enter the required license numbers. You can find the numbers on the cover of the CD.



If the "30-day test version" option is set during installation, the setup program will be fully functional for 30 days. After 30 days, certain features of the program, for example data transfer, data storage, and printing, will automatically be disabled.

The software can be licensed at a later stage.

- Program folder** * Define the program folder into which the icons for starting the software will be copied. The directory for the program files is defined automatically.

- Carry out installation** * The final action is to click  to initiate the actual installation.

Preparations for starting the program Before starting the program for the first time, a user list (PC rights file) has to be created using the PC Security Manager Software (PCS) and made accessible to the PC on which the setup software is to run.

⇒ Additional information about the PC Security Manager Software (PCS) can be found in the operating manual B 709703.0.

Program start The selected software components will now be installed. When installation has been completed, start the setup program from the Windows start menu.



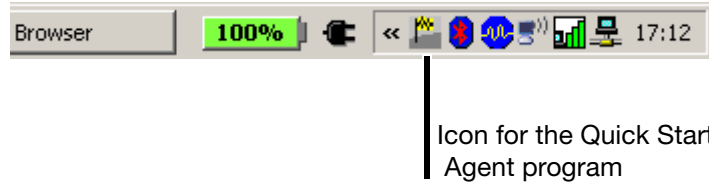
Please note that not all functions are available to all users. Which functions of the setup program are available, can be decided through the PC Security Manager Software (PCS).

2 Installation

2.2 Quick Start Agent

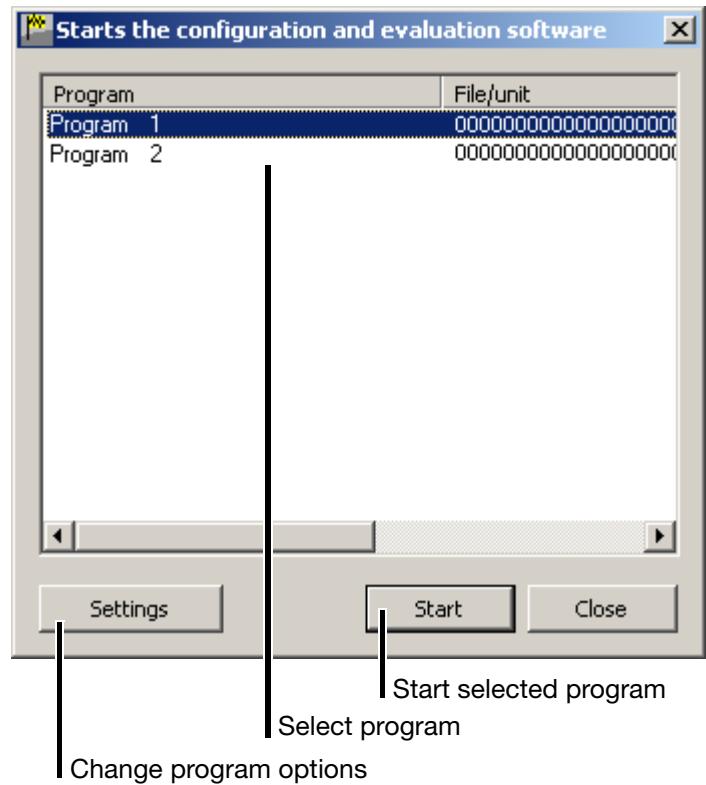
Installation

When the installation setup program is installed, another program called the "Quick Start Agent" is installed. This program starts automatically and appears in the Windows task bar.



Automatic program start

This program monitors the exchangeable media of a computer and responds, for example, if a paperless recorder or USB memory stick is connected to the computer. It provides a list of all PC programs connected to the device that was found. The user can decide which PC program to start. If only program is available, it starts immediately.



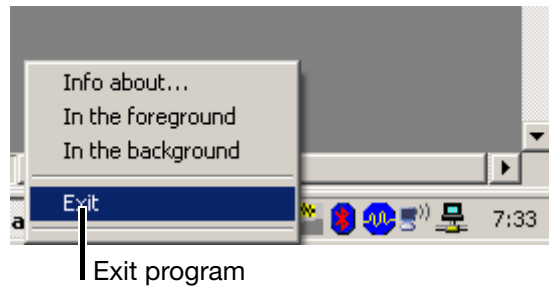
Settings

The user can change the program options with the button. The program options are:

- Language of the program,
- Selection of programs that can be started, and
- the option of preventing Autostart.

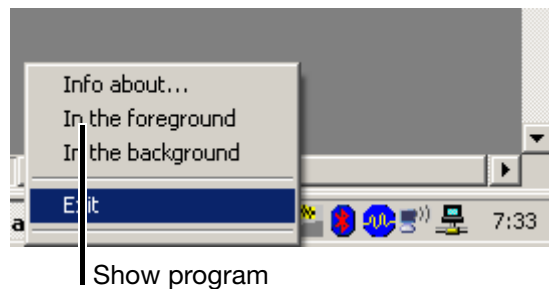
Exit program

To exit the program, the user can left- or right-click the program icon (🔌) in the Windows task bar.



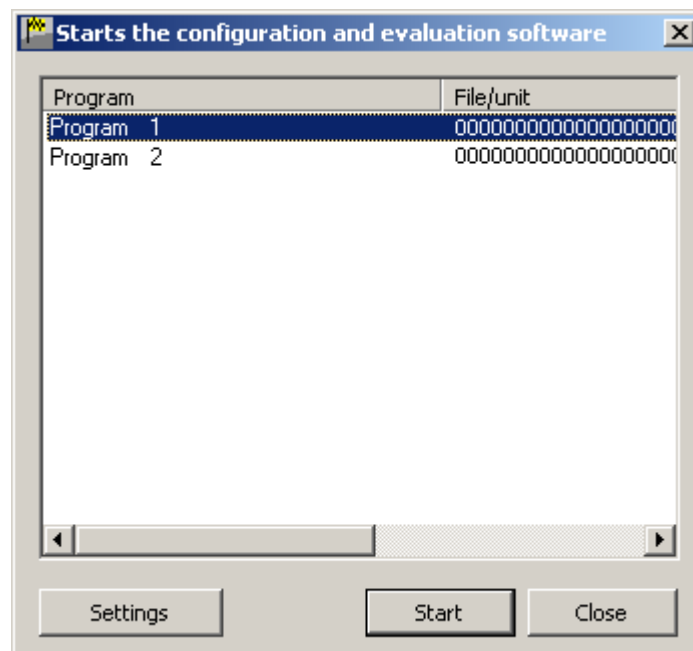
Manual program start

To exit the program in the foreground, the user can left- or right-click the program icon (🔌) in the Windows task bar.



If Autostart is inactive, i.e. the program icon is not included in the task bar, it can be started manually through the Windows start menu. The Quick Start Agent can be found in the same program group in which the setup program was installed.

Program in foreground



The picture shows the Quick Start Agent as it appears in the foreground.

2 Installation

3.1 Logging in to the Program

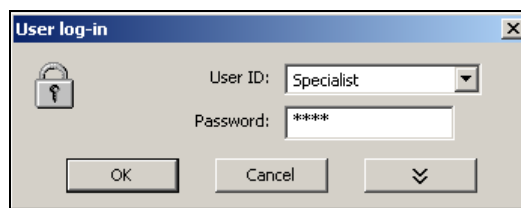
When the software has just been installed for the first time, there will not yet be a prompt for the user name and password. In the *Tools* menu, the prompt at the start of the program can be activated by the function *Renew log-in/Alter password*.

The activation of the log-in function can be used to distinguish between the user types "Specialist" and "Maintenance". These two users have different access rights with regard to the functions in the setup program.

⇒ Chapter 8.11 "Renew Log-in/Alter Password"

If the prompt is active, proceed as follows:

* Log in.



Please note that not all functions are available to all users.

⇒ Chapter 3.2 "Rights with Regard to the Setup Program"

3 Log-in and Rights

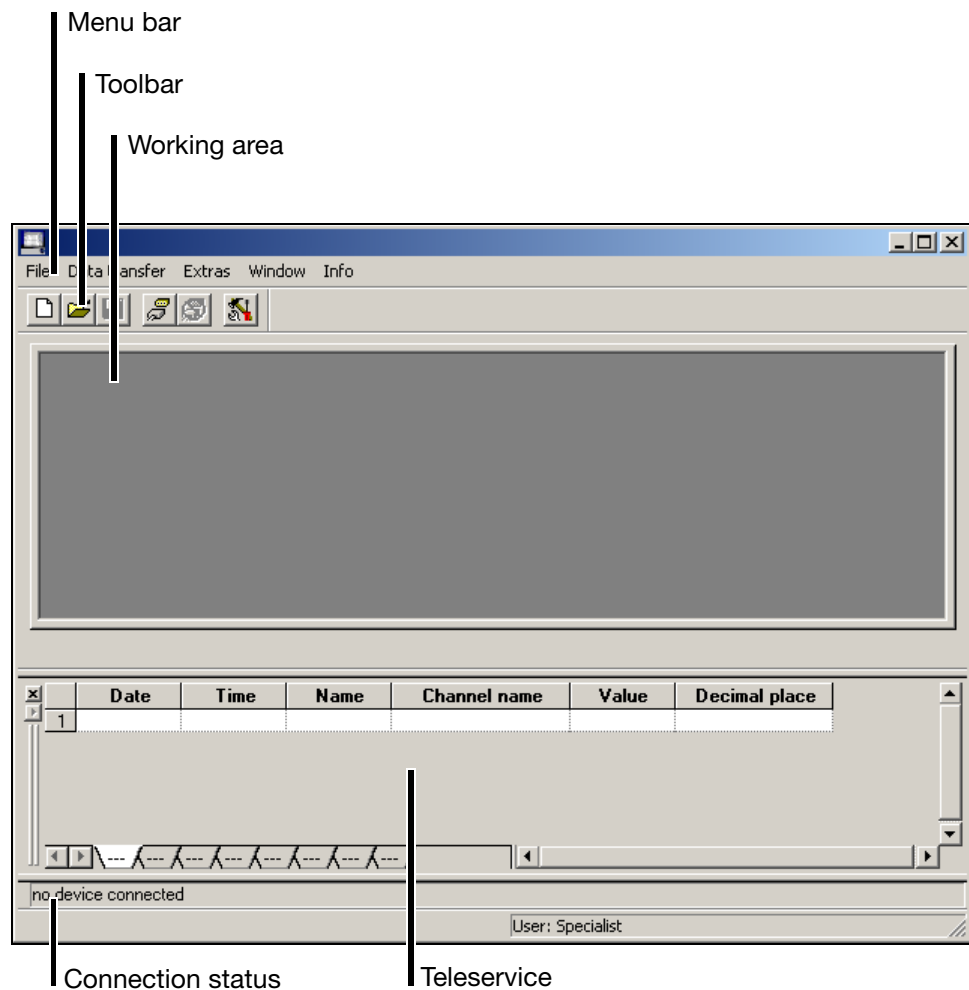
3.2 Rights with Regard to the Setup Program

Depending on the installation and the log-in, individual users will have different rights within the setup program.

The differences are summarized in the table below:

Right	Demo installation	Main-tenance	Specialist
Write interface texts	-	x	x
New	x	x	x
Open	x	x	x
Save, Save as, Delete	-	x	x
Configure undocumented parameters	-	-	x
Export to CF card or USB stick	-	x	x
Import from CF card or USB stick	-	x	x
Print	-	x	x
Enable program options	x	-	x
Enable extra codes	-	-	x
Edit interface settings	-	x	x
Edit device settings	x	x	x
Delete device	-	-	x
Create new device	x	-	x
x = right is available - = right is not available			

4.1 Elements of the User Interface



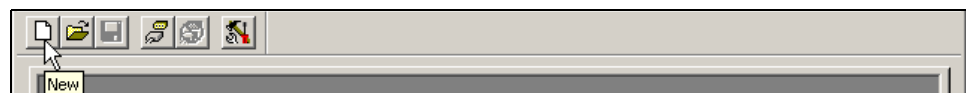
Menu bar

The individual functions of the setup program can be started by using the menu bar.

⇒ Chapter 5 "File Menu"

Toolbar

The toolbar contains selected functions from the menu bar. They can be started from the left mouse button. If you rest the mouse pointer on one of the icons (tool tips), you will see the function title after a short while.



4 User Interface

Moving the toolbar

The position of the toolbar can be changed if desired.

- * Move the mouse pointer between two icon groups.



- * Click (press the left mouse button).
- * Keeping the left mouse button pressed and drag the symbol bar to the required position.
- * Now release the mouse button.



Possible positions are:

- the left or right window border (vertical orientation),
- below the menu bar (horizontal orientation),
- at the bottom edge, above the user details (horizontal orientation) or
- any position (in own window - horizontal orientation).

Working area

Here you are provided with an overview of the current settings of a configuration file.

⇒ Chapter 4.2 "Configuration"

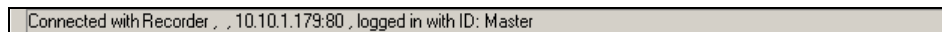
Connection status

In the "Connection status" line you can check whether a connection to a device has been established, and which interface data are being used. The line can be shown or hidden with *Window* → *Connection status*.

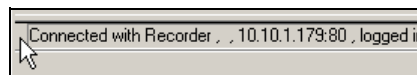
Example: No connection



Example: Connection to a device



The line can be moved (like the toolbar). In order for the shift to work, first position the mouse pointer on the icon, then press the left mouse button.



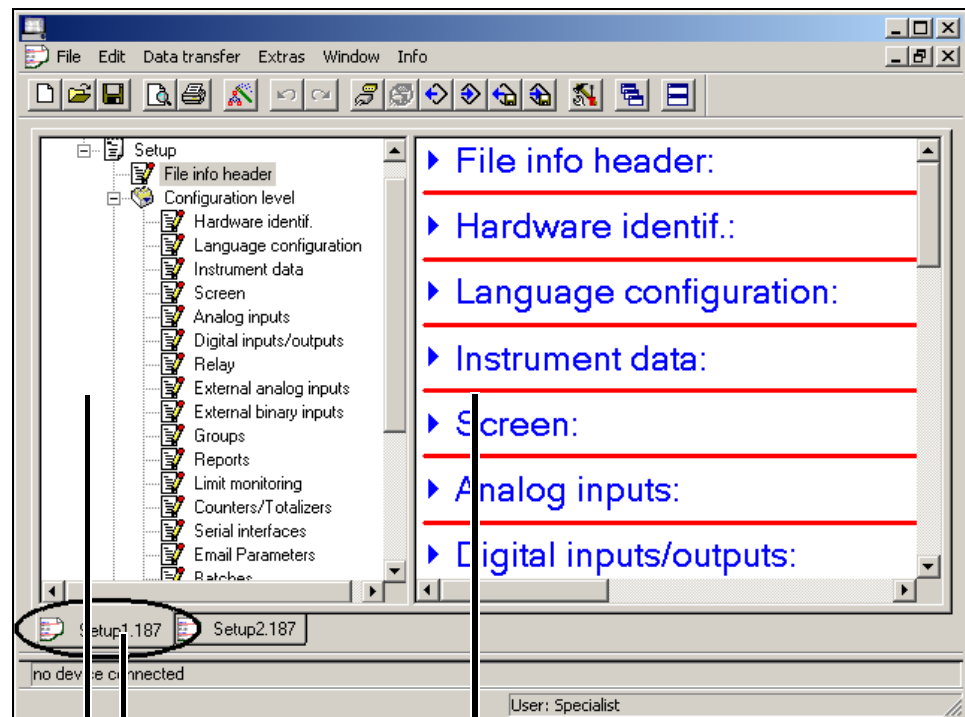
Teleservice

You can use Teleservice to look at the latest data from a paperless recorder. Teleservice can be shown or hidden with function *Window* → *Teleservice*.

⇒ Chapter 9.4 "Teleservice"

4.2 Configuration

You can use function *File* → *New* (or *File* → *Open*) to create a new configuration file (setup) or open an already existing one. The working area will be filled in with the corresponding settings.



Current setup

Navigation tree, for finding the settings quickly

Dialog window
The settings appear here.

Navigation tree Clicking once in the navigation tree will position the entry so it is visible in the dialog window.

Click to reduce the size of the display; click to enlarge the display again.

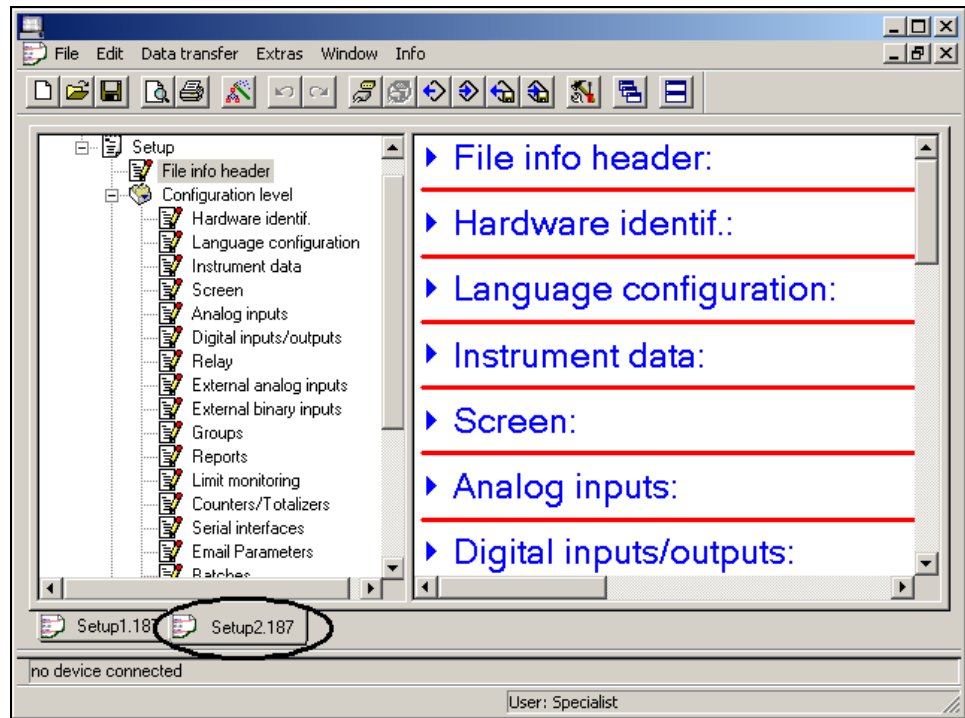
You can double-click an entry (e.g. Instrument da) to start the change dialog. As an alternative, a change can be started via the menu bar (*Edit* → *Device data*).

Dialog window To launch the change dialog, double-click an entry in the dialog window. Click “Arrow to right” (▶) before the entry to list the current setting in the dialog window; click “Arrow down” (▼) to hide the current setting again.

Current setup If several setup settings are open at the same time, simply clicking the name is sufficient to ...

4 User Interface

... make that window become the active window.

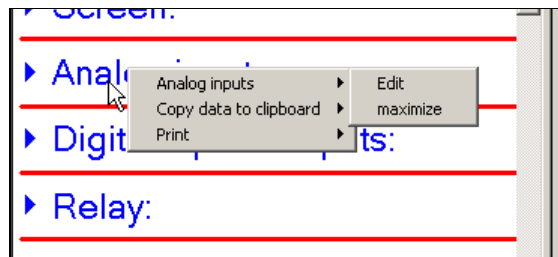


Functions of the right mouse button

If you use the right mouse button in the dialog window, different functions will be available. These functions are related to the submenu on which the mouse pointer was positioned when you right clicked.

Example:

You right clicked when the mouse was positioned on the entry “Analog inputs”.



Analog inputs → Edit

This function starts the change dialog for configuring the analog inputs. Configuring can also be started by double-clicking (with the left mouse button).

Analog inputs → Maximize

This function displays the current configuration of the analog inputs. As an alternative, the current configuration can also be displayed by clicking (left mouse button) “Arrow to right” (▶).

Copy data to clipboard → Analog inputs

This function copies the current configuration of the analog inputs to the Windows clipboard. The contents of the clipboard can be imported into an editor or a text processing program, etc.

Copy data to clipboard → All data

This function copies the complete current configuration – not just that for the analog inputs – to the Windows clipboard. The contents of the clipboard can be imported into an editor or a text processing program, etc.

Print

This function enables the printout of the latest setting. You can select which parameter groups are printed out, and which are not. Alternatively, the printout can also be performed via the *File* menu.

4 User Interface

5.1 New

This opens a new setup in the working area. The values will be preloaded with the factory (default) settings.

After calling up this function, the user must first enter the hardware information for the instrument. The operation corresponds to the menu function *Edit* → *Hardware identifier* and is described in Chapter 6.4.

5.2 Open

Opens an existing setup from a file, and present the contents in the working area.

5.3 Save

Saves the setup that is shown in the working area to a file. It is only necessary to enter the file name once. If the file is saved again, no query is made about the file name.

5.4 Save as

Saves the setup that is shown in the working area to a file. Unlike the *Save* function, this always asks for a file name.

5.5 Close

Removes a complete setup from the working area. If changes have not yet been saved, this can still be done immediately after calling up the *Close* function.

5.6 Delete

Deletes a file from a hard disk or another data storage medium.



The deletion of files is irreversible.

5.7 Export as RTF text

The current setup can be saved as an RTF file on the PC.

5.8 Print

After calling up the function, the selection of what is to be printed is made next. Printing will start when the selection has been concluded.

5 File Menu

5.9 Print preview

The printed result is displayed on the screen. You can let several pages be displayed, and alter the size of the pages on the screen.

5.10 Printer setup

Here you can make alterations to the settings for your printer. When the program starts, the Windows default printer will always be set as the active printer.

5.11 Default settings

Here you can make alterations to the default settings for the program. Many alterations will not take effect until the setup program has been restarted.

5.12 Exit

This closes the setup program.

6.1 Undo

This undoes the last editing action. In the menu, the *Undo* item shows which setting will be undone.

6.2 Restore

The *Restore* function is only available when the *Undo* function has been activated. This function repeats the setting that was previously canceled by the *Undo* function.

6.3 Hardware ID ... Process images

Each function has the same effect as double-clicking the corresponding function in the dialog window.

- ▶ Hardware identif.:
- ▶ Language configuration:
- ▶ Device data:
- ▶ Screen:
- ▶ Analog inputs:
- ▶ Binary inputs/outputs:
- ▶ Relay:
 - ▶ :
 - ▶ :
 - ▶ :
- ▶ Undocumented parameters:
- ▶ Customized Lin Tab.:
- ▶ Math:
- ▶ Logic:
- ▶ Batch text:
- ▶ Profibus:
- ▶ Web server:
- ▶ Process images:



These instructions describe just those parameters that can only be configured through the setup program, and not on the instrument.

The description of parameters that can also be configured on the instrument can be found in the operating manual B 706585.0.

The following table provides an overview of the parameters that can be altered by the user:

6 Edit Menu

Parameter	Configurable through the setup program	Configurable on the instrument
Hardware ID	x	-
Country settings	x	_1
Device data	x	x ²
Screen	x	x
Analog inputs	x	x
Binary inputs/outputs	x	x
Relays	x	x
Ext. analog inputs	x	x
Ext. binary inputs	x	x
Groups	x	x
Reports	x	x
Limit monitoring	x	x
Counters/integrators	x	x
Serial interface	x	x
Ethernet e-mail parameters	x	-
Batches/Plants	x	x
Date and Time	x	x
Undocumented parameters	x	x
Customized linearization	x	-
Math	x	-
Logic	x	-
Batch text	x	-
Profibus	x	x
Web server	x	-
Process images	x	-
Setup data info (File info header and file info text)	x	-
x = editable, - = not editable		

¹ On the instrument, you can choose between two operating languages

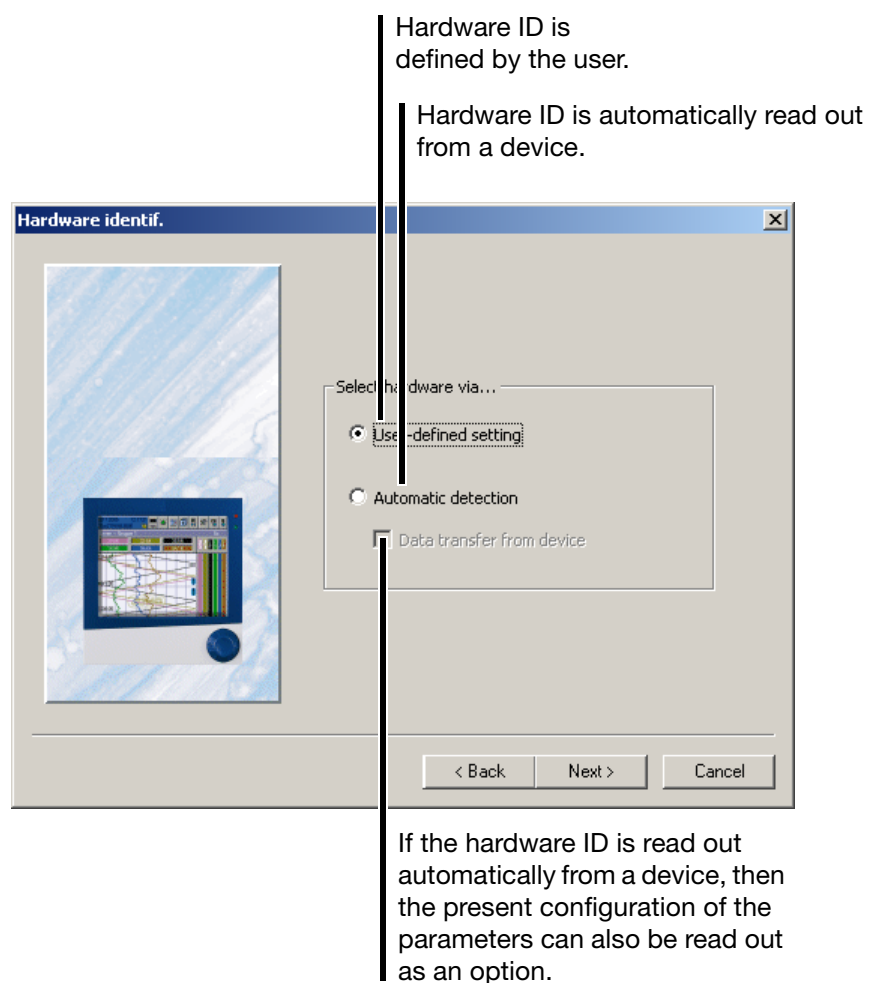
² The general device data can be configured on the instrument, but not the parameter Setup info (device data info).

6.4 Hardware ID

This function performs the adaptation of the setup program to the hardware and extra codes in the instrument. The instrument has three plug-in module slots, which can have different assignments. The following are available:

- Analog input card with 6 analog inputs
- Combination I/O card with 3 analog inputs and 8 binary inputs/outputs
- Relay card with 6 relays.

The exact assignment can be determined by comparing the nameplate (attached to the instrument) and the type designation (see the installation instructions).

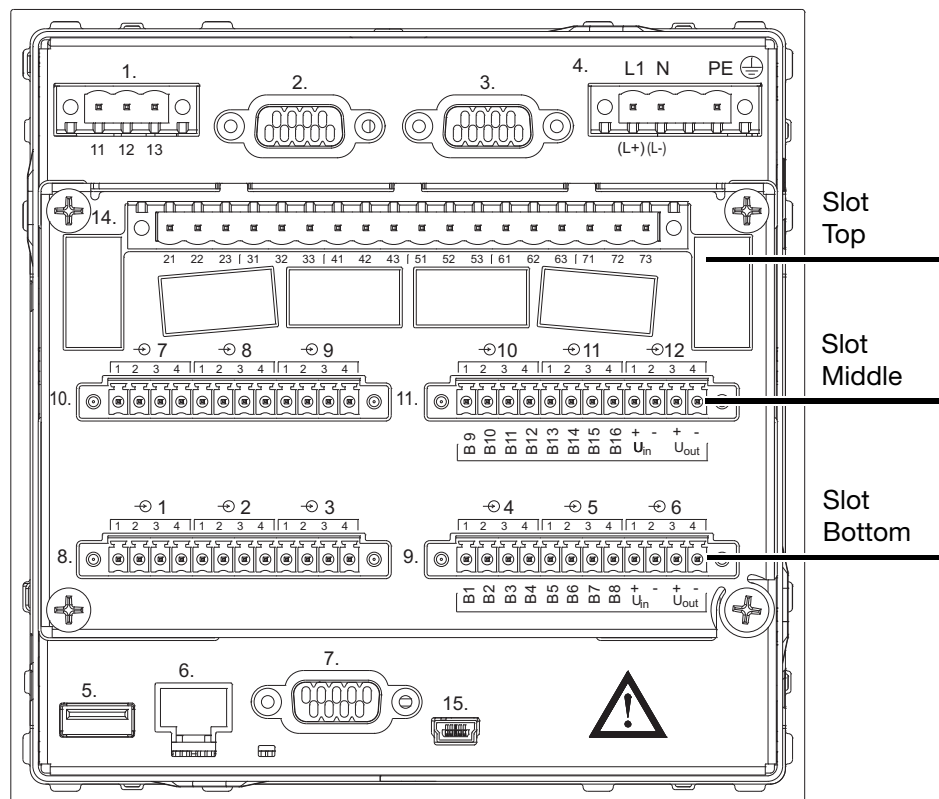
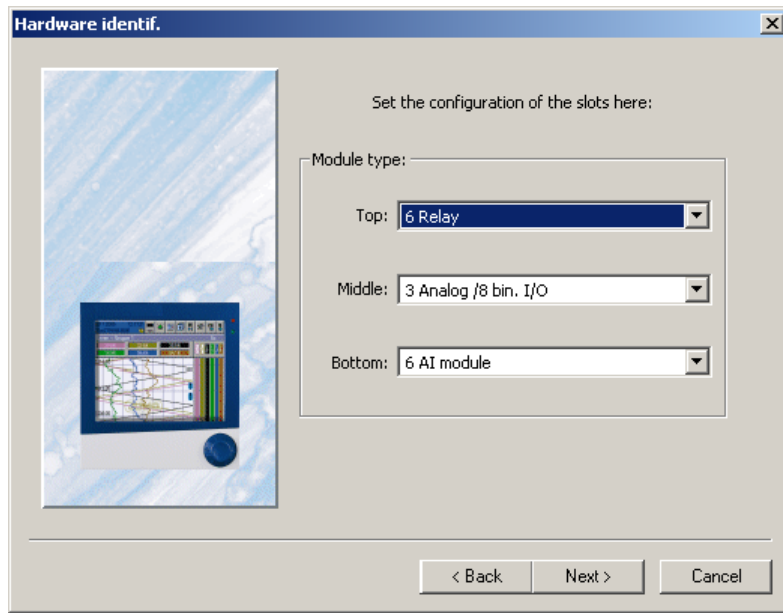


- * Choose how the hardware ID will be determined and then click **Next >**.

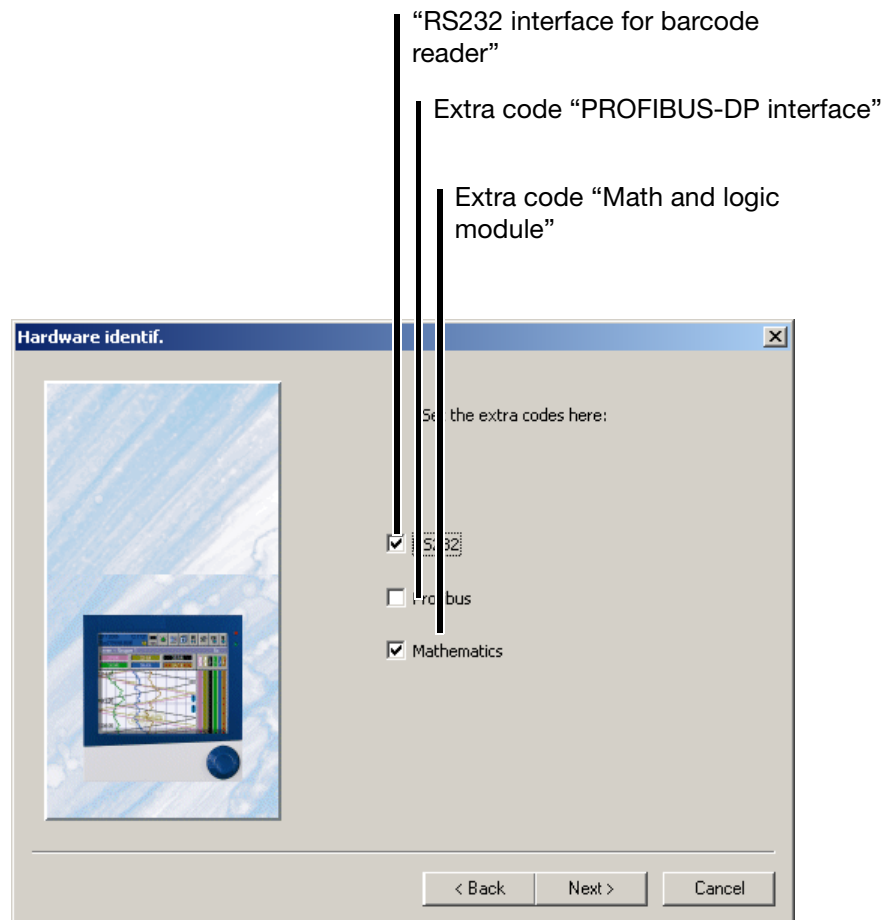
6 Edit Menu

User-defined settings

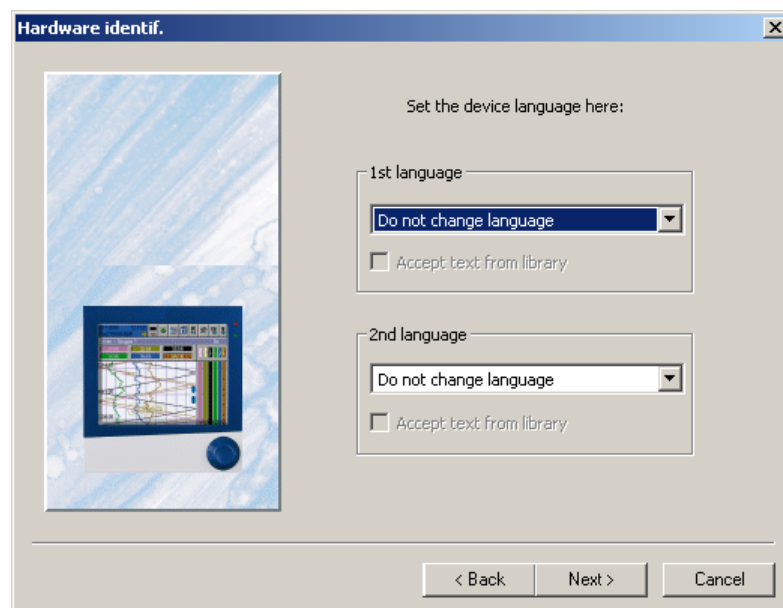
With user-defined settings, the user determines the hardware ID.



* Select the slot assignments, and click **Next >** .



- * Select the extra codes that have been fitted, and activate the **Next >** button. The interface "RS232" (= RS232 for barcode reader) is provided as standard in the paperless recorder, and is thus not an extra (code). Please make sure that you select the interface.



6 Edit Menu

- * Choose the two languages that will be sent to the instrument as “Language 1” and “Language 2”, and activate the button.

A setup file can include more than two languages on the PC side, but only two will be sent to the instrument. These languages must be placed in the first and second positions in the language list. The choice that is made here can be revised at a later date.

⇒ Chapter 6.5 "Country settings"

On the instrument, *Parameter* → *Configuration* → *Device data* → *Language* can be used to select the language.

The setting “” means that Language 1 and 2 will depend on the installation of the PC program.

Language 1: The language used for installing the PC program.

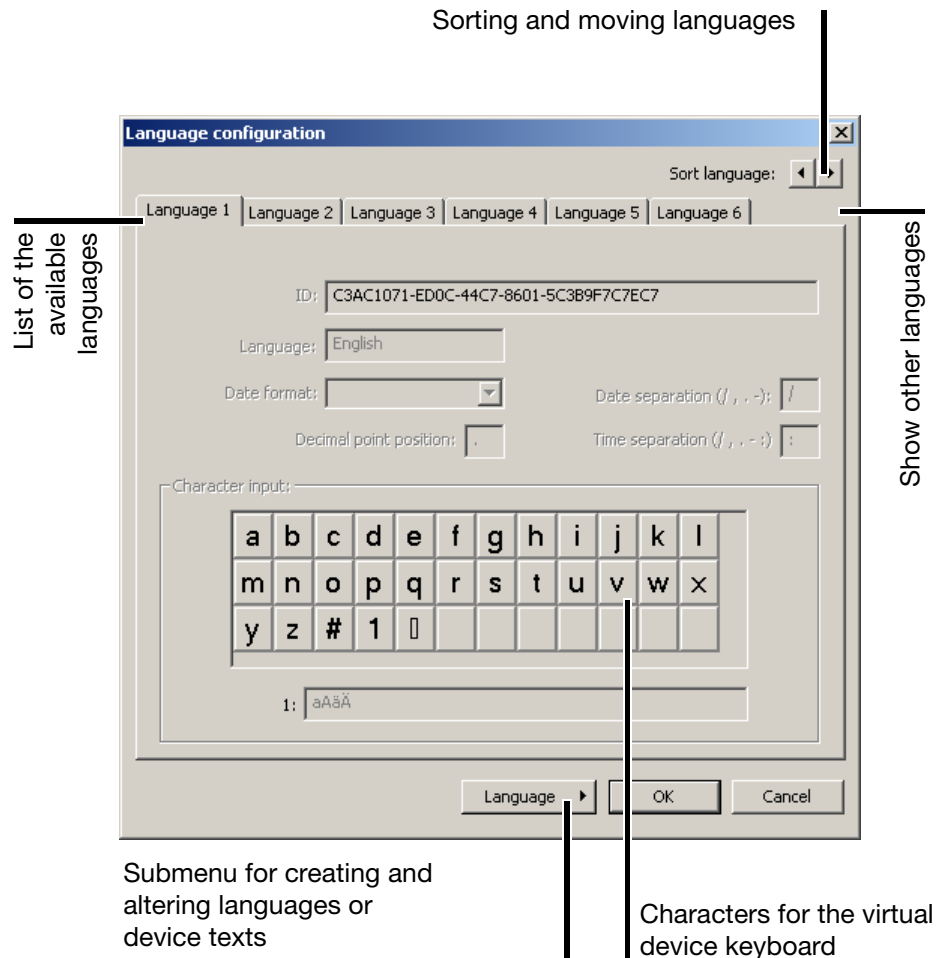
Language 2: English (or German if Language 1 is English).

Automatic detection

With automatic detection, the hardware is read out from a connected device. As an option, the current settings for the setup configuration can also be read out (*Data transfer from device*).

6.5 Country settings

After calling up the function, the languages that are available in the setup file will be shown. If you click on a language with the left mouse button (Language 3 | Lar), its properties will appear, and they can be moved to a different position in the list (Sort language: ◀ ▶). The first two languages in the list will be sent to the device (Language 1 and Language 2).



Language editing

All the available languages can be copied and edited. In this way, the user can also create new languages.



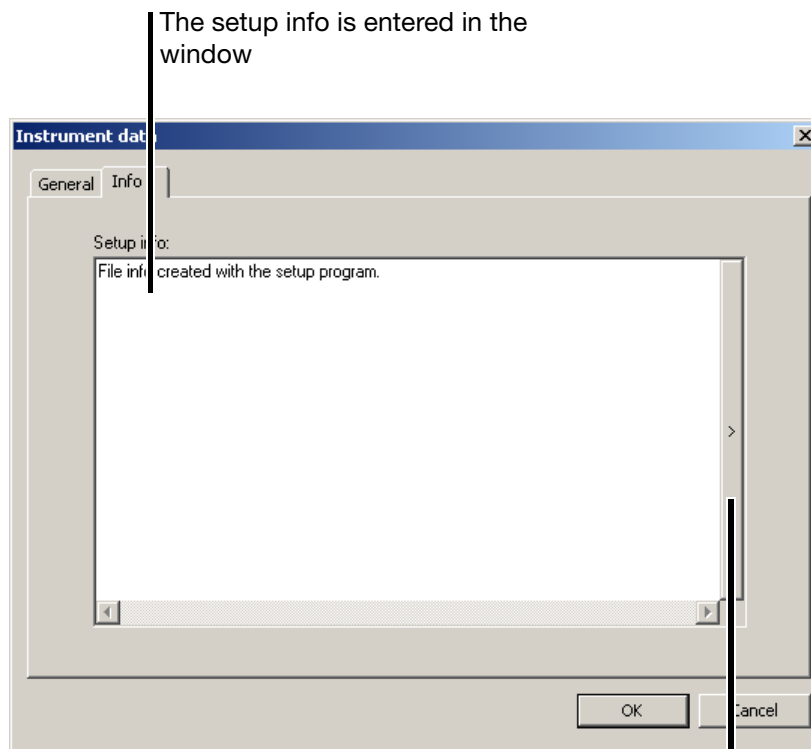
How to create and edit new and existing languages is described in Chapter 11 "Languages".

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6.6 Device data

The device data consist of two sections:

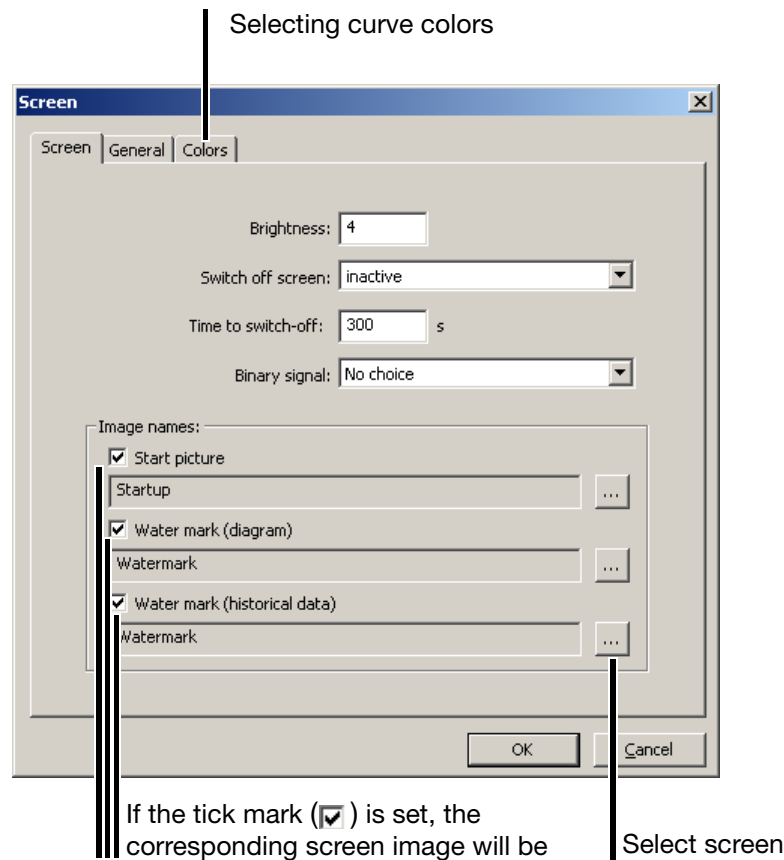
- general device data (also configurable on the instrument) and
- setup info (can only be configured with the setup program).



Enter setup info in other languages
(country settings).

The setup info is also sent to the paperless recorder. It can be viewed in the PC evaluation software PCA3000 before being read in or on opening the data, and can be viewed and expanded in the menu item Edit → Supplementary description.

6.7 Screen



Start screen

The start screen is displayed when the supply voltage is switched on (Power On). It must have a size of 320 × 240 pixels, with a maximum of 256 colors.

Watermarks (curves)

The watermark is shown as a background to the measurement curves when using curve presentation for the analog inputs. It can have a maximum size of 200 × 100 pixels, with a maximum of 256 colors.



The color white is used as a transparent color!

Watermark (History)

The watermark is shown as a background to the measurement curves when using memory presentation for the analog inputs. It can have a maximum size of 200 × 100 pixels, with a maximum of 256 colors.



The color white is used as a transparent color!

6 Edit Menu

6.8 Ethernet e-mail parameters

Five e-mails can be sent to up to three users. The precondition is that the instrument is connected to a network via the Ethernet interface, and the Ethernet parameters (*Extras* → *Ethernet interface*) are correctly configured.

Ethernet e-mail parameters

Max. 5 e-mails

Max. 3 e-mail addresses

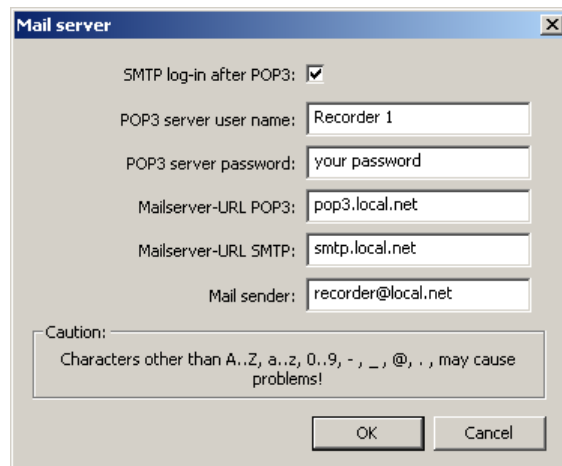
Caution: Characters other than A..Z, a..z, 0..9, -, _, @, ., may cause problems!

The mail server is configured here. Alterations should be made by a network administrator.

Binary signal that activates e-mail dispatch

⇒ For other information, flow charts, and error codes, refer to the interface description B 706585.2.0.

Mail server

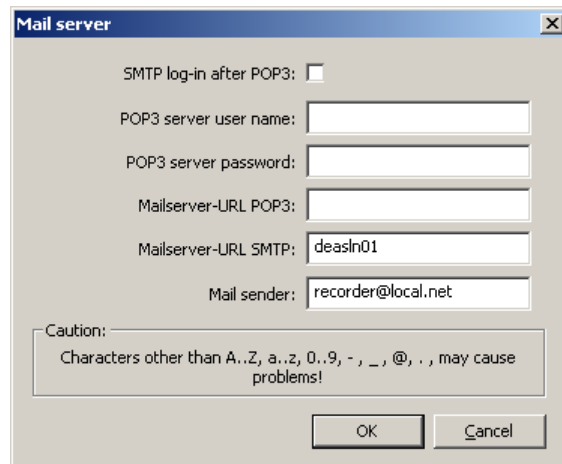


The dialog box titled "Mail server" has a close button (X) in the top right corner. It contains the following fields and controls:

- SMTP log-in after POP3:
- POP3 server user name: Recorder 1
- POP3 server password: your password
- Mailserv-URL POP3: pop3.local.net
- Mailserv-URL SMTP: smtp.local.net
- Mail sender: recorder@local.net

Below the fields is a "Caution:" box with the text: "Characters other than A..Z, a..z, 0..9, -, _, @, ., may cause problems!". At the bottom are "OK" and "Cancel" buttons.

In simple company networks it is often sufficient to specify e-mail transmission via SMTP (Simple Mail Transfer Protocol):



The dialog box titled "Mail server" has a close button (X) in the top right corner. It contains the following fields and controls:

- SMTP log-in after POP3:
- POP3 server user name: (empty)
- POP3 server password: (empty)
- Mailserv-URL POP3: (empty)
- Mailserv-URL SMTP: deasln01
- Mail sender: recorder@local.net

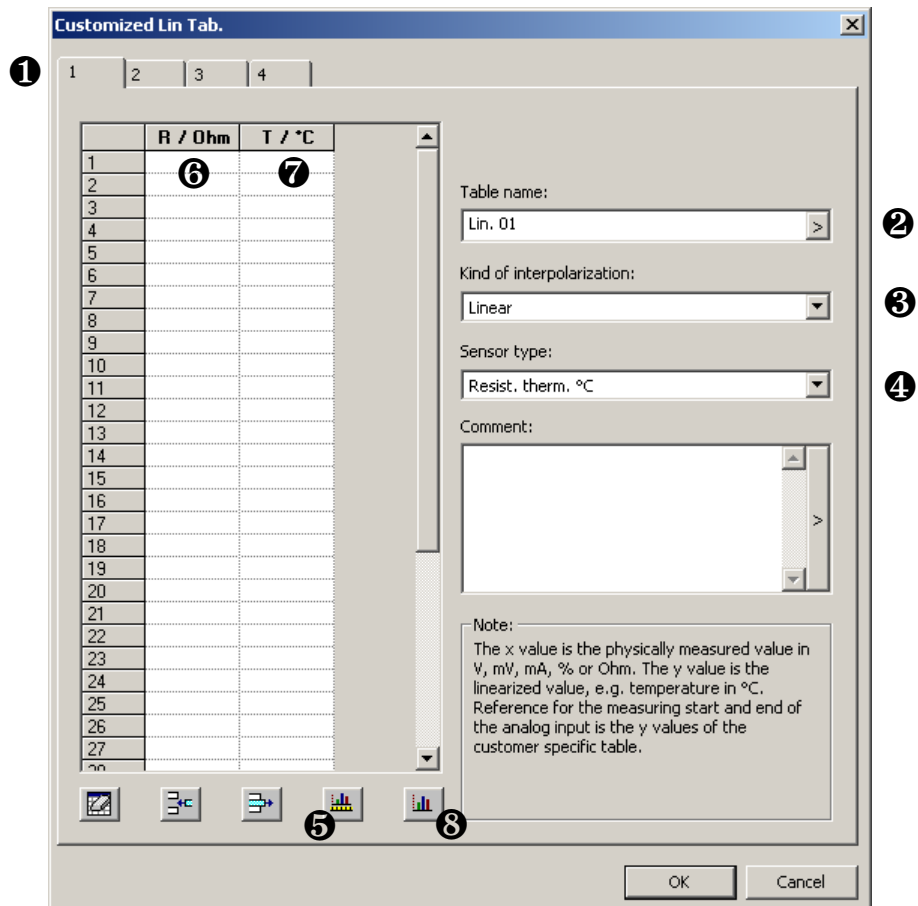
Below the fields is a "Caution:" box with the text: "Characters other than A..Z, a..z, 0..9, -, _, @, ., may cause problems!". At the bottom are "OK" and "Cancel" buttons.

6 Edit Menu

6.9 Customized linearization

Customer-specific linearizations (max. 40 interpolation points) make it possible to connect up sensors that are not defined by the linearizations which are provided ex-factory.

Interpolation points are defined in the *Customized linearization* menu. They are used when setting analog channels (*Edit* → *Analog inputs* → *Linearization* → *Customized 1...4*).



The following procedure has proven to be advantageous for entering a customer-specific linearization.

- * Select Linearization 1 – 4 (❶).
- * Assign a name (❷).
- * Choose the type of interpolation (❸).
- * Select the sensor type (❹).
- * Let the X values be calculated automatically (❺). The values are entered in the left-hand column of the interpolation table (❻).
- * Enter the Y values in the right-hand column of the interpolation table (❼).
- * Use the function (❽) to check the linearization table.

6.10 Math

The math and logic module is available as an extra (code). It has to be ordered with the instrument, or subsequently enabled through the function *Tools* → *Enable extra codes*.

⇒ Chapter 8.2 "Enable Extra Codes"

The math and logic module are channels that are not available as hardware but are calculated by the instrument software.

Math channels

You can configure the math channels in the "Math" section of the setup program, or through the menu *Edit* → *Math*.

▶ **Math package:**

In the following example, math channel 3 will be configured:

The screenshot shows the 'Math package' configuration window. At the top, there is a tabbed interface with tabs numbered 1 through 12. Tab 3 is selected. The window contains the following fields and controls:

- Math function:** A dropdown menu set to 'Humidity'.
- Variable a:** A dropdown menu set to 'Analog input 1'.
- Time base:** A text input field containing '1' followed by 'min'.
- Variable b:** A dropdown menu set to 'Analog input 2'.
- Formula text:** A large empty text area for entering a formula.
- Formula Editor:** A button located to the right of the formula text area.
- Channel designation:** A dropdown menu set to 'Math 03'.
- Channel description:** A text input field containing 'Math channel 03'.
- Unit:** A dropdown menu set to '%'
- Comma format:** A dropdown menu set to 'XXXX . X'.
- Range start:** A text input field containing '0.0000'.
- Range end:** A text input field containing '100.00'.
- Alarm structure:** A button located below the range fields.
- OK** and **Cancel** buttons are located at the bottom right of the window.

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Function selection

The function is selected here. All other fields can subsequently be edited according to the function.

Math package

1 2 3 4 5 6 7 8 9 10 11 12

Math function: Without function Variable a: []

Time base: 1 min Variable b: []

Formula text: []

Formula Editor

Channel designation: Math 03

Channel description: Math channel 03

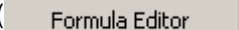
Unit: %

Comma format: XXXX . X

Range start: 0.0000 Range end: 100.00

Alarm structure: []

OK Cancel

You must edit the input fields “Variable a”, “Variable b” or “Time base” if one of the standard functions (difference, ratio, humidity, moving average) has been set. If you have set the “Formula” function, then the input field “Formula” must be edited. Entry can either be direct or via a dialog ().

Example: Humidity

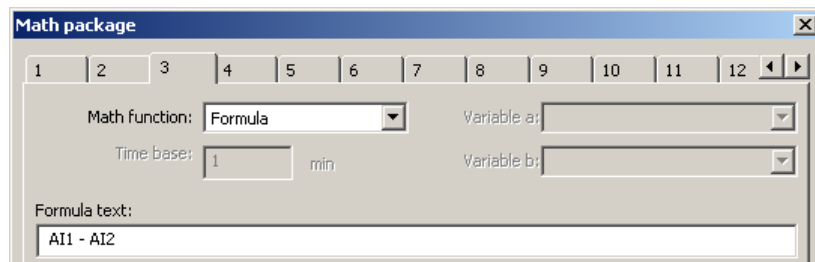
Math function: Humidity Variable a: Analog input 1

Time base: 1 min Variable b: Analog input 2



With humidity measurement, the channel for dry bulb temperature has to be specified as variable A, and the channel for the wet bulb temperature as variable B.

Example: Formula

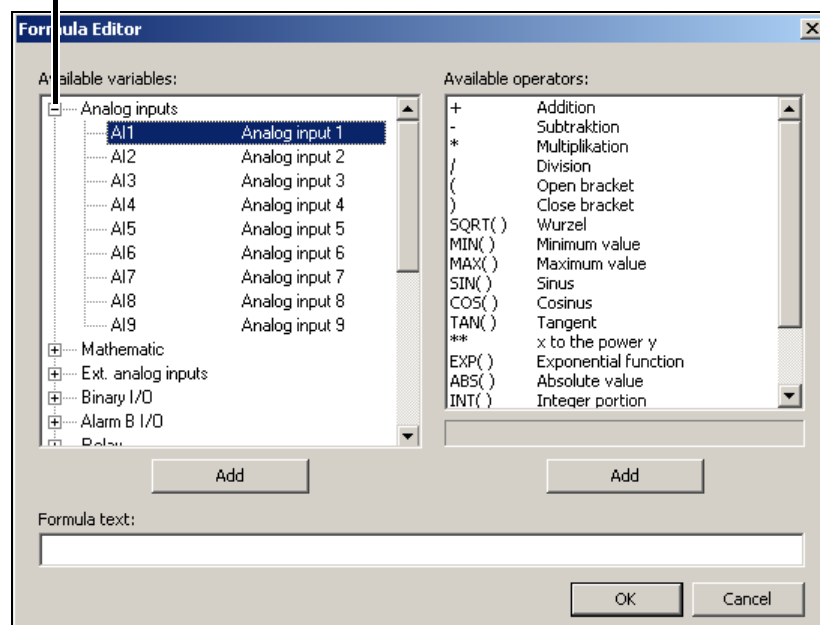


The formula can be entered directly from the PC keys or by calling up the **Formula Editor** function.

Formula Editor

After calling up the function, the following dialog box will appear:

Click here with the left mouse button to expand or reduce the view.



In the left-hand window you can select the required signal, in the right window the required operator, and then insert them into the formula by activating the corresponding button (**Add**). Instead of using **Add** , you can also make a selection by double clicking.



For functions ending with (), you will have to add the closing bracket yourself.


Example: 1. SQRT() insert --> **SQRT(**
 2. AE1 insert --> **SQRT(AE1**
 3.) insert --> **SQRT(AE1)**

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Operator overview

Operator	Explanation	Example
+	Addition	AE1 + AE2
-	Subtraction	AE1 - AE2
*	Multiplication	AE1 * AE2
/	Division	AE1 / AE2
(	Opening bracket	(
)	Closing bracket)
SQRT()	Root	SQRT (AE1)
MIN()	Minimum value (of several variables)	MIN (AE1, AE2)
MAX()	Maximum value (of several variables)	MAX (AE1, AE2, AE3)
SIN()	Sine (angle of 360° circle)	SIN (AE1)
COS()	Cosine (angle of 360° circle)	COS (AE1)
TAN()	Tangent (angle of 360° circle)	TAN (AE1)
**	x to the power y	AE1 ** AE2
EXP()	Exponential function	EXP (AE1)
ABS()	Absolute value	ABS (AE1)
INT()	Integer portion	INT (AE1)
FRC()	Decimal portion	FRC (AE1)
LOG()	Logarithm	LOG (AE1)
LN()	Natural logarithm	LN (AE1)

Operator priorities

Priority	Math sign / function	Comment
High	()	Brackets
	SQRT, MIN, MAX, LOG, LN, SIN, COS, TAN, ABS, EXP, INT, FRC	Functions
	**	Exponent (x^y)
	+, -	Sign
	*, /	Multiplication, division
	Low	+, -	Addition, subtraction

6.11 Logic

The math and logic module is available as an extra (code). It has to be ordered with the instrument, or subsequently enabled through the function *Tools* → *Enable extra codes*.

⇒ Chapter 8.2 "Enable Extra Codes"

The math/logic module is composed of channels that are not available as hardware but are calculated by the instrument software.

Logic channels Activate the "Logic" section in the setup program, or use the menu *Edit* → *Logic*.


▶ Logic:

Editing a logic channel is just the same as entering a formula for a math channel (Chapter 6.10 "Math"); the only difference is in the variables and operators that are available.

Operator overview

Operator	Explanation	Example
!	NOT	! BE9
&	AND	BE9 & BE10
|	OR	BE9 | BE10
^	XOR	BE9 ^ BE10
/	Rising edge	/ BE9
\	Falling edge	\ BE9
(	Opening bracket	(
)	Closing bracket)

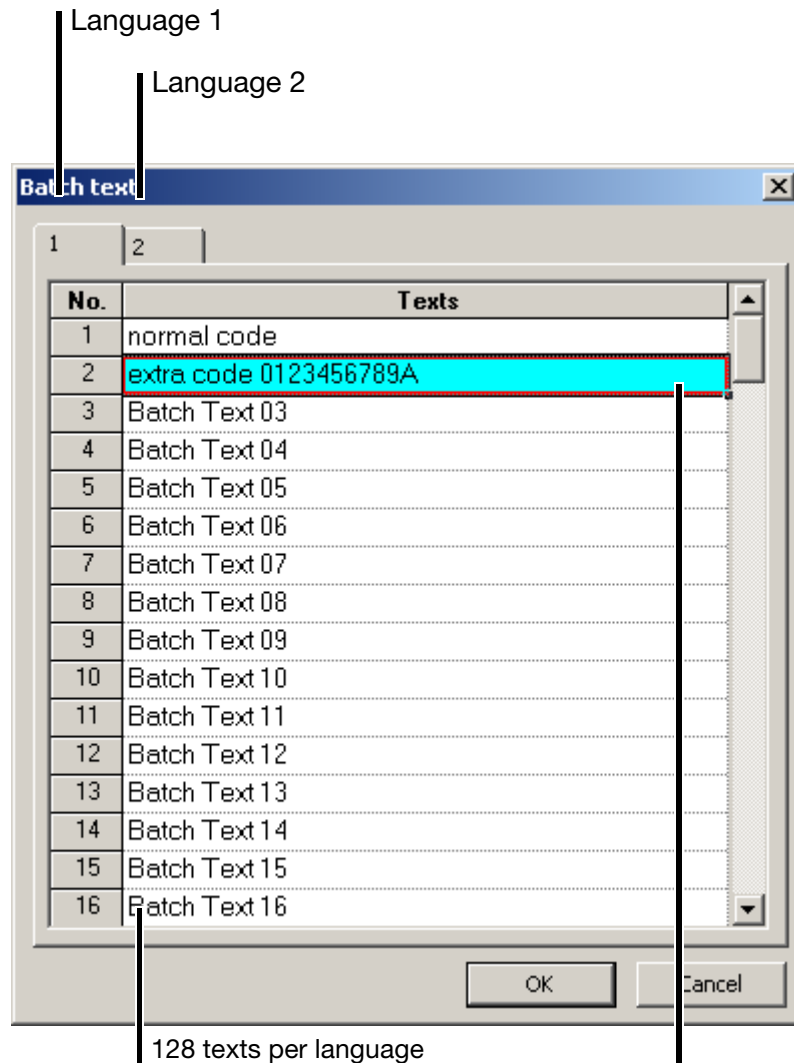
Operator priorities

Priority	Operator	Comment
High	/, \	Edges
	(,)	Brackets
	NOT, !	Negation
	AND, &, XOR, ^, OR, |	AND link, exclusive OR link, OR link
Low		

6 Edit Menu

6.12 Batch text

This function can be used to assign 128 user texts for each of the two device languages. Texts can be shown in the right column of a current batch protocol. To do this, the "Content of the right column" for the relevant line must be configured for "Text list" or "Bin. linked text".



A colored background (colored border) indicates an error in text entry



A colored border indicated an error in an entry.

⇒ „Errors” on page 90

6.13 Profibus

The settings and basic principles of the PROFIBUS-DP interface are described in the B 706585.2.3 interface description.

6.14 Web server

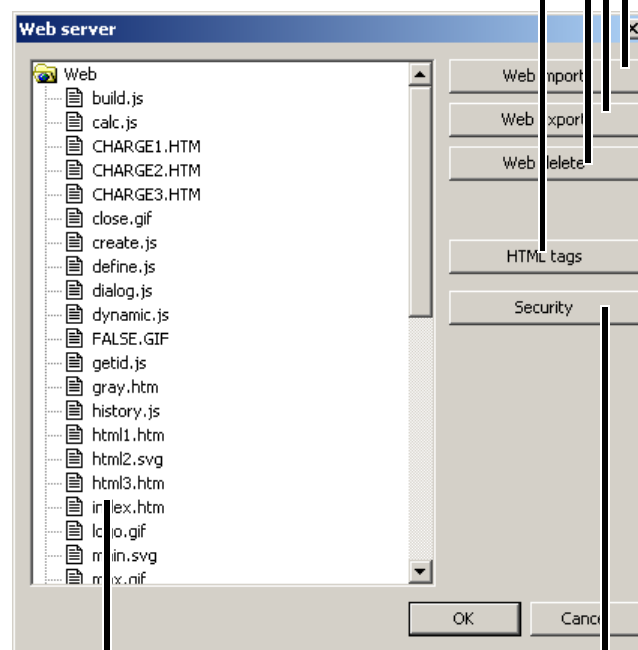
The integrated web server gives the user the opportunity to control analog and binary inputs of a paperless recorder via Ethernet, set batch data on the device, and track visualizations as they appear on the device with a PC web browser. Operation is described in the B 706585.0 operating manual.

Read in web server files from data medium.

Export web server files to data storage medium.

Remove web server files from the setup file.
The data will not be removed until the dialog is ended by the OK button.

Conversion of variable names to addresses for web server programming.



List of active web server files.

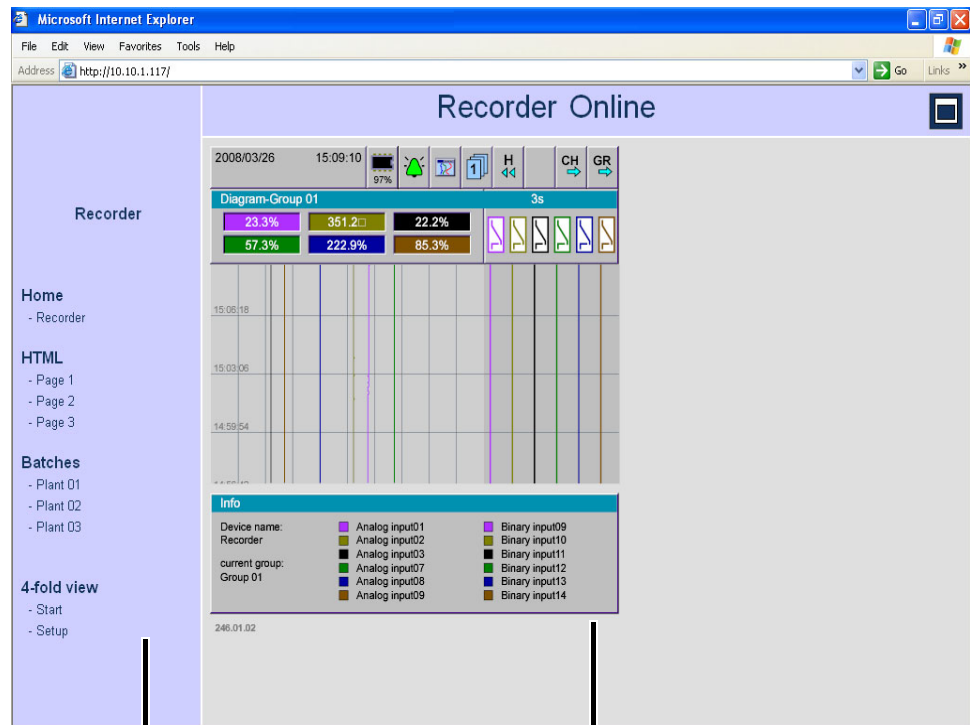
Activation of password prompt in PC browser

Depending on the Ethernet configuration (*Tools* → *Ethernet interface*), the web server for the paperless recorder can be called up from the PC with the Internet Explorer web browser) in one of two ways:

- by entering the IP address (e.g. http://10.10.1.179), or
- (for active DNS device names) by entering the name (e.g. http://lsntssc).

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Browser example



Navigation area.
Click with the left mouse button
to start display.

Window contents.
Here you can find the
latest data



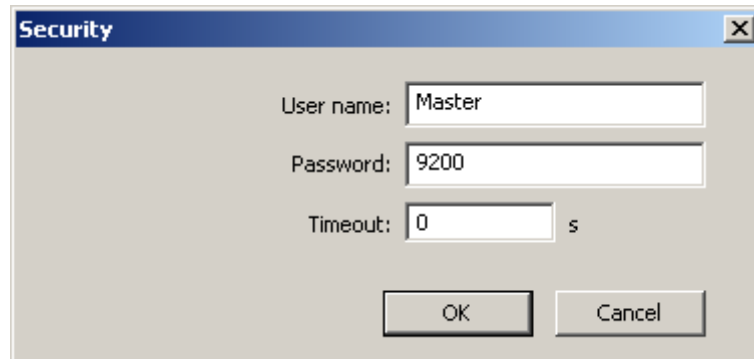
SVG pictures (SVG = Scalable Vector Graphics) are used within the web server. For the correct presentation of SVG, the web browser requires a plug-in such as the SVG Viewer from Adobe® (<http://www.adobe.com/svg>).



New, specially adapted web server files can be created by the manufacturer, if required. Quotation and prices on request.

Password-prompt

The "Security" button is used to start a dialog that serves to protect the use of the recorder's internal web server (with the web browser) by prompting for a password.



The user name = Master and password is set to 9200 in the factory. This makes password prompting active.

Depending on the timeout setting, the prompt appears once when the web server is called with the web browser (Timeout = 0) or several times (Timeout <> 0).



If password prompting is active, it can be made inactive again by deleting the user name and password. If a setting is changed, the setup must be transferred to the paperless recorder again.

Copy web server files

There are two ways to copy web server files back and forth between setup files:

- * Open setup file with the source files.
- * In the *Edit* menu, start the *Web server* function.
- * Click "*Web export*", select a folder on the PC, and export the files with "OK".
- * Open target setup file.
- * In the *Edit* menu, start the *Web server* function.
- * Click "*Web import*", select the previously selected folder on the PC, and import the files with "OK".
- * Close the web server dialog with "OK."
- * Save the setup file.

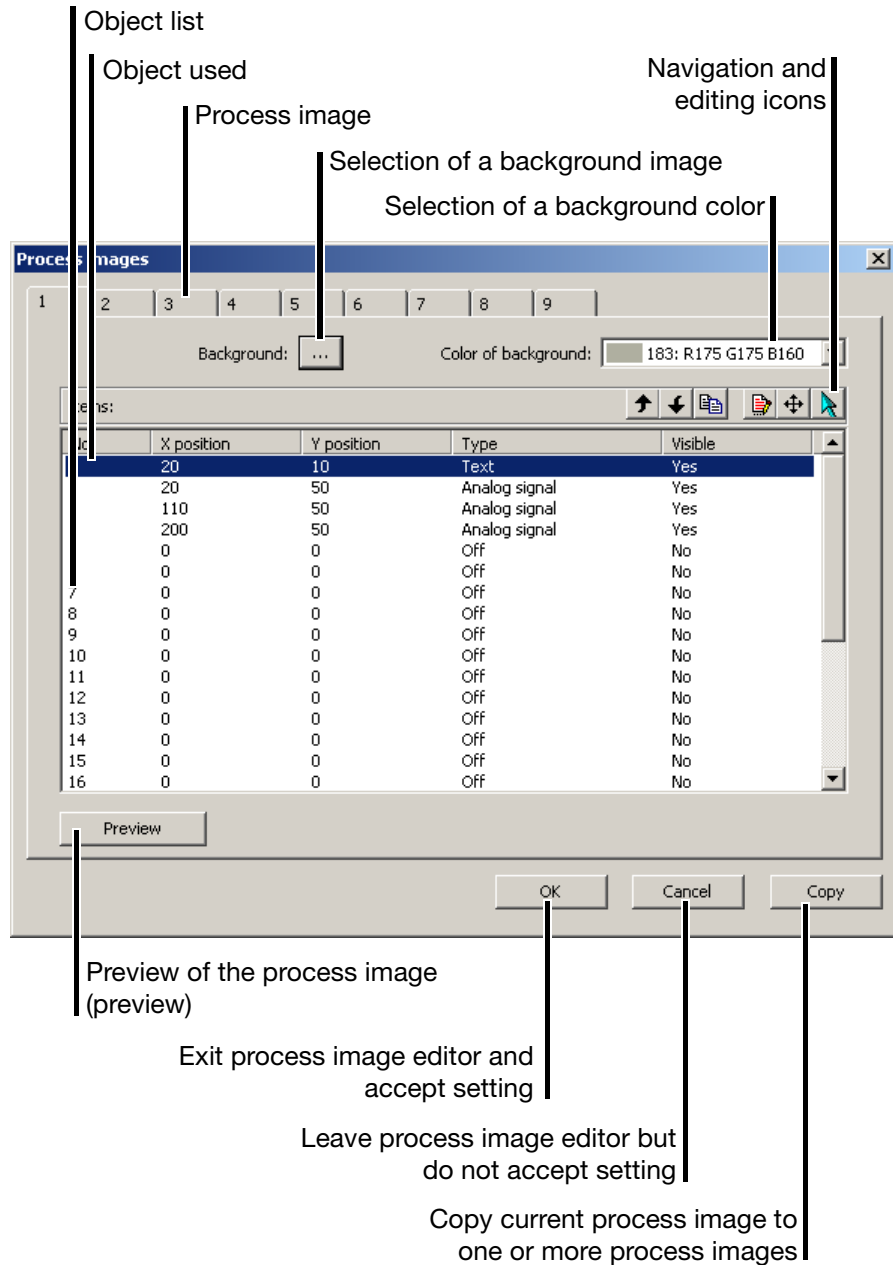
6 Edit Menu

6.15 Process images

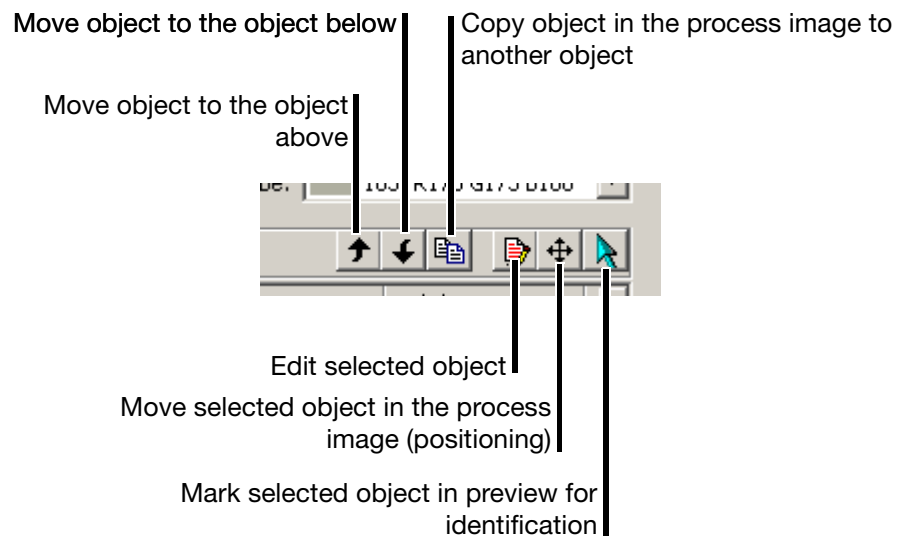
Process images are a type of visualization for measurement files. The user can create up to nine process images and save them with the setup program.

Max. size 315 pixels wide and 187 pixels high.

Process image editor




Navigation and editing icons



6.15.1 Create process images

A process image is created as follows:

- * Click (left mouse button) to select process image 1 ... 9.
- * Click to select the object in the object list.
- * Double click the selected object or click the icon () to start editing object properties.
- * Edit properties.
- * Select and edit additional objects.
- * If desired, you may adjust the background (image) and background color. The background color can only be seen if the background image does not cover the entire process image area or if the "Transparent" option was selected when the image was imported.
- * Accept the process image into the Setup file with OK.
- * Transfer the setup file to the paperless recorder.
- * Select process image visualization on the paperless recorder.

6 Edit Menu

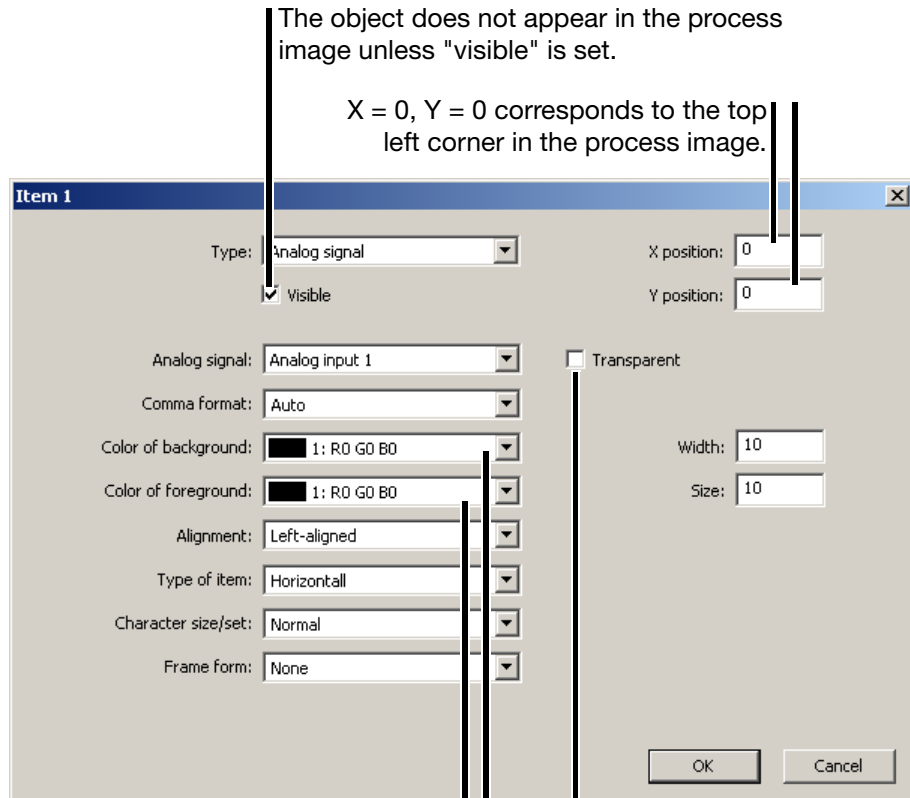
6.15.2 Objects

The following objects can be used:

Object	Description
Pictogram	The status of a binary signal can be represented graphically by two pictograms (icons or images).
Analog signal	Internal and external analog channels. The result of math and the current time can be shown in numerical form.
Binary signal	The status of a binary signal can be represented by a frame combined with a colored border and text.
Text	Fixed text entered in the setup program in one of four sizes. Unicode is also possible in one size.
Frame	Frame for grouping or highlighting objects. The frame appears transparent and is automatically in the background, i.e. a text or analog value, etc. may be inside this frame and is visible.
Rectangle	Rectangle corresponds to the object frame, but is not transparent.
Bar graph	Internal and external analog channels. The result of math and the current time can be shown in bar format. Unlike the analog signal object, scaling must also be specified for the bar graph object.

6.15.3 Object properties

Object properties are the same for all objects. The following image describes the analog signal object.



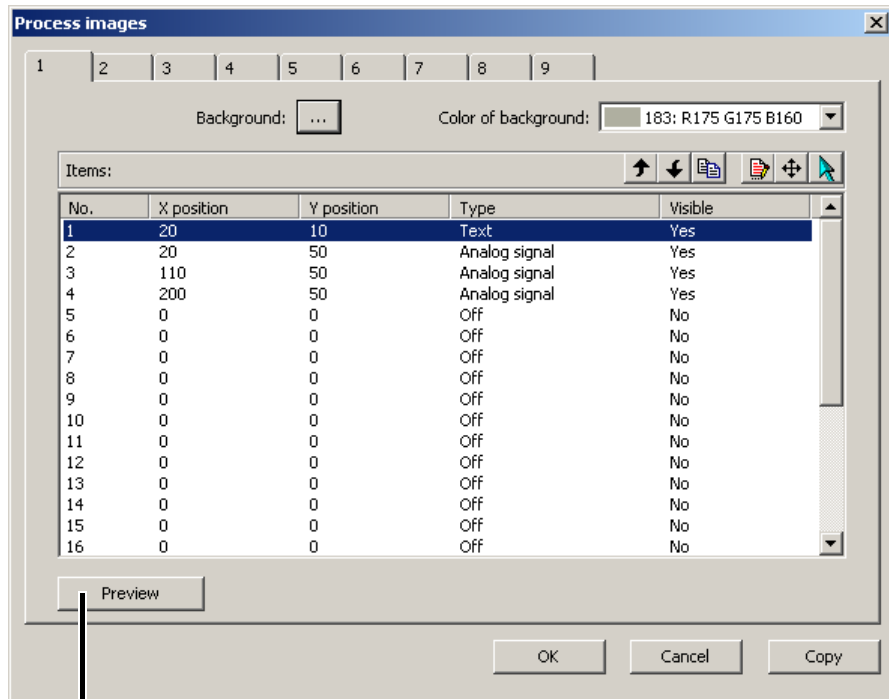
Caution: The background and foreground colors must be different if the setting "Transparent" is inactive. This is the only way to ensure the object is visible. Please note the background color of the process image.

If this option is selected, the background color is not

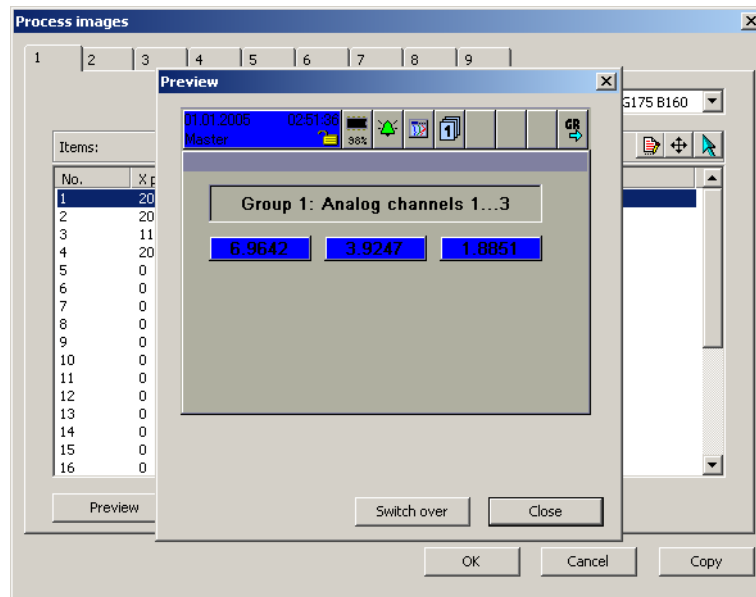
6 Edit Menu

6.15.4 Preview

All process images can be evaluated in the setup by a preview before they are transferred to the paperless recorder.

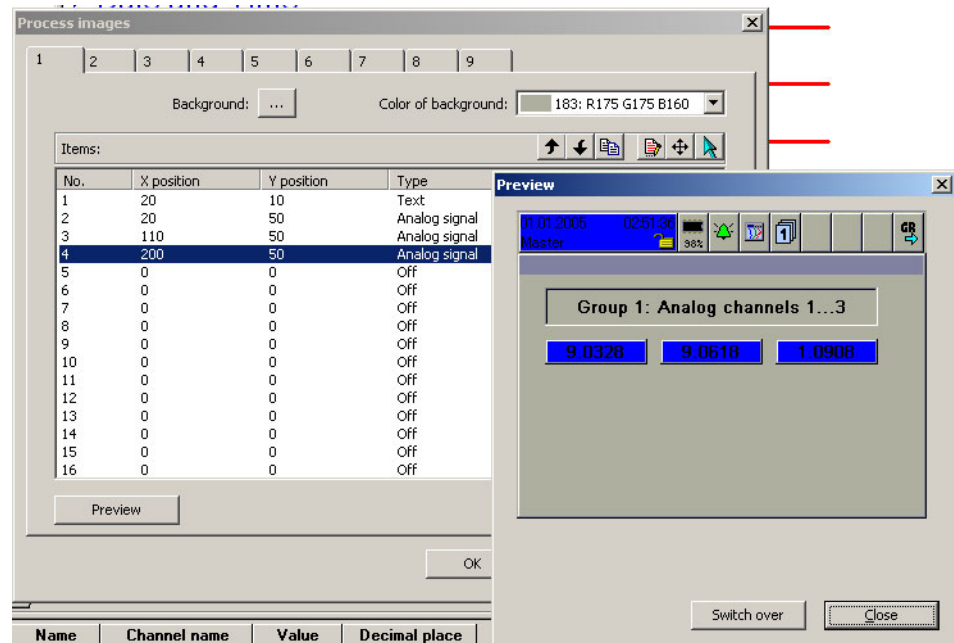


Preview of the process image (preview)




Very helpful for editing and moving objects if the preview is moved in reference to the object list.

- * Position the mouse pointer in the header.
- * Move the preview while holding down the left mouse button.




6.15.5 Moving objects


Objects can be positioned to a specific place within the process image by the object properties (X/Y position). If they need to be moved later, there are three options available:

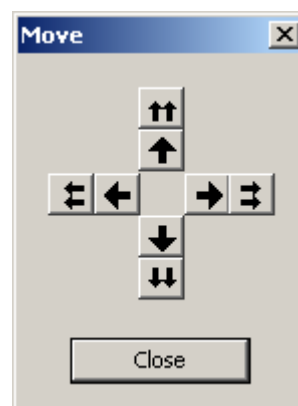
- Change X/Y position
- With the "Move" (button )
- Directly in the preview holding down the left mouse button

X/Y position

- * Select object in the object list.
- * Edit object properties ( or double click).
- * Change position.

"Move" ()

- * Left-click on the () button.

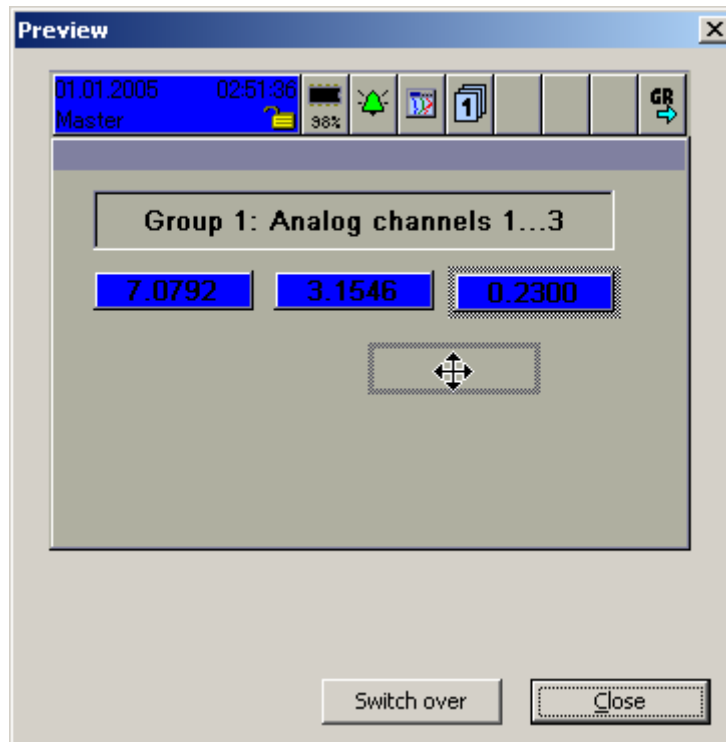


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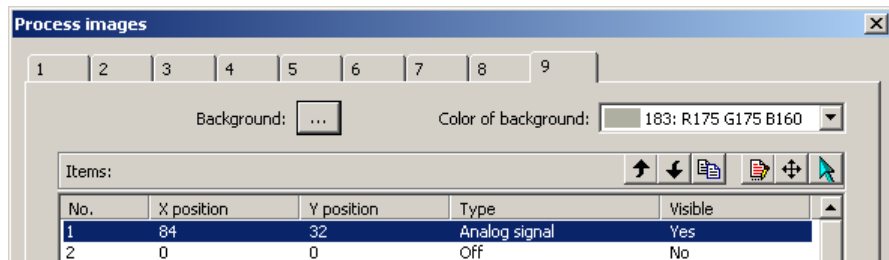
- * Move the object by clicking the arrow buttons.
The first time an arrow button is clicked, a preview automatically appears.
- * If possible, move the preview to a suitable place so that all windows are next to each other.
- * To finish, close, the window with the arrow buttons.

Moving in the preview

- * Click the object in the preview with the left mouse button.
- * Move the object while holding down the left mouse button.

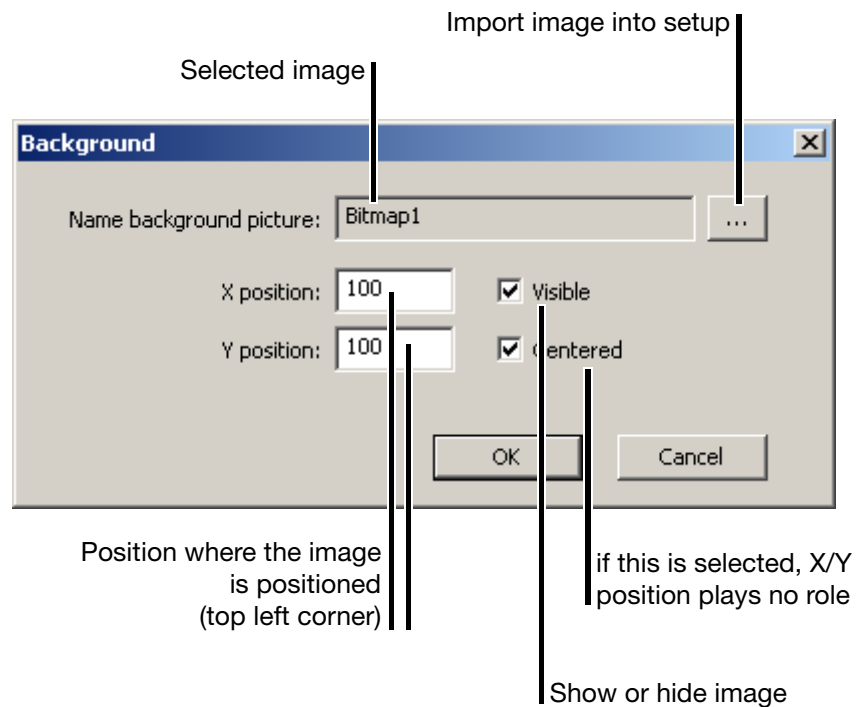


6.15.6 Background



This function uses an image as a background. The image must be imported from a data storage medium (e.g. hard drive) into setup. Then it is available in setup and is no longer tied to the data storage medium.

The background color is only an issue if no background image is being used or the background image "Transparent" was imported.




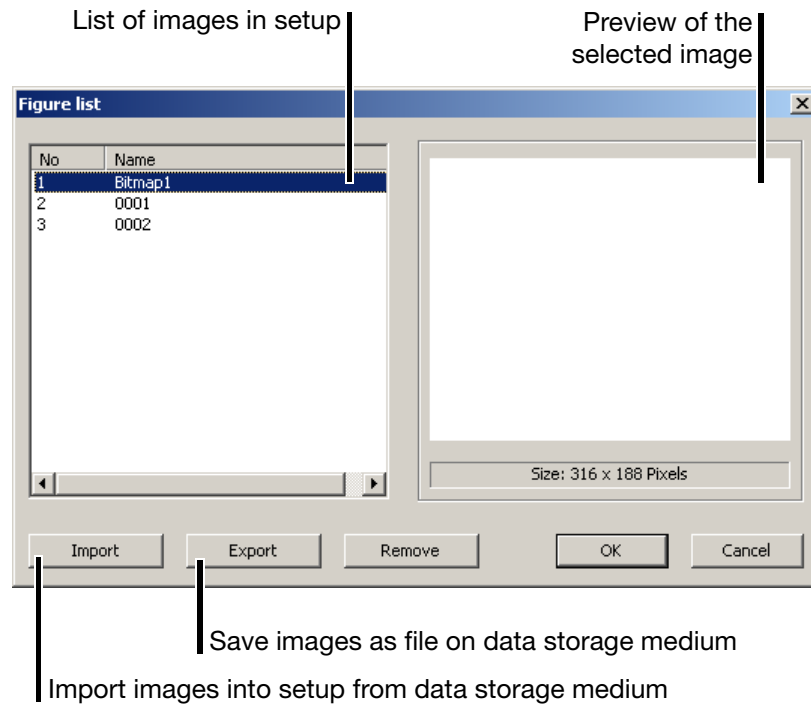
6 Edit Menu

6.15.7 Import/export image

Images (background images or icons) must be imported into setup before they can be used.

The import can be performed where images can be used for display (background, pictogram).

* Click  to start import and selection.



6.16 Setup data info

This function has the same effect as double clicking one of the following functions in the dialog window.

▶ **File info header:**

▶ **File info text:**

The *File info header* and *File info text* can be used for a description of the setup file.

This information is stored only within the setup files, and is not transferred to the instrument.

6 Edit Menu

7 Data Transfer Menu

In this chapter, before explaining (from Page 66 on) the function of the data transfer, it is necessary to provide some general explanation on the topic of data transfer.

7.1 General

There are two ways of transferring the setup data to or from a recorder:

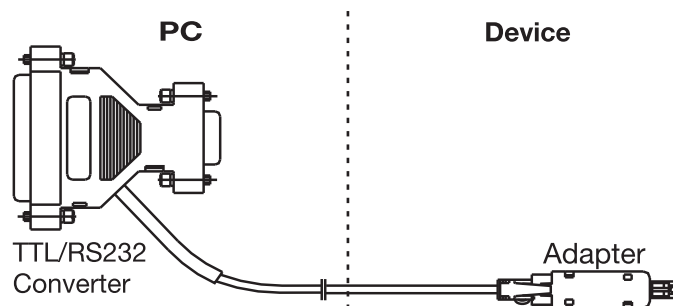
- transfer via interface, or
- transfer via CompactFlash memory card/USB stick

7.1.1 Transfer via interface

Data transfer is possible via one of the following interfaces:

PC	Paperless recorder
RS232 (with TTL/RS232 converter)	Setup interface (only for recorder type 706580/...)
RS232 (with USB/TTL converter)	Setup interface (only for recorder type 706580/...)
RS232	RS232
RS485 (plug-in card or converter)	RS485
Ethernet	Ethernet
USB	USB device interface

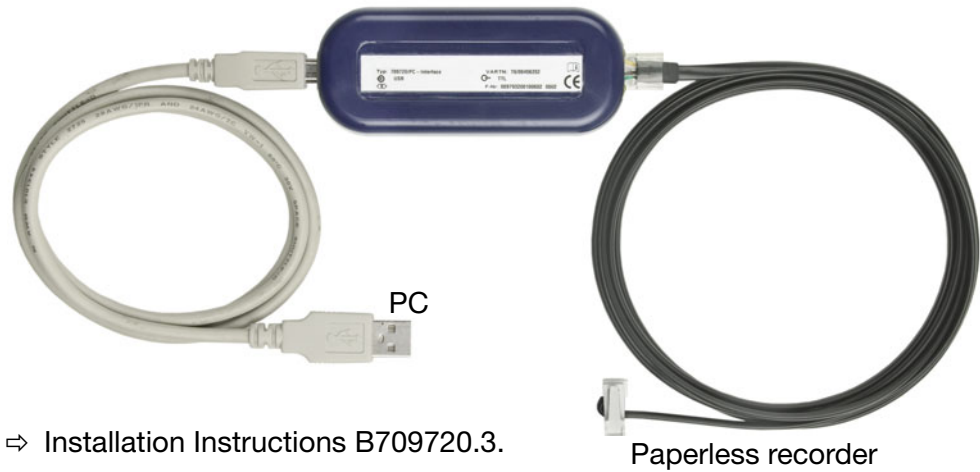
Setup via RS232 You will need the interface cable (including adapter) in this case. It is available as an accessory for the recorder.



7 Data Transfer Menu

Setup via USB

You will need the interface cable (including adapter) in this case. It is available as an accessory for the recorder.



USB

The required setup cable with plugs type A (PC-side) and type B mini (device side) are enclosed with each setup program.



RS232

⇒ For the pin assignments, please refer to the interface description B 706585.2.0.

RS485

⇒ For the pin assignments, please refer to the interface description B 706585.2.0.

Ethernet

The paperless recorder or a PC can be connected to the network using normal, commercially available network cables (with RJ45 connector). If the recorder and a PC will be connected directly together, please use a crossover cable.

Starting the transfer

Use the toolbar or the *Data transfer* menu with its functions „*Data Transfer to Device*“and „*Data Transfer from Device*“ in order to transfer the setup data.



Chapter 7.5 "Data Transfer from Device"

Chapter 7.4 "Data Transfer to Device"



This can be configured either on the recorder or through the setup program. If, for example, the *Configuration* menu is open on the instrument, then the instrument cannot be accessed through the setup program.

7 Data Transfer Menu

7.1.2 Transfer via CompactFlash memory card/USB stick

Setup program

Use the toolbar or the *Data transfer* menu with its functions „*Data Export - Ext. Mass Storage*“ and „*Data Import - Ext. Mass Storage*“ to transfer the setup data.



Chapter 7.7 "Data Import - Ext. Mass Storage"

Chapter 7.6 "Data Export - Ext. Mass Storage"



Do **not** use the menu function "File → Save as".

It cannot be used to create a valid CF card for the paperless recorder.

Paperless recorder

You can use the paperless recorder to write and read setup data to/from the CompactFlash memory card or USB memory stick.

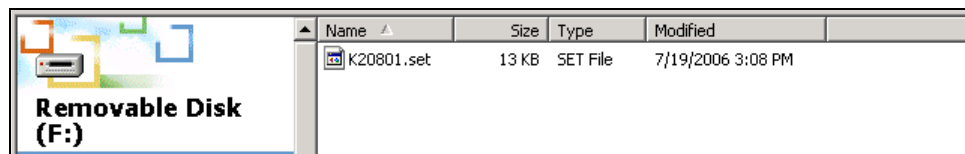
Import/export errors

If an error occurs on the paperless recorder side during transfer from or to mass storage, it will be indicated in the Memory manager menu and will remain until the error has been eliminated or is overwritten by a new error message.

Notes on the CF card

To be able to read or write to/from CompactFlash memory cards from a PC, you will need a card reader/writer.

When you have installed the card reader/writer, and inserted a CompactFlash memory card, you will automatically have a new drive under Windows. You can access this new drive just like a normal hard disk, using Windows Explorer.



CompactFlash memory cards must only be removed from the card reader/writer when the function "Eject removable medium" or "Safe removal of hardware" (functions in the PC operating system) has been activated first.



Only one configuration file can be saved to the CF card at any time, since there is no file name as a variable.

Measurement data from several instruments can be on the same CF card, since they have unambiguous IDs.

Formatting a CF card

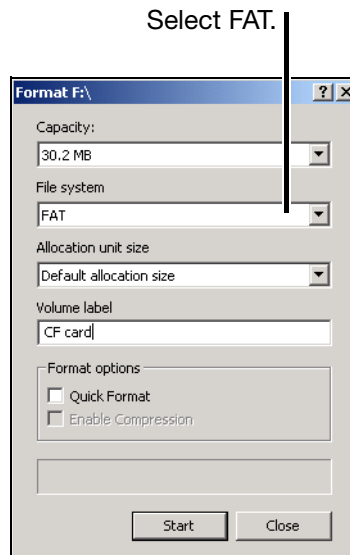


A CompactFlash memory card, (CF card) must be formatted for FAT (**not** FAT32 or NTFS).

If you format a CF card yourself, you must **not** use fast-formatting (quick format). If this is disregarded, a fault free exchange of data cannot be ensured.

To format a CF card using the Windows workplace (e. g. Windows XP):

- * Double click the workplace symbol in the “Desktop” area for the PC, using the left mouse button.
- * Right click the drive letter for the CF card.
- * Select the *Format* function.



- * Select FAT file system.
- * Click the “Start” button.

Information about the USB memory stick

The same information applies to USB memory sticks as for CF cards, except that no write/read device is needed.

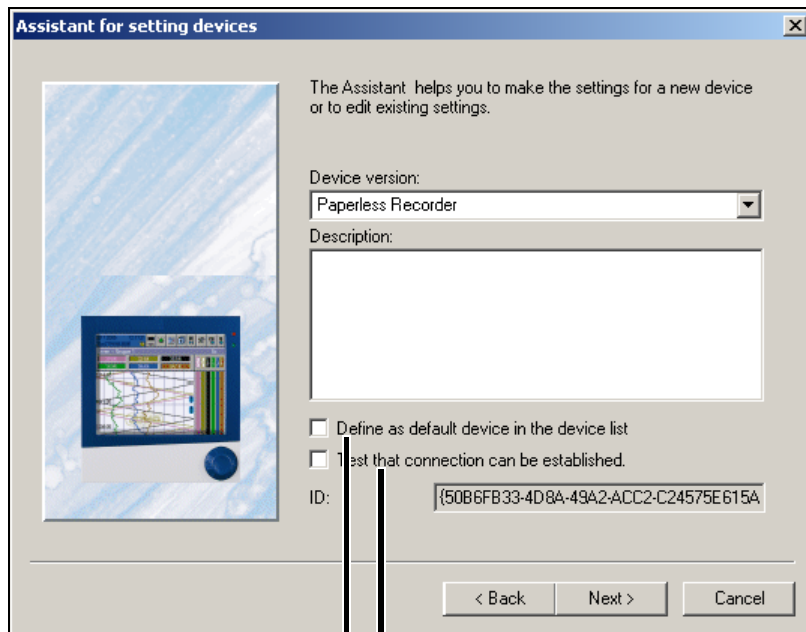
7 Data Transfer Menu

7.2 Make connection

This function establishes a connection (📶) to a device. A connection to a device is a precondition for transferring a setup to or from a device via an interface (serial, USB host, or Ethernet).

7.2.1 Device Settings Wizard

If there has never been any previous communication with an instrument, the “Device Settings Wizard” will automatically be started when the first attempt is made to access the instrument. It helps you to set up a device list.

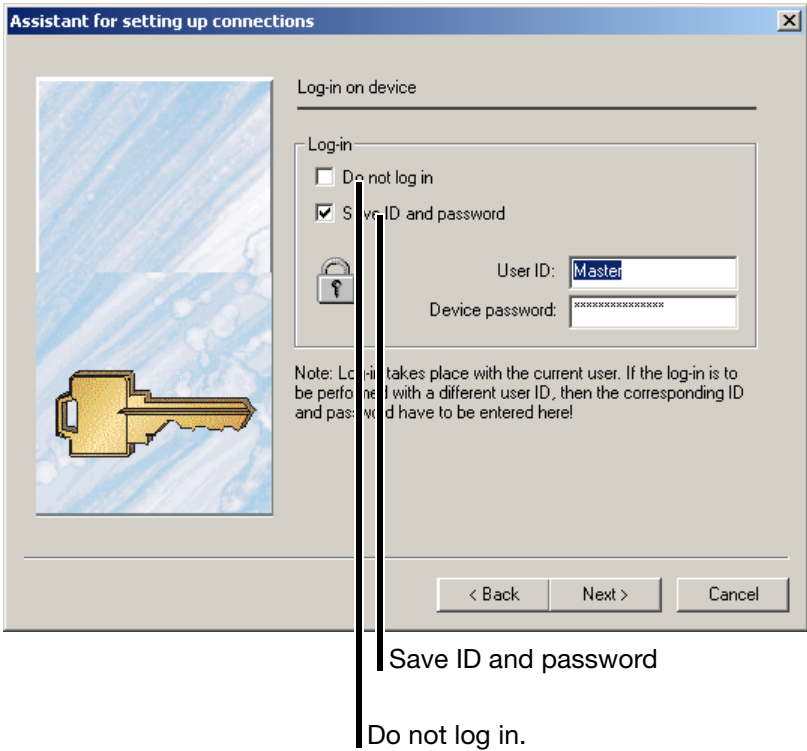


Here you can choose whether the device should be defined as the default device (☑). The system will automatically access a default device. Other devices must be linked through the device list.

If the option is active (☑), a check is made at the end whether the chosen device can be accessed via the selected interface.

- * First select the device version.
- * Enter an additional description if appropriate.
- * Set one of the option fields if appropriate.
- * Activate **Next >** .

Logging in to the device



Do not log in

The default setting of the program is such that the “Master” user is automatically logged in to a device that is found with the user’s name and password, and can thus communicate with this device.

Set option (☑) if you do not want to log in. Please note that it is possible that some functions will not be operable if you are not logged in. The decisive factor is the current user list and the access rights that are defined in this list.

Saving ID and password

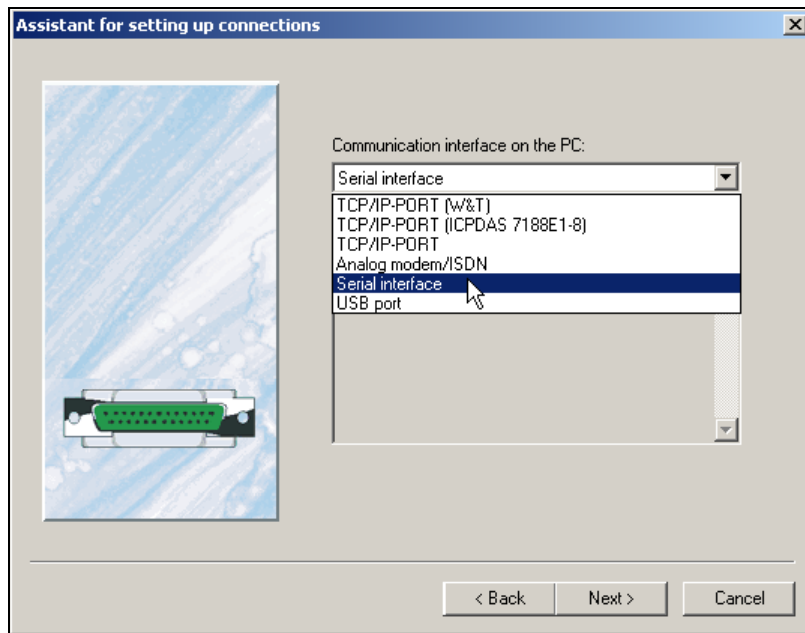
If the “Save ID and password” field is active, the log-in is made to the device with the data that are stored under the “User ID” and “Device password” that are entered. The default settings are “Master” for the user ID, and “9200” for the device password.

If the “Save ID and password” field is inactive, then the log-in is made with the “User ID” and “Device password” that were used to start the setup program.

* Make your selection, and activate the button.

7 Data Transfer Menu

Interface selection



* Select the interface you want to use to access the device.

The next steps depend on the interface or type of connection that has been selected.

TCP/IP PORT

The following parameters must be selected:

IP address / HOST name	xxx.xxx.xxx.xxx (Example: 192.168.0.10)	Enter the IP address for your instrument. If you enter the name, the IP address can be determined by clicking on the button "Convert HOST name to IP address".
Port number, port name	80	The port used for communication.
Communications protocol	HTTP protocol	This has a fixed setting, and cannot be altered.

Analog modem / ISDN

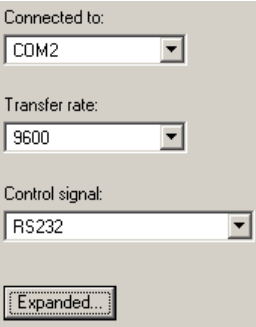
The following parameters must be selected:

Telephone number		Enter the telephone number for connecting to the required device.
Connect via		Select which modem is to be used to make the connection.
Communications protocol	Modbus protocol	This has a fixed setting, and cannot be altered.
Device address	1 ... 254	Device address for the Modbus protocol.
If modems are used, they must be preconfigured before they can be used.		

7 Data Transfer Menu

Serial interface

The following parameters must be selected:

Connected to	COM1, COM2	The PC interface to which the paperless recorder is connected.
Transmission rate	9600, 19200, 38400	The transmission rate must match the one that has been set in the device. 9600 must be set if “RS232 setup interface (TTL)” is selected as the control signal.
Control signal	RS232	If the RS232 interface on the device is used.
	RS232 setup interface (TTL)	If the setup interface on the device is used.
	RS422-RTS	If the RS422/485 interface on the device is used.
	RS422-DTR	
	RS485-RTS	
RS485-DTR		
Expanded 	Stop bit and parity	The parameters under the “Expanded” button must also match the corresponding device parameters. Standard and obligatory settings for the control signal “RS232 setup interface (TTL)” are: Stop bit = 1 Parity = none
Communications protocol	Modbus protocol	This has a fixed setting, and cannot be altered.
Device address	1 ... 254	Device address for the Modbus protocol. If the “RS232 setup interface” is used as the control signal, then the device address will be ignored – it does not have to match the address in the device.

7 Data Transfer Menu

USB interface

The following parameters must/can be selected:

Communications protocol	Modbus protocol	The Modbus protocol must be set here.
Connected devices	Select which device should be connected.	If multiple devices are connected via USB interface, a device can be selected here.
Name	Activate check yes/no	If check is active, the device will only be connected if the device name matches.
F No.	Activate check yes/no	If check is active, the device will only be connected if the device number matches.
CPU	Activate check yes/no	If check is active, the device will only be connected if the CPU number matches.
Path	Activate check yes/no	If check is active, the device will only be connected if the USB path matches.

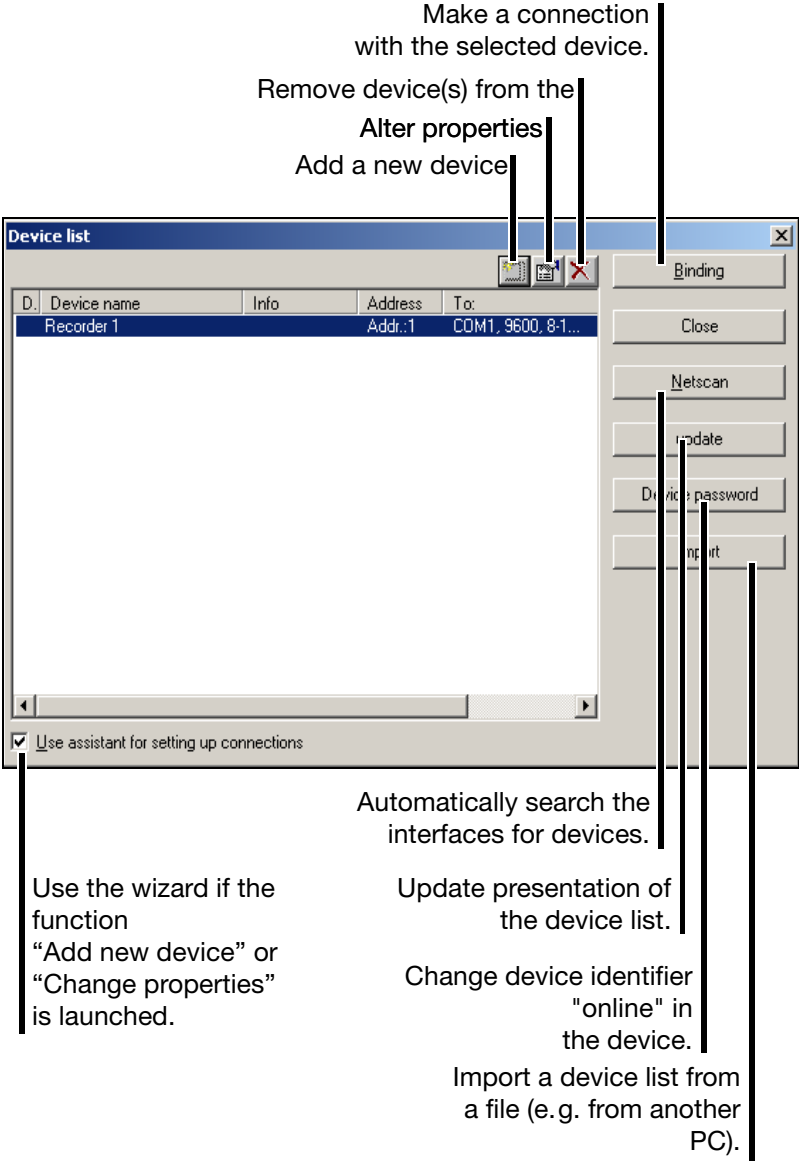
Device List

When all settings have been made, the device is entered in the device list.

7 Data Transfer Menu

7.2.2 Device List

All devices that have been defined are shown in a device list. The interface parameters are also administered here, and new, additional devices can also be defined in the device list.



Click **Binding** to make a connection to a device.

When deleting entries, you can use the Ctrl key on the PC keyboard and the left mouse button to select several devices at the same time and delete them.

A successful connection produces a change in the toolbar.

7 Data Transfer Menu

Not
connected



Connected



7.3 Disconnect

This breaks an existing connection between the PC and a device.

7.4 Data Transfer to Device

Transmits a setting setup to a device.

7.5 Data Transfer from Device

Reads in a setting from a device. If there is no connection, the program will automatically attempt to access the default device.

7.6 Data Export - Ext. Mass Storage

The setting is saved to an ext. mass storage medium (CompactFlash card or USB memory stick). Data card can be read in to the instrument using the *Memory manager* menu.

7.7 Data Import - Ext. Mass Storage

This reads a setting from a mass storage medium (CompactFlash card or USB memory stick) and displays it in the working area.



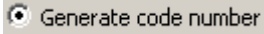
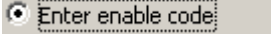
In order to use a function in the *Tools* menu, there must be an existing connection to an instrument. If there is no connection, the setup program will try to access the default device from the device list. If no default device has been defined, then the device list will appear on the screen and the user must set up a connection by hand.

8.1 Enable Program Options

If no valid serial number was entered during the installation of a program, then it will only run in demo mode. You can use this function to register a program at a later date and to convert it into a 30-day test or full version.

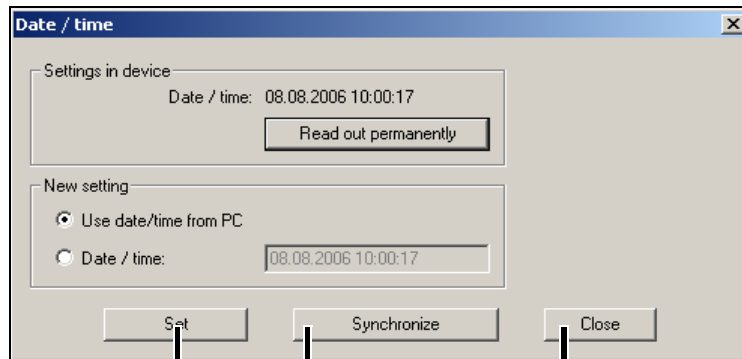
8.2 Enable Extra Codes

This function is intended for later extensions within the paperless recorder (e. g. enabling the extra code for “Math and logic module”).


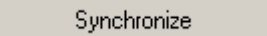
After starting up the function, the  function must be used to read out a code number from the instrument, which is then passed on to the manufacturer. The manufacturer will then generate a “release number.” The  function is used to transmit this release number to the instrument, which will then enable the new device functions.


8.3 Date and time

This function is used to match the date and time for an instrument to the PC time.



Terminates the
Synchronize a device with the
PC time.
Send the date and time to a device.

The  and  buttons are used to make a new setting of date and time for a device. Both functions use the details in the “New setting” selection as the basis for adjustment.

The  button is used to make date and time settings for a device. The “Set” function generates a **new** configuration in the instrument.

8 Tools Menu

The **Synchronize** function only sets the time. If there is a discrepancy of more than 30 seconds, then the function will not be carried out. The "Synchronize" function does **not** generate a new configuration.

Read out permanently ensures that the device clock is read out continually (cyclically). The continual read-out can be ended by activating **Cancel**. The clock cannot be adjusted while it is being continually read out.

8.4 Calibration and Testing

This function may only be used by a service engineer of the instrument manufacturer (or someone acting on the service engineer's instructions).

8.5 Create Screenshot

This function provides an additional option for documenting settings or events. When you start the function and activate "Create," a screenshot of the connected device is created. You can save the screenshot as a bitmap or print it out directly.

8.6 Ethernet Interface

It is possible to look at and alter the active settings for an instrument if it is connected to the PC via an Ethernet interface.



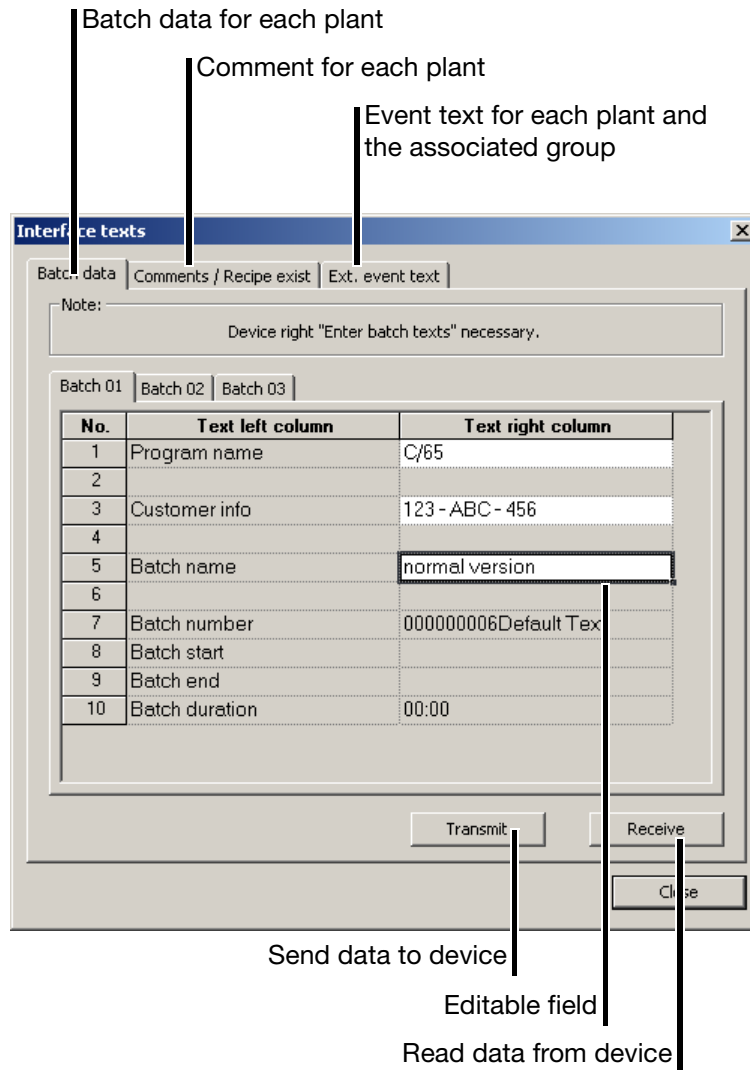
If the dialog is terminated by pressing the OK button, then the attached device will carry out a restart (reset). If you just want to look at the settings, leave the dialog by pressing the cancel button.

8.7 Write Interface Texts

With this function you can:

- read and write batch texts for the current batch,
- read and write an additional batch text (e.g. a recipe), and
- write event texts.

The function is independent of the present setting in the dialog window (setup file). The data can be transmitted to a device without causing a new configuration.



Batch data

All the editable fields can be altered and sent to the attached device. If a batch report is terminated at the instrument, then the instrument (= device) will continue to use the configuration data.

Comment

A text (e.g. a recipe) up to 400 characters long can be sent to the attached device and so saved in the course of a batch report. The text can be called up on the instrument in the visualization of a finished batch report.

If a batch report is terminated at the instrument, the comment will be deleted from the instrument. Since the data are retained in the dialog window of the setup program until new data is received, it is possible for edited data to be sent to an instrument more than once.

8 Tools Menu

External event text

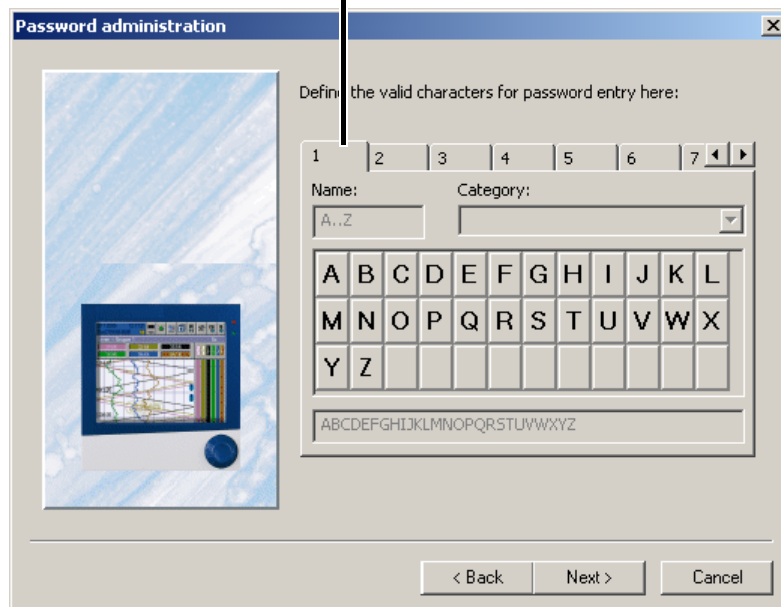
This function can be used to write a group-specific event text in the event list of the recorder. Please note that the groups are, in their turn, assigned to the plants.

Plant number	Group	Plant (batch)
1	1 ... 9	1
2	1 ... 3 4 ... 6 7 ... 9	1 2 Not assigned
3	1 ... 3 4 ... 6 7 ... 9	1 2 3

8.8 Password Management ...

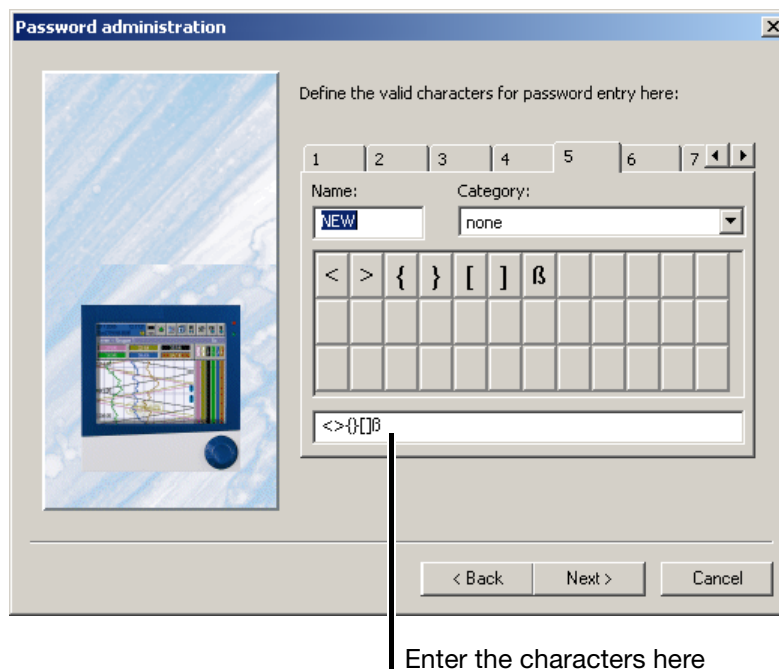
The password management function can be used to alter the passwords for the users and their rights, as well as the standard rights (applied when no user is logged in to the device).

Tables 1 – 16



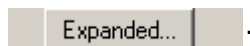
All the characters that are listed can be used for allocating passwords.

- * Scroll through the individual tables and check whether the character selection is adequate for your requirements.
- * If not, look for the first available table and then define additional characters.



- * When you have finished defining the characters, click **Next >**.

In the following dialog, the passwords can be allocated for the users, and the user rights and standard rights can be viewed and altered by clicking



8.9 Reset User List ...

This function resets the device user list to the standard settings (user: "Master", password: "9200" and user: "User", password: 0). This function will only be available if the user who is logged in to the setup program has the corresponding access rights (e.g. logged in as Specialist).

⇒ Chapter 3 "Log-in and Rights"

8.10 Delete Internal Memory ...

This function deletes the device-internal memory. The function will only be available if the user who is logged in to the setup program has the corresponding access rights.

⇒ Chapter 3 "Log-in and Rights"

You should only use this function after the installation of the instrument, or after setting up a new plant.

8 Tools Menu



The deletion of the memory contents is irreversible. All the data recorded up to this moment will be deleted, and only the active configuration will be retained.

When this function has been performed, the attached device will carry out a restart (reset).

8.11 Renew Log-in/Alter Password

The function *Renew log-in/alter password* is used to

- activate the user and password query at the program start, and
- alter the current password.

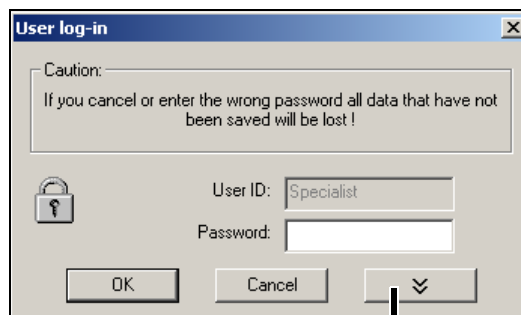
This function only has an effect on the operation of the setup program, not the recorder.

Activation of the user and password query at the program start

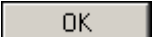
When the setup program is installed for the first time, there will not yet be a query of the user name and password when the program starts. You will automatically be logged in as “Specialist”, with a blank password.

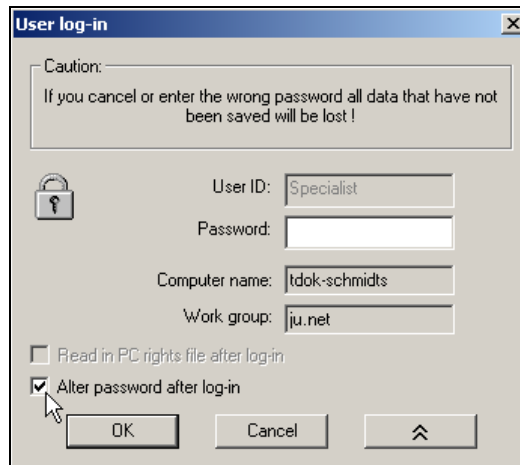
Proceed as follows:

- * Start the function “Renew log-in / alter password”.
- * Show the options.



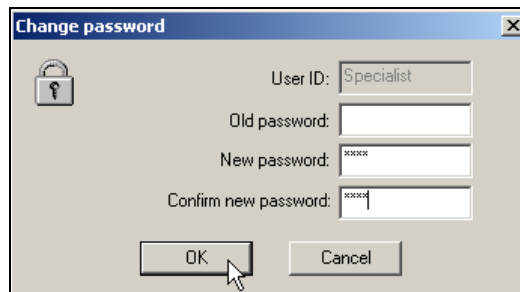
Show the options.

- * Activate the option “After log-in – alter password” and click .




The "User log-in" dialog box features a blue title bar with a close button. A "Caution" message box at the top states: "If you cancel or enter the wrong password all data that have not been saved will be lost!". Below this is a lock icon. The form contains the following fields: "User ID:" with the value "Specialist", "Password:" (empty), "Computer name:" with the value "tdok-schmidts", and "Work group:" with the value "ju.net". There are two checkboxes: "Read in PC rights file after log-in" (unchecked) and "Alter password after log-in" (checked). At the bottom are "OK", "Cancel", and an upward-pointing arrow button.

- * Enter the password – the “Old password” field remains empty.



The "Change password" dialog box has a blue title bar and a lock icon. It contains three password fields: "Old password:" (empty), "New password:" (filled with "xxxxxx"), and "Confirm new password:" (filled with "xxxxxx"). At the bottom are "OK" and "Cancel" buttons.

When the entry has been concluded, the new password is activated by clicking . From now on, the user name and the password will be requested at the program start.



Initially, no start password is assigned to the “Maintenance” user either. At program start, log in with the “Maintenance” user name and enter a password as described above.

Password alteration

Altering a password is very similar to activating the password prompt. The only difference is that in this case the “Old password” field must not remain empty.

8 Tools Menu

8.12 Text Library

The text library contains the various operator languages. When a new setup file is created, the languages will be copied to the setup file if requested. The first two languages (Language 1 and Language 2) are transferred to the instrument and can be selected there.

The operation of the text library is identical to the menu item *Edit* → *Country setting*.

⇒ Chapter 6.5 "Country settings"

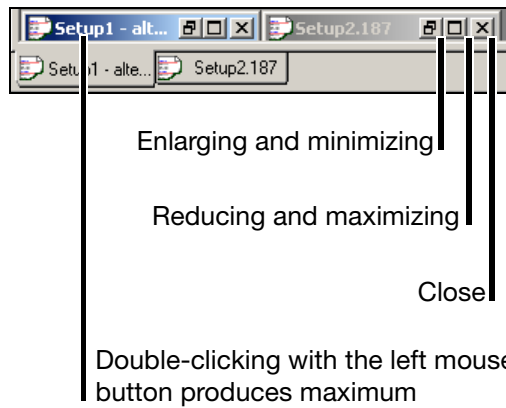
⇒ Chapter 11 "Languages"

8.13 Import Text Library

This imports text libraries (own independently created languages) that were created with Version 187.01.xx setup programs. Imported languages must be checked by the user for completeness.



The usual Windows options are available for the positioning of the dialog windows.



9.1 Cascade

If several dialog windows are open at the same time, this function has the effect that all windows are shown with a small offset to one another. Clicking a window moves it to the foreground.

9.2 Tile horizontally

If several dialog windows are open at the same time, this function has the effect that the various windows are shown one above another. You can switch into each window by clicking it.

9.3 Arrange Icons

All the open windows are minimized – they disappear from the screen, but are not closed.

9 Window Menu

9.4 Teleservice

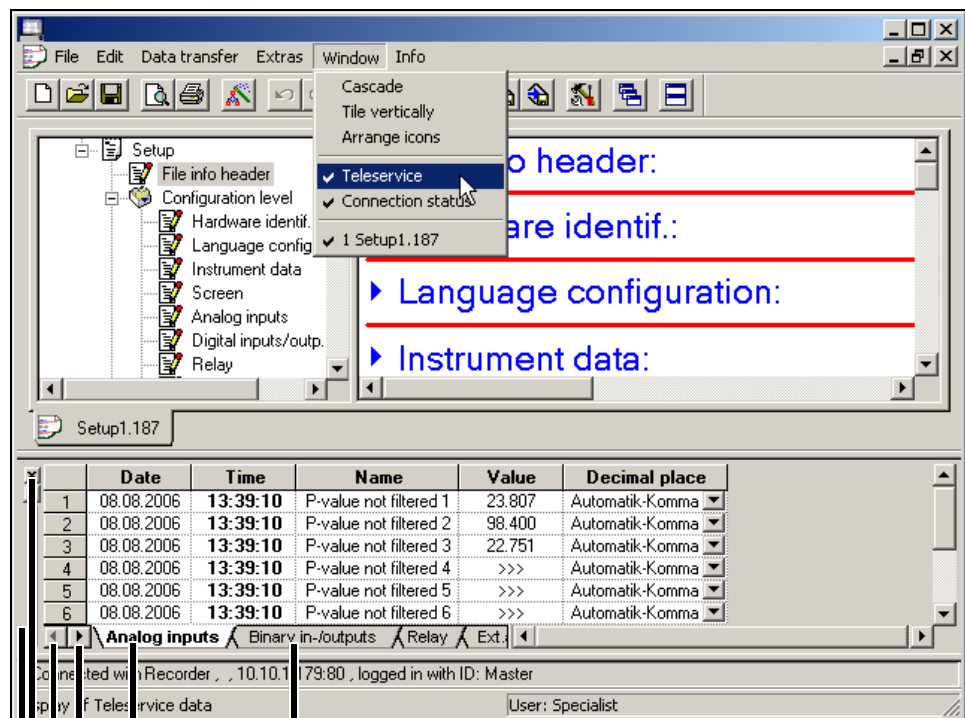
You can use this function to switch the Teleservice window in or out of display. Positioning is independent of the position of the dialog window.

You can use Teleservice to request the latest data from a paperless recorder.

In order to use Teleservice, there must be an existing connection to an instrument.

⇒ Chapter 7.2 "Make connection"

You can switch Teleservice into or out of display via the *Window* menu.



Click here to select the register as the active tab

Active tab

Click here to show other tabs in the display (if available)

Close Teleservice window

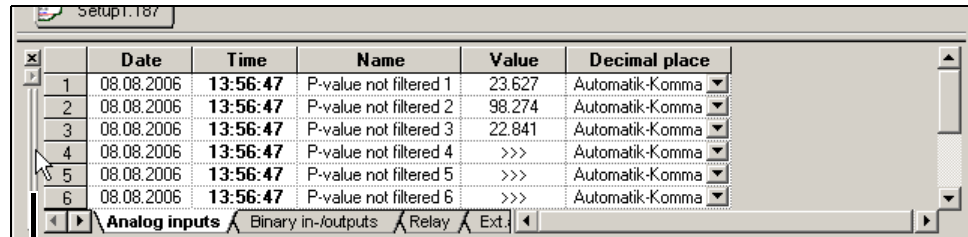
Move the Teleservice window.

⇒ „Moving the toolbar” on page 22

Moving the Teleservice window

The Teleservice window can also be moved. The same options apply as for moving the toolbar.

⇒ „Moving the toolbar” on page 22



	Date	Time	Name	Value	Decimal place
1	08.08.2006	13:56:47	P-value not filtered 1	23.627	Automatik-Komma
2	08.08.2006	13:56:47	P-value not filtered 2	98.274	Automatik-Komma
3	08.08.2006	13:56:47	P-value not filtered 3	22.841	Automatik-Komma
4	08.08.2006	13:56:47	P-value not filtered 4	>>>	Automatik-Komma
5	08.08.2006	13:56:47	P-value not filtered 5	>>>	Automatik-Komma
6	08.08.2006	13:56:47	P-value not filtered 6	>>>	Automatik-Komma

Position the mouse pointer here. Then, while holding the left mouse button down, move the Teleservice window to a different position.

9.5 Connection Status

You can use this function to switch the connection status window in or out of display. Positioning is independent of the position of the dialog window.

⇒ „Connection status” on page 22

9 Window Menu

10.1 Information about Setup

Here you can find out the version number of the setup program. Please have the version number available if you contact the service hotline.


10.2 Software Documentation

This function calls up the available instrument and software documentation in PDF format.

10.3 Registered License Numbers

Here you can find out the license number of the setup program. Please have the license number available if you contact the service hotline.

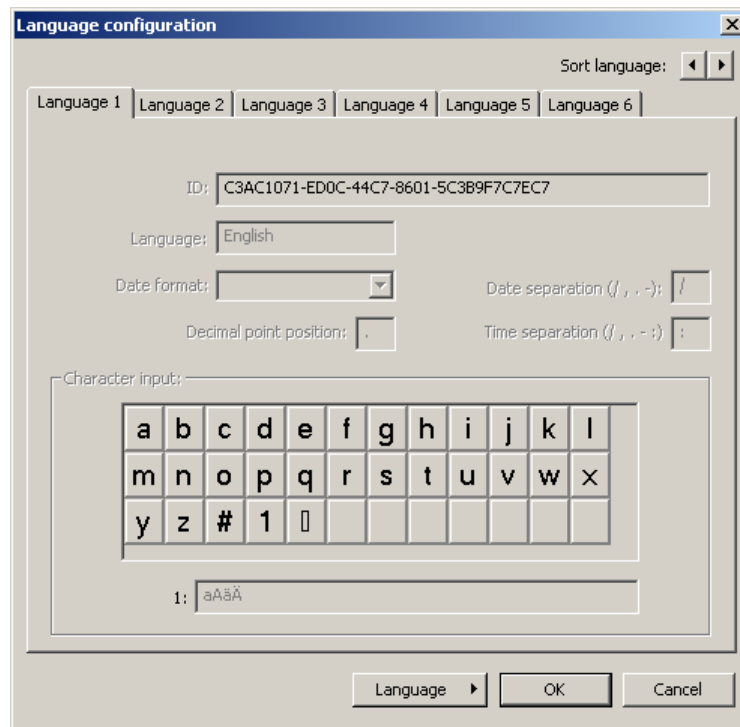
10.4 Program folder

Here you can obtain information as to which folders (directories) on the hard disk or in the network are used by the setup program. If you operate the  button, the contents of the folder will be displayed.

For languages, a distinction is made between:

- The languages for a setup file
(*Edit* → *Country settings*) and
- The languages in the text library of the setup program
(*Tools* → *Text library*).

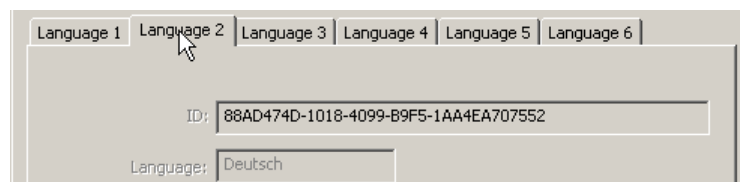
It makes no difference where a language is added or changed. It can be copied back and forth in either direction.



It is not possible to edit a standard language. A standard language can be recognized by the fact that there are no editable fields in the dialog window. If a standard language has to be altered, then it will have to be recreated.

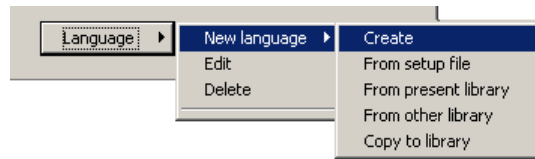
11.1 Adding a Language

- * Click the language that will be used as a basis in the dialog window, to choose it.

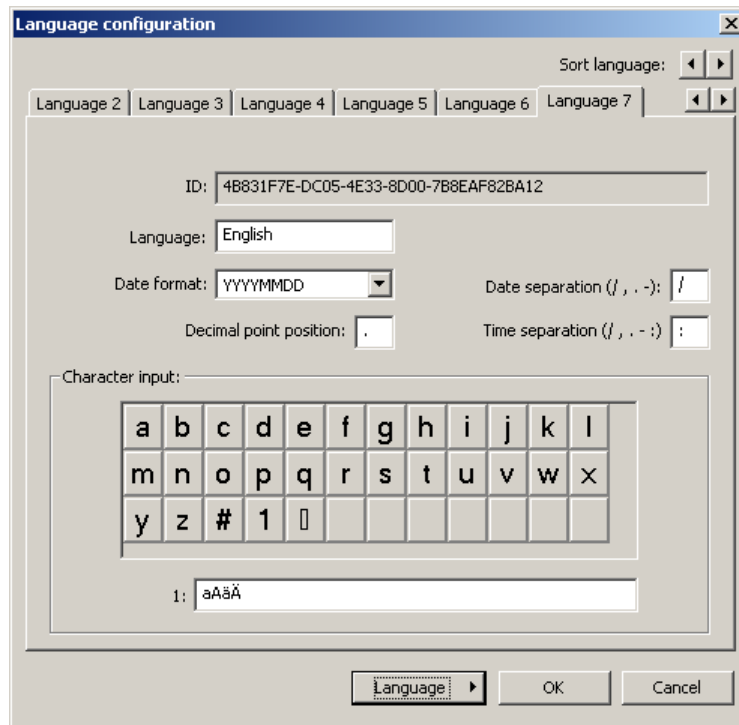


11 Languages

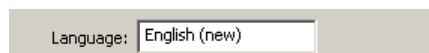
- * Select function *Language* → *New language* → *Create*.



A copy of the language will be created, and the corresponding summary data will be displayed. The presence of white fields instantly shows you that this language can be edited.



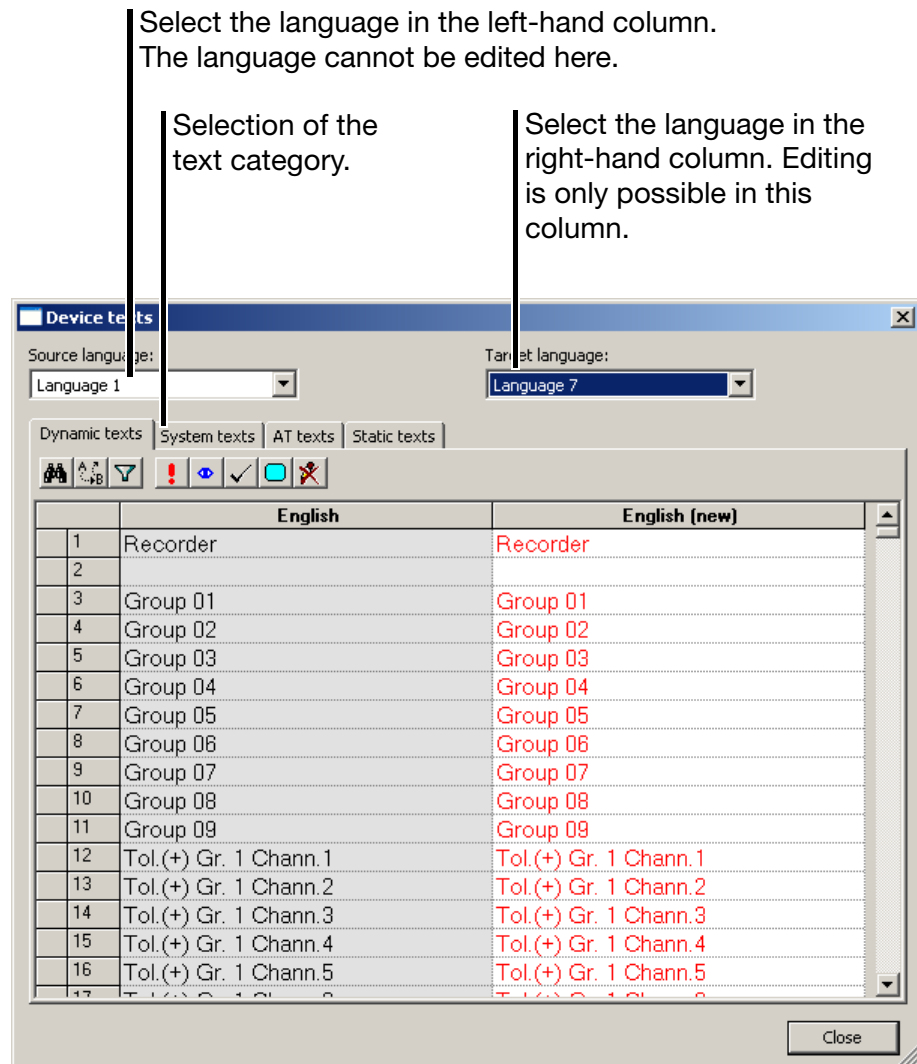
- * First of all, give the new language a new name, so that it can be identified later.



- * The function *Language* → *Edit* can now be used to make alterations to the new language.

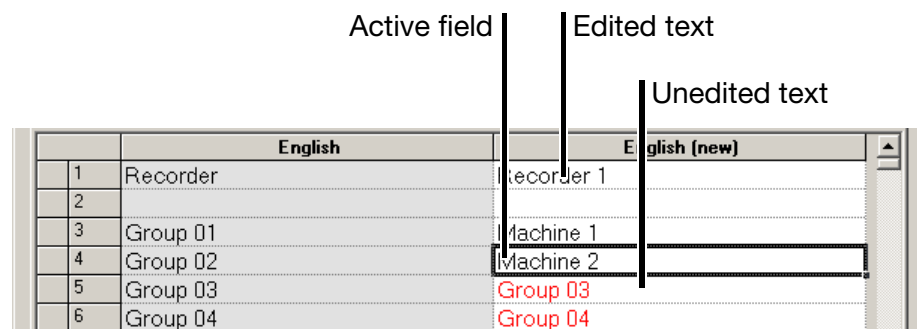


11.2 Editing Languages



When a new language has been created, the texts are shown as red text on a white background. This indicates that these texts have not yet been edited (or translated).

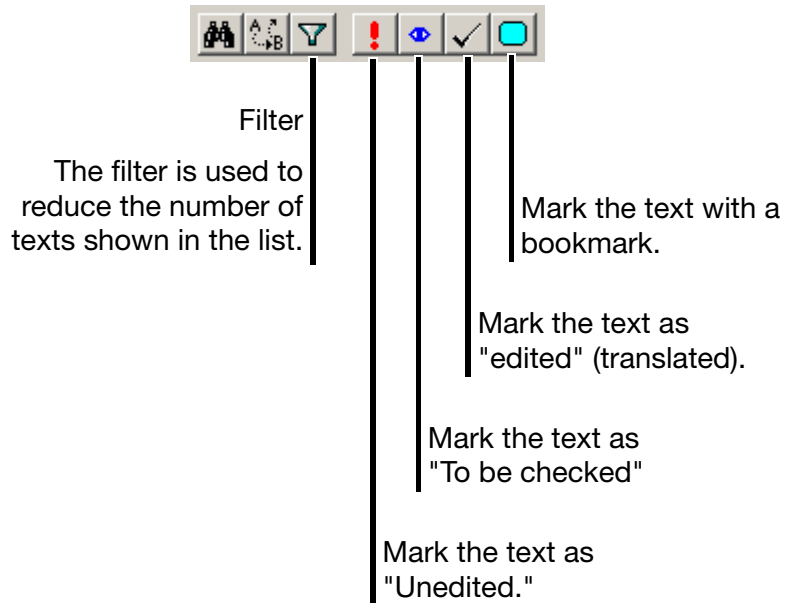
Use the left mouse button to click in a text field. Then it can be edited. If you leave the field, the entry for this field is finished. It will be shown as black text on a white background. This indicates that the text has been edited (or translated).



11 Languages

Toolbar

The toolbar can be used to alter the status of a text and activate a filter.



Errors

The following errors may occur during text entry, and are indicated by a colored background:

Background	Explanation
Blue	Not enough memory available. The total number of characters in a text is too long and must be reduced (shorten text).
Yellow	The text that was entered is too long – it does not fit into the intended window.
Mauve	The text that was entered contains characters that the instrument cannot display.
Brown	Error when editing a wildcard (#). The # symbol is used as a wildcard. The instrument software automatically generates text to take the place of the wildcard. Example: "Device ID #1,100". "Device ID" can be changed, but not "#1,100".



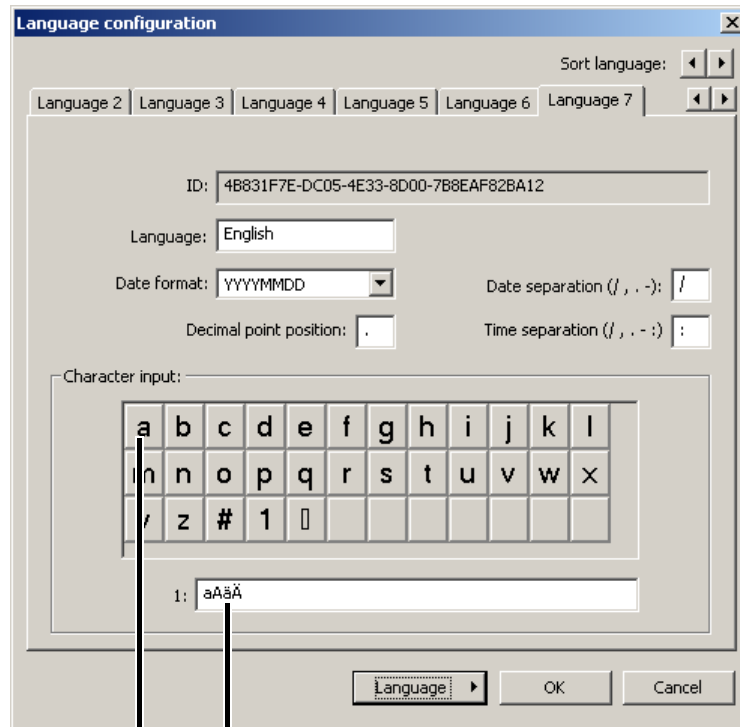
If errors occur, they must be removed.

A setup file that contains errors must not be transferred to an instrument.

11.3 Device character set

For new languages, you can define the characters that may be used in entering text for the paperless recorder.

⇒ Chapter 11.1 "Adding a Language"



Characters in the group

Group of characters

- * Left-click on a group.
- * Then edit the characters that are available in the group.

The characters that are defined here will be visible for text entry to the paperless recorder.



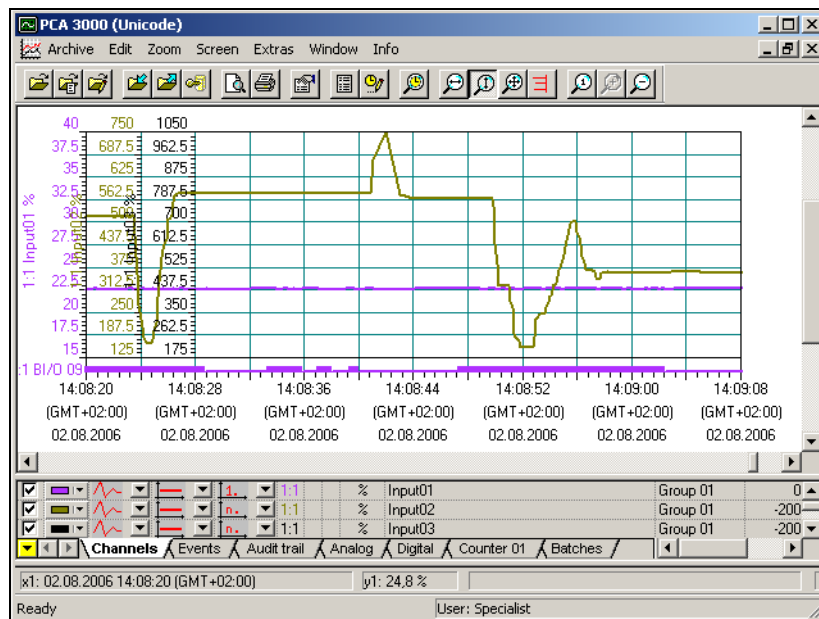
11 Languages

12.1 PC Evaluation Software PCA3000



PCA3000 is described in the operating manual B 709701.0 in detail.

PCA3000 is the professional evaluation software for data analysis of the archived instrument process data.



PCA3000 is the ideal software for the best-quality graphic and alphanumeric display of electronically stored measurement data. The software supports multi-user functionality, so that different users can access the same data. PCA3000 runs under Windows NT, Windows 2000 and Windows XP.

- Data storage** The life-cycle archive data structure enables on-demand saving and archiving of all process data, clearly and simply, in a single file.
- Data archive** Archive data can be read out and visualized directly from a CD-ROM or DVD (a transfer to the hard disk is not necessary).
- Data export** Data export at the HTML level, or as an ASCII text file (for evaluation in Excel).
- Communication** The data transfer program PCC (Communication Server software) is perfectly matched to PCA3000, and enables the comfortable read-out of data through the interface, using RS232/ RS422, Ethernet, a modem, or through the USB device interface.

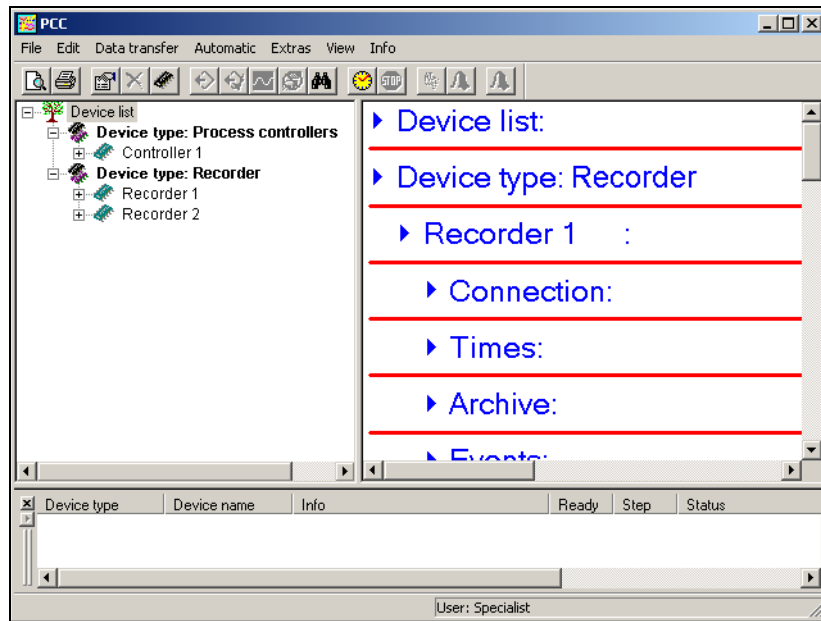
12 PCA3000 and PCC

12.2 PCA Communications Software (PCC)



PCC is described in detail in the operating manual B 709702.0.

PCC is the professional archive software: it transfers the data (setup, serial or Ethernet) from the recorder (or several recorders and controllers) via an interface, and places it on a PC or network.



13 Character Set

Entering special characters

Any (special) characters in the setup program that cannot be entered directly from the keyboard of the PC can be entered with the help of the **Alt** key and a corresponding numeric combination.

Example

The special character © has to be entered:

- * Position the cursor with the mouse, or by using the cursor keys, at the point where the character will be inserted.
- * Press the **Alt** key **and hold it down**
- * Enter the numeric sequence 0169 on the number block (on the right-hand side of the keypad) – the leading zero **must** be entered as well.
- * Release the **Alt** key.

The © character is inserted at the cursor position.

Cyrillic characters



The character set depends on the language of the operating system that is used, and may be different from the example.

If “Russian” has been selected as the language for the instrument, then the characters 0192 ... 0255 will be replaced by Cyrillic letters in the instrument.

Example of a character code

Number	Char.	Number	Char.	Number	Char.	Number	Char.
032		080	P	0161	ı	0209	Ñ
033	!	081	Q	0162	ç	0210	Ò
034	"	082	R	0163	£	0211	Ó
035	#	083	S	0164	α	0212	Ô
036	\$	084	T	0165	¥	0213	Õ
037	%	085	U	0166	ı	0214	Ö
038	&	086	V	0167	§	0215	×
039	'	087	W	0168	¨	0216	Ø
040	(	088	X	0169	©	0217	Ù
041	)	089	Y	0170	ª	0218	Ú
042	*	090	Z	0171	«	0219	Û
043	+	091	[	0172	¬	0220	Ü
044	,	092	\	0173	-	0221	Ý
045	-	093	]	0174	®	0222	Þ
046	.	094	^	0175	-	0223	ß
047	/	095	_	0176	°	0224	à
048	0	096	'	0177	±	0225	á
049	1	097	a	0178	²	0226	â
050	2	098	b	0179	³	0227	ã
051	3	099	c	0180	'	0228	ä
052	4	0100	d	0181	μ	0229	å
053	5	0101	e	0182	¶	0230	æ
054	6	0102	f	0183	·	0231	ç
055	7	0103	g	0184	,	0232	è

13 Character Set

Number	Char.	Number	Char.	Number	Char.	Number	Char.
056	8	0104	h	0185	ı	0233	é
057	9	0105	i	0186	°	0234	ê
058	:	0106	j	0187	»	0235	ë
059	;	0107	k	0188	¼	0236	ì
060	<	0108	l	0189	½	0237	í
061	=	0109	m	0190	¾	0238	î
062	>	0110	n	0191	ı̇	0239	ï
063	?	0111	o	0192	À	0240	ð
064	@	0112	p	0193	Á	0241	ñ
065	A	0113	q	0194	Â	0242	ò
066	B	0114	r	0195	Ã	0243	ó
067	C	0115	s	0196	Ä	0244	ô
068	D	0116	t	0197	Å	0245	õ
069	E	0117	u	0198	Æ	0246	ö
070	F	0118	v	0199	Ç	0247	÷
071	G	0119	w	0200	È	0248	ø
072	H	0120	x	0201	É	0249	ù
073	I	0121	y	0202	Ê	0250	ú
074	J	0122	z	0203	Ë	0251	û
075	K	0123	{	0204	Ì	0252	ü
076	L	0124		0205	Í	0253	ý
077	M	0125	}	0206	Î	0254	þ
078	N	0126	~	0207	Ï	0255	ˇ
079	O	0128	€	0208	Ð		

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