
Operating manual

ReadWin[®] 2000

E+H Wetzer 07/01



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1 Introduction

1.1 Preface

Concept

In this chapter we would like to introduce ReadWin® 2000, the common PC software for all E+H units containing an interface, also what the system requirements are and how to install the software.

The PC software is free of charge! It is always an integral part of the delivery when the serial interface in our units is used.

Please keep these instructions in a safe in a printed form or save it as a file!

1.2 Symbols



Attention

This symbol is used when not following these instructions can lead to damage to data!



Note

This symbol is used when you are to be notified of something specific.



Reference

This symbol refers to information in other chapters or paragraphs.

1.3 Character modes

Menu points

Menu points and programme commands are always indicated in bold/italic characters. Menu name, menu point and menu sub points are always separated from each other using a '-->".

1.4 Hardware and software requirements

The following hardware and software requirements must be fulfilled for the installation and operation of the PC software:

- IBM PC or compatible PC from Pentium 166 MHz
- 64 MB Main RAM
- CD ROM drive
- Screen resolution at least 800 x 600 Pixel
- Windows 95 / 98 / ME / NT4.0 / 2000

Recommended minimum configuration

Pentium 400 MHz

128 MB main RAM

120 MB free hard drive memory

Screen resolution 1024 x 768 Pixel

All names and descriptions used could be trade names of their individual users.

1.5 Installation

1.5.1 Start set-up

Place CD into drive

If autostart is active then the installation is automatically started. If this is not the case go to the directory „...\install“ on the CD and start „Setup.exe“.

Follow the installation programme instructions.

Start ReadWin® 2000.

1.5.2 What programmes do I find on the CD?

In addition to the actual ReadWin® 2000 PC software you will find the following additional programmes:

- DDE server
- Mem-Calc
- Eco-Graph and Memo-Graph simulation
- WinSer32, terminal programme

1.6 Where do I find the most up to date version of ReadWin® 2000?

Always up to date!

The ReadWin® 2000 PC software can be directly downloaded from the Internet. This means you will always have access to the most up to date version:

www.endress.com/ReadWin

1.7 Data security

The instrumentation used front end reliably record and store the measured values and events. Once these have been transmitted error free they are store manipulation secure in the PC database.

If some measured data is manipulated this is recognised and highlighted in the PC display.

Date/Time	Status	Channel 1	Channel 2
		Average	Average
		°C	°C
05.04.01 06:00:00	OK	1,7	87,3
05.04.01 06:06:00	3	4,0	121,9
05.04.01 06:12:00	OK	1,7	86,1

Legend	Unit 1 (Tabular)	Unit 1 (Events)
--------	------------------	-----------------

Data integrity: Checksum error (3)

2 Operating level

2.1 Overview

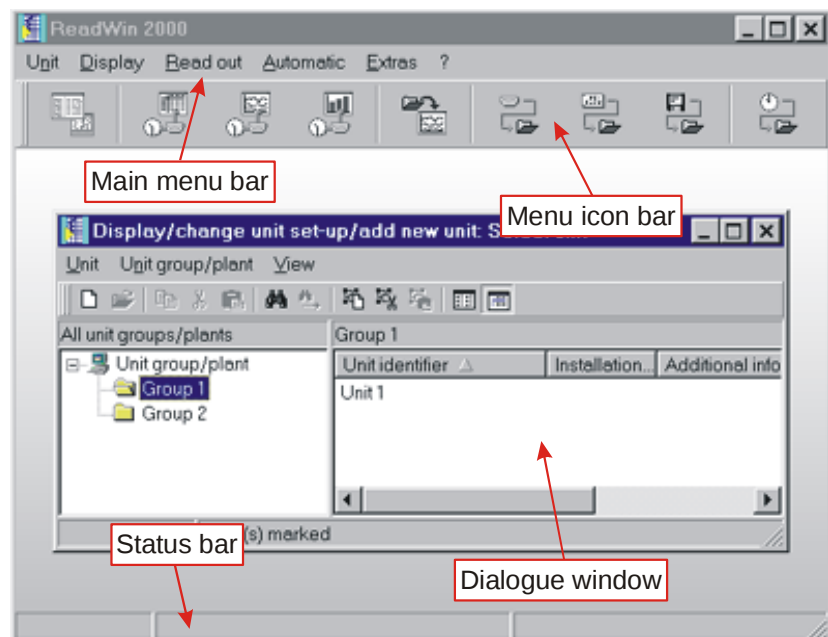
In the following chapter you will find a detailed description to each function that can be run using this PC software. The operating level is constructed as follows:

Main menu bar

The following menu points can be selected:

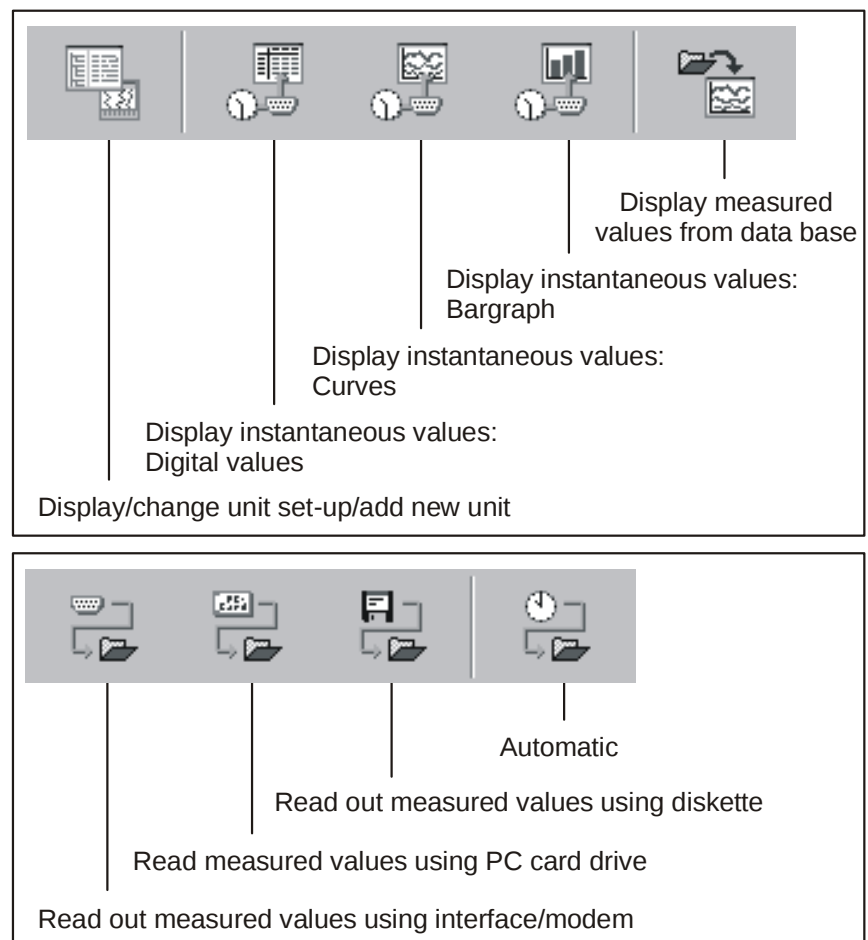
- Unit
- Display
- Read out
- Automatic
- Extras
- ? (Online help)

A further menu with command list appears once the main menu point has been selected (click with mouse). This PC software opens a dialogue window once a command has been selected:



Menu symbol bare

The following symbols are available:



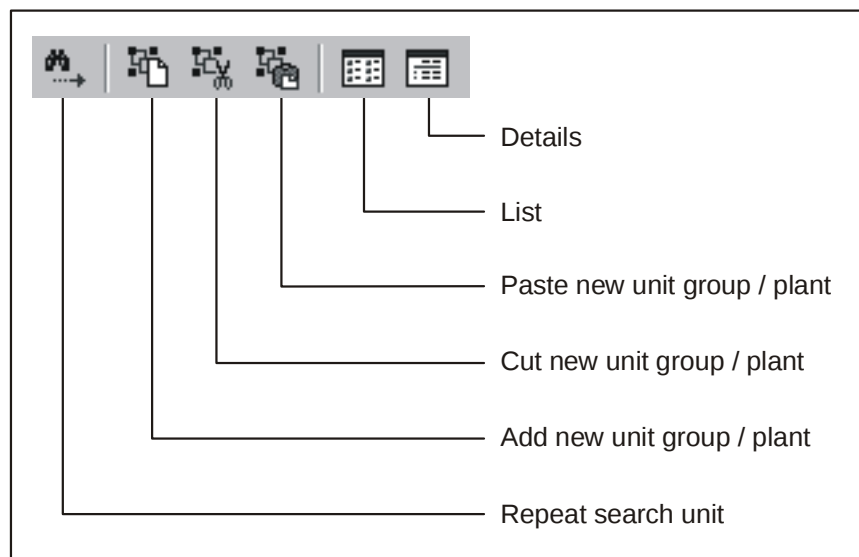
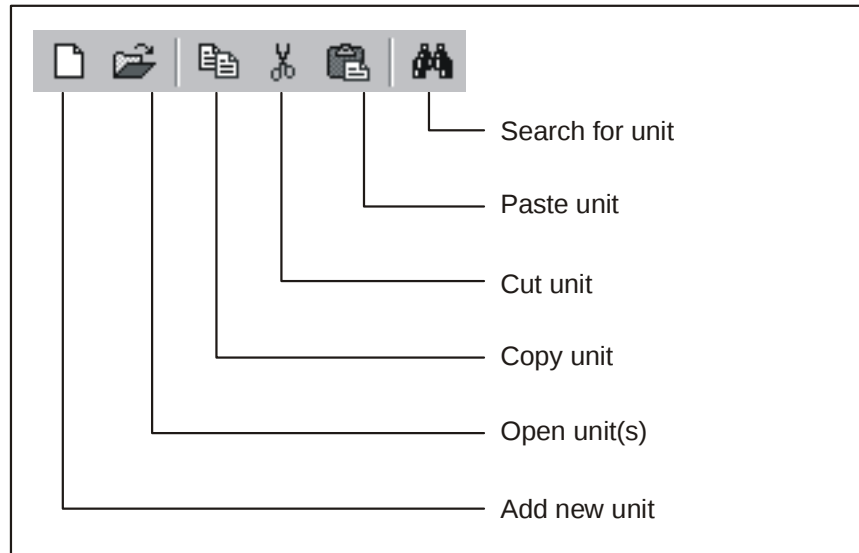
The programme open the respective window once the Icon has been selected (mouse click).

Unit dialogue window

As soon as a function will be selected in the Main menu bar or Menu icon bar the programme opens a respective dialogue window. This dialogue window is similarly constructed dependent on the operating level of the main menu.

If a menu point in the unit dialogue window is selected from the **Main menu bar** a pull down menu with dialogue command appears. By clicking onto the menu Icon in the **Menu icon bar** this command is immediately run without the need of the pull down menu.

The following Icons are available for selection in the Icon bar in the unit dialogue window:



Note

The following commands from the pull down menu in menu points **Unit** and **Display** are identical in every unit dialogue window. For further commands from the pull down menu of the menu point **Unit** see also Display/change unit set-up/add new unit.

Unit

Open unit

Select the command **Open unit** if connection is to be made to the selected unit.

Search for unit

Select the command **Search for unit**. Enter the required unit description in the text window and acknowledge using **OK**. If the required unit is found the cursor moves to the unit group and highlights the unit found. The search is aborted if a unit with the entered description is not found in the database.

If the complete unit description is not known then it is sufficient to enter a part of the description followed with a *, e.g. Data*. The cursor will then move to the first unit containing the respective unit description.

Repeat unit search

Further units can be looked for and displayed by using the command **Repeat unit search** or by operating the **F3** function key.

Select all units

If the command **Select all units** is selected then all units in the unit list of the selected file in the dialogue window are activated.

Abort

Select the command **Abort**, in order to close the unit dialogue window.

View

Details

In order to get detailed unit information in the dialogue window select the command **Details** or the respective menu Icon.

List

If only a listing of the units is required then select the command **List** or the respective menu Icon. A tick in the pull down menu indicates which option has been selected.

Operating the Refresh command or the **F5** function key can actualise the view of the dialogue window.

Direct selection of a unit

Select the required unit directly in the unit listing. By operating the right mouse key the pull down menu of the menu point **Unit** is activated.

3 How do I start?

3.1 Initial start up

Select language

The operating language for this software can be selected when it is started for the first time.

The following languages are available at the moment:

German

English (GB)

Dutch

French

Danish

Italian

English (USA)

Swedish

The operating language can be changed at any time: **Extras --> Program options --> Change language**

Selection list of unit types

When this software is started for the first time a preselection as to the unit types that are to be placed into the data base can be made.

Dependent on the units selected all relevant functions for these units appear. This gives a better overview of the units available when commissioning.

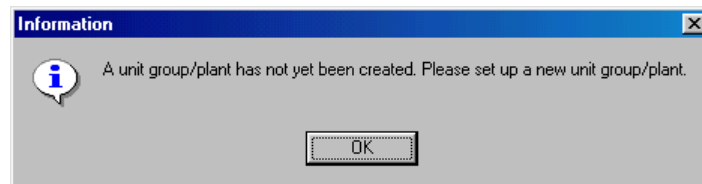
Other unit types can be added or removed later using the menus: **Extras --> Program options --> Select units used.**

3.2 First steps with this software

Generate a unit group

There is no data available in the database in the first start up this software. Because of this the programme requests that a unit group be generated.

The following dialogue window appears in **Unit -> display/change unit set-up/add new unit**.



At least 1 character must be entered for the identification of the unit group.

Add new unit

Once the unit group has been generated add a new unit to this group. A more detailed description of how to do this can be found in chapter 4.

Once the unit data has been successfully added to the database measured data can be loaded/displayed or exported. See "Store/save measured values" and "Load measured values".

4 Menu 'Unit' - Create or maintain unit data base

4.1 Common

Using this menu the unit database can be completely maintained.



Note

Units that are to be set up, maintained, read out or displayed using this software must first be entered into the unit database. Only then are all settings/values available by simply selecting the unit.

The main menu **Unit** is divided into the following sub menus:

- **Display/change unit set-up/add new unit**
- **Exit programme**

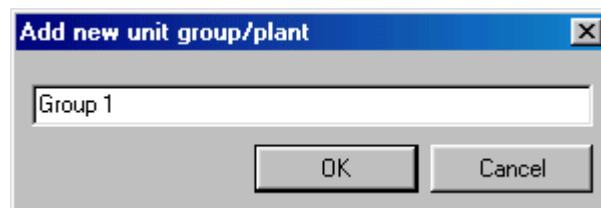
4.2 Display/change unit set-up/add new unit

4.2.1 Add new unit group

Add new unit group

Before a unit can be placed in the database a unit group must be generated.

It is possible to save the unit in different directories and sub directories, in the so-called **Unit groups**. Here the unit group name is totally selectable and can be changed at any time. This increases the understand ability. This is especially important if there a large number of units are to be maintained.



At least 1 character must be entered in the text window.

4.2.2 Add new unit

Once a unit group has been generated a new unit can be added.

In addition to the **unit identifier** (at least 1 character long) the **Installation point** and further **Information** can be added.



Note

The text entry in the field **Unit identifier** must be different for each unit to be maintained by this software.

The unit set-up is read into the programme once the transmission form has been selected.

The following forms of transmission can be used. These are described further in Read in unit set-up:

- Serial, (e.g. RS232 / RS485)
- Modem
- Ethernet (TCP/IP)
- Parameter file from a data carrier

Add new unit

General information

Group/plant: Group 1

Unit identifier: Unit 1

Installation point: Plant 1

Information:

Using which interface is the unit to be set up:

Serial (e.g. RS232 / RS485)

Modem

Ethernet (TCP/IP)

Parameter file from a data source (e.g. diskette, ATA flash card)

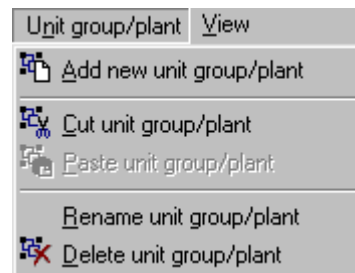
< Return Continue > Cancel

4.2.3 Existing unit group

Move

Once the menu point **Display/change unit set-up/add new unit** has been selected a window that is divided into two sections appears. On the left side a list of existing unit groups appear and the right section contains the units that are in the unit group selected (*see Unit dialogue window*).

If a group is selected using the cursor this can be moved to another group using the 'Drag+Drop' function. All units contained in this group are then also automatically moved.



Cut/paste

Using the commands **Cut unit group/plant** and **Paste unit group/plant** Unit groups can be moved to another group within the existing list. This means that all units within this group are moved.

Rename

Unit groups can be renamed at any time.

Select the unit group that is to be renamed from the list. Select the command **Rename unit group/plant** in the menu point **Unit group/plant**. Enter the new name for the unit group in the text window. This is then accepted by selecting **OK**.



Note

The unit group identifier must be unique. Unit groups with identical identifiers are not possible!

Delete

Select the unit group that is to be deleted from the list. Select the command **Delete unit group/plant** in the menu point **Unit group/plant**.



Note

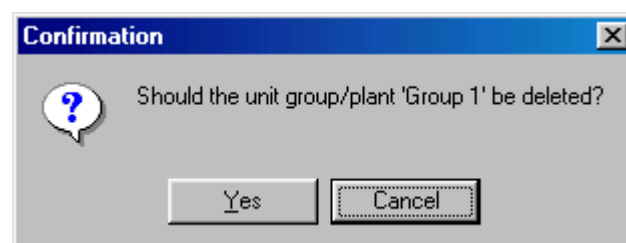
Only empty unit groups can be deleted, this means that all sub groups or units must be removed.



Attention

Deleting a unit group cannot be undone.

Before a unit group can be deleted, **Yes** must be selected in the confirmation window that appears.



4.2.4 Existing units

Cut/paste



Using this command a unit can be moved from one unit group to another.

Select the unit from the unit list. Select the command **Unit -> Cut unit**. It is now possible to place this unit into a different group using the command **Unit -> Paste unit**.

The selected unit can be moved to any unit group/sub group.

All unit settings **and** measured values belonging to the unit selected are automatically moved with the unit.

Copy

Using this function a unit can be copied to any other unit group. Here the complete unit set-up is also copied. Measured values are not copied!

A specific number identifies a copied unit.

Select the unit that is to be copied from the unit list. Select the command **Unit -> Copy unit**. It is now possible to place this unit into a different group. Select the command **Unit -> Paste unit**.

Move

Open the window **Display/change unit set-up/add new unit**. Units can now be moved by using the 'Drag+Drop' function. Select a unit from the **unit dialogue window** and move it to any other unit group or sub group.

The complete unit set-up **and** measured values of the unit moved are also automatically moved to the new unit group.

Rename



Select the unit that is to be renamed from the unit list. Select the menu **Unit -> Rename unit**. Enter the new unit identifier in the text window.

Note

The unit identifier must be unique. Same unit identifiers for more than one unit are not possible.

Delete



A unit can be removed from the unit database. Select the unit that is to be deleted from the unit list. Select the menu point **Unit -> Delete unit**.

The following warning appears. The unit is only deleted when the delete sequence is confirmed with **Yes**.

Attention

The delete sequence cannot be undone. The complete unit set-up and measured values are deleted!

4.2.5 Import unit set-up

Parameter files that have been saved externally can be imported to the database. Select the menu point ***Import unit set-up*** from the menu ***Display/change unit set-up/add new unit***. Once the drive/file (*.stg or *.ruf) have been selected the set-up is imported.

4.2.6 Export unit set-up

A selected unit can be exported or copied from the unit. The data in the database are not deleted. Once the drive/file (*.stg or *.ruf) have been selected the unit set-up is copied to a data carrier or the PC drive allocated.

4.3 Read in unit set-up

4.3.1 Read in/display unit set-up from a new unit

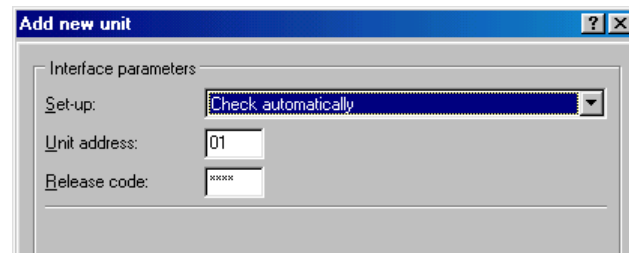
*Serial transmission using
an RS232/RS485 interface*

Connect the unit to the PC serial interface.

The interface parameter input mask must be filled in.

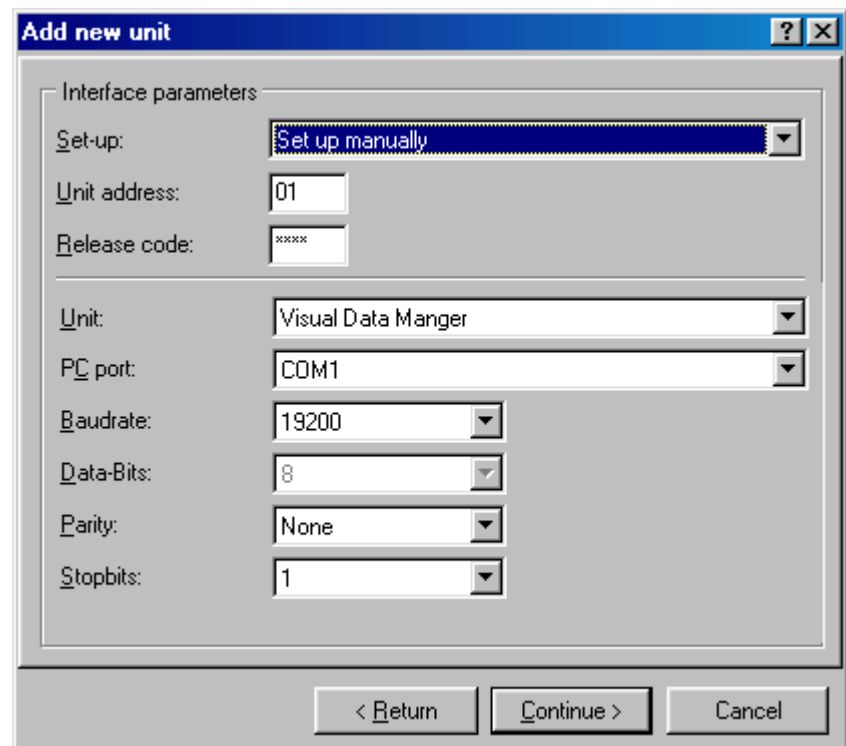
If required the programme can automatically set up the necessary interface parameters and then make connection with the unit.

1. Automatic check for interface parameters.



2. Set up interface parameters manually

Select the text field **Add new unit -> Set up manually** and enter all the relevant interface parameters.



The **set-up 'Baud rate', 'Parity' and 'Data-/Stop bits'** in the **'Interface parameters'** must correspond identically with the set-up of the unit connected.

Once this set-up has been acknowledged the unit set-up from the new unit is stored in the data bank and can be retrieved at any time.



Serial transmission using a modem

Note

If unit set-up from more than one unit is to be transmitted using the RS485 interface then a different address must be entered for each unit (01 to 99, entered at both the unit and the PC software).

Unit set-up can also be transmitted using a modem. In order to do this a modem must be connected to both the unit and the PC.

Select transmission mode as **Modem**. Here the modem set-up must be entered. Enter the telephone number of the unit to be selected (the modem connected to the unit) in the text field **Telephone no..**

The screenshot shows a Windows-style dialog box titled "Add new unit". It contains a "Modem set-up" section with the following fields and controls:

- Dial system:** A dropdown menu currently showing "MFV (tone dial system)".
- Line number:** A text input field containing the number "0".
- ☒ **Wait for dial tone before dialing**
- Abort Dial sequence after:** A text input field containing "60" followed by the label "Seconds".
- Telephone No.:** A text input field containing "01234 / 567890".

At the bottom of the dialog box are three buttons: "< Return", "Continue >" (which is highlighted with a dashed border), and "Cancel".

Serial transmission using Ethernet TCP/IP

So that a modem connection to a unit connected to a modem can be used the unit that is connected to the modem must be prepared. See Set up modem for connection to unit.

If transmission mode **Ethernet TCP/IP** is selected, the unit data can be transmitted directly over the local network.

A 4-digit IP address and the data transmission port must be entered.

The screenshot shows a Windows-style dialog box titled "Add new unit". Inside the dialog, there is a section labeled "Ethernet (TCP/IP)". Under this section, there are two rows of input fields. The first row is for the "IP address", which is split into four boxes containing the numbers 195, 183, 231, and 179. The second row is for the "Port", with a single box containing the number 8000. Below the Ethernet section, there are two more rows of input fields. The first is for the "Release code", with a box containing "xxxx". The second is for the "Unit address", with a box containing "01". At the bottom of the dialog, there are three buttons: "< Return", "Continue >", and "Cancel". The "Continue >" button is highlighted with a dashed border.

Unit set-up from a data source

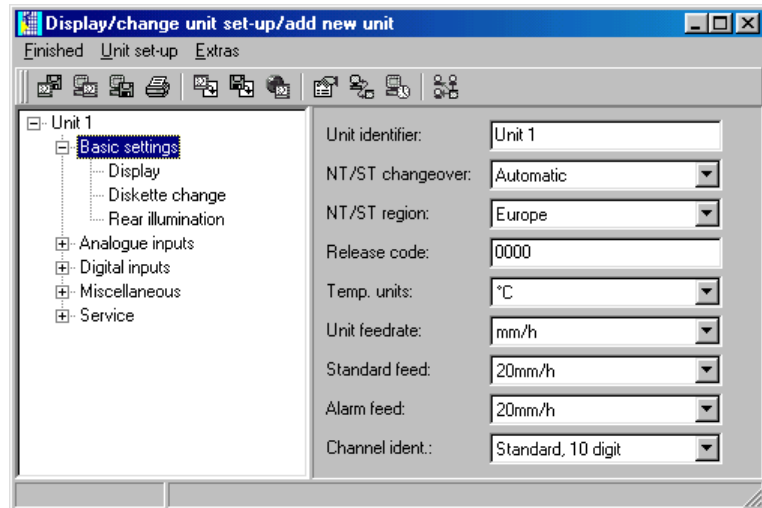
If transmission mode **Parameter file from a data source (e.g. diskette, ATA flash card)** is selected then the data is loaded directly from a unit parameter file (*.rpd).

4.3.2 Display/change unit set-up on an existing unit

If a unit already exists and has been stored in the database the set-up are directly read out from the database. Either select the unit from the unit list by double mouse click or select the menu point **Display/change unit set-up/add new unit -> Menu Unit -> Open unit**.

If changes are to be made to the unit set-up the unit must be connected to a PC. Otherwise the changes would only be saved in the database they can, however, be transmitted to the unit at a later date.

Once a unit has been selected from the unit list a window with a listing of the unit set-up appears, e.g. Basic settings, Analogue inputs, Digital inputs, Miscellaneous etc. These settings differ dependent on which unit is selected.



If the actual set-up is to be viewed set the cursor on the required menu point and open it with a double mouse click. A dialogue window opens on the right hand part of the dialogue window. This displays all the relative set-up data.

The set-up can now be changed. Place the cursor over the value that is to be changed and enter the new value or select the required setting from the pull down menu.

Saving unit set-up

The new unit set-up can be saved in a number of different ways:

1. Only save to database.
2. Transmit set-up to the unit.
3. Save set-up on a set-up data carrier (diskette/ATA flash card).

Select the required mode in the **Menu Finished**.

4.3.3 Finished

If all changes have been made to the unit set-up the data can be saved in the database or transmitted directly to the unit. Additionally the unit set-up can be saved to a data carrier.

Store set up in data base

1. Unit set-up is **only** saved in the database.

Select the menu point **Store set-up** in the menu **Display/change unit set-up/add new unit -> Finished**. Now the new unit set-up in the database can be stored.

Transmit set-up to the unit

2. Transmit unit set-up to unit.

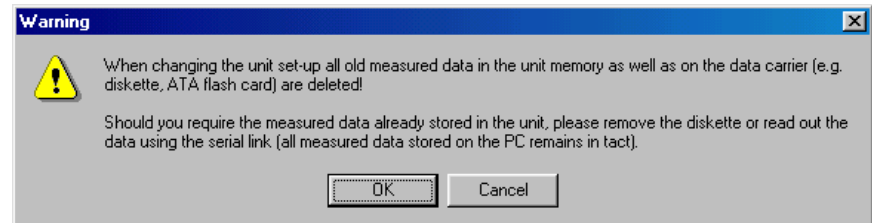
Select the menu point **Transmit set-up to unit** in the menu **Display/change unit set-up/add new unit -> Finished**. Now the new unit set-up is transmitted to the unit.



Attention

When changing the unit set-up old measured data in the unit memory and the data carrier (e.g. diskette, ATA flash card) are deleted from the unit!

If the stored measured values are required the data carrier must be removed from the unit or the measured data must be read out using the serial interface. The measured data saved in the PC remains unchanged.



The new set-up is only transmitted to the unit once the transmission request has been confirmed by selecting **OK** in the dialogue window.

Create set-up data carrier

3. Create set-up data carrier (diskette, ATA flash card).

The unit set-up of an existing unit can be copied to a data carrier. First select the unit from the unit list. Then select the menu point **Create set-up data carrier (diskette, ATA flash card)** in the menu **Display/change unit set-up/add new unit -> Finished**. Then enter the drive in which the data carrier is placed. Once this has been confirmed with OK the set-up parameter file (*.rpd) is created.

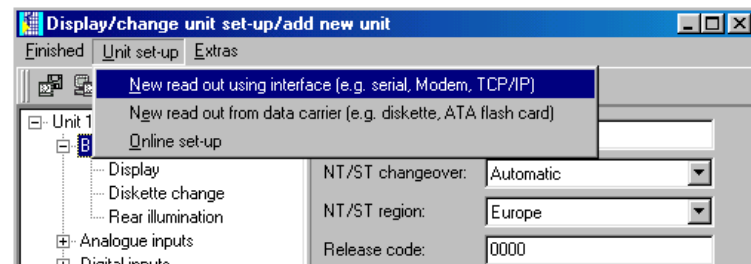
4.3.4 Print unit set-up

Select the menu point **Print unit set-up** in the menu **Display/change unit set-up/add new unit -> Finished**. Now all unit set-up data of the unit selected is printed out.

4.3.5 New read out of unit set-up or on-line change

If changes have been made to the unit set-up directly on the unit it is advantageous to transmit this to the unit database. It is also possible to save a parameter file into the unit database using a data carrier.

Unit set-up can also be changed on-line. Here the unit must be connected to the PC using either the serial interface, a modem or using Ethernet TCP/IP. The data carrier containing the new unit set-up must be in a drive.



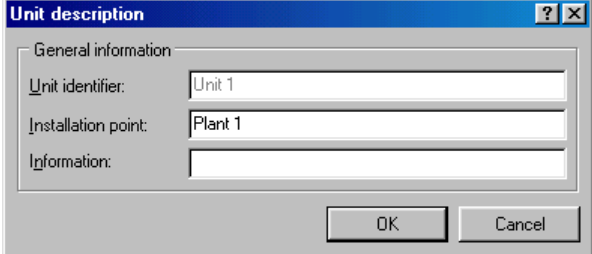
4.3.6 Extras

Here additional entries can be made regarding the unit or interface. Here the automatic functions can also be set up or matched to the application. The following menu points are available:

- Unit description
- Interface settings
- Configure automatic
- Read out unit

4.3.6.1 Unit description

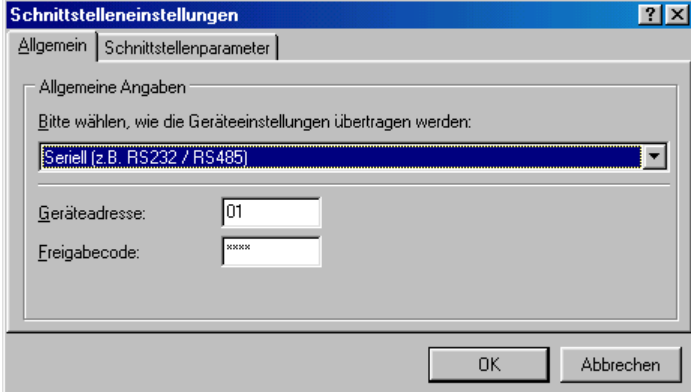
Select a unit from the unit list and load the unit set-up. The actual unit set-up will be displayed in the menu **Extras -> Unit description**. The description for the installation point or additional information can be entered in the text fields. The unit identifier, however, cannot be changed here. The new data is accepted after the entry is confirmed by selecting **OK**.



The 'Unit description' dialog box has a title bar with a question mark and a close button. It contains a 'General information' section with three text fields: 'Unit identifier' (containing 'Unit 1'), 'Installation point' (containing 'Plant 1'), and 'Information' (empty). At the bottom are 'OK' and 'Cancel' buttons.

4.3.6.2 Interface settings

The transmission mode can be changed in the menu point **General**. Additionally the unit address and release code can be changed or confirmed here.



The 'Schnittstelleneinstellungen' dialog box has two tabs: 'Allgemein' (selected) and 'Schnittstellenparameter'. The 'Allgemein' tab contains a section 'Allgemeine Angaben' with a label 'Bitte wählen, wie die Geräteeinstellungen übertragen werden:' and a dropdown menu showing 'Seriell (z.B. RS232 / RS485)'. Below this are two text fields: 'Geräteadresse' (containing '01') and 'Freigabecode' (containing 'XXXX'). At the bottom are 'OK' and 'Abbrechen' buttons.

Dependent on the transmission mode selected the respective **Interface parameters** can be entered.

The settings are accepted one confirmed by selecting **OK**.

4.3.6.3 Configure automatic

The various automatic modes can be configured in this menu point.

Note

The functions available in the menu **Automatic** are dependent on the type of unit and the unit software being used.



1. Read out stored data
2. Read out instantaneous values
3. Export measured values
4. E-mail
5. Measured value database maintenance
6. Information

The functions are described as follows.

1. Read out stored data

Stored data can be automatically read out in the following modes:

Interval:	Stored measured data is read out in fixed preset time intervals (1 minute - 12 hours).
Daily:	Stored measured data is automatically read out daily at fixed preset start times.
Weekly:	Stored measured data is automatically read out weekly on a fixed preset day and start time.
Monthly:	Stored measured data is automatically read out monthly on the same day of the month at a fixed start time.

Automatic read out of stored data can also be deactivated.

2. Read out instantaneous values

In this menu point it is possible to set up the automatic read out mode for instantaneous values.

3. Export measured values

Stored measured values can be automatically exported. Here the measured values are either added to an existing file or an already existing file is deleted.

4. E-mail

Messages received/fault messages are retransmitted by e-mail.

So that e-mails can be sent the server set-up must be fixed. (**Main menu -> Extras -> Program options -> Program set-up -> E-mail**).

If an e-mail is to be sent to more than one recipient the e-mail addresses must be separated by a semi colon e.g.
adresse1@test.com;adresse2@test.com.

Attention

It cannot be guaranteed that e-mails will be transmitted. This lies in the responsibility of the e-mail server or provider.



Set up automatic [?] [X]

Read out stored data		Read out instantaneous values	
Export measured values	E-mail	Measured value data base maintenance	Information

In case of alarm E-mail transmission of instantaneous values (e.g. limit, cable open) [v]

To:

Copy:

Hints:

In order to ensure that E-mails can be sent the server set-up must first be entered (Main menu --> Extras --> Program options --> Program set-up --> E-mail).

If E-mails are to be sent to more than one recipient then the E-mail addresses must be separated using a semi-colon (e.g. address1@test.com;address2@test.com).

There is no guarantee that the E-mails will be sent. This is the responsibility of your E-mail server or provider.

5. Measured value database maintenance

The measured value data base maintenance is automatised. Measured value data that has been in the database for a long time is saved to data carrier and/or deleted from the database.

6. Print

An automatic print out is initiated after each batch process.

Note

Only available on units with batch software



4.3.6.4 Read out unit

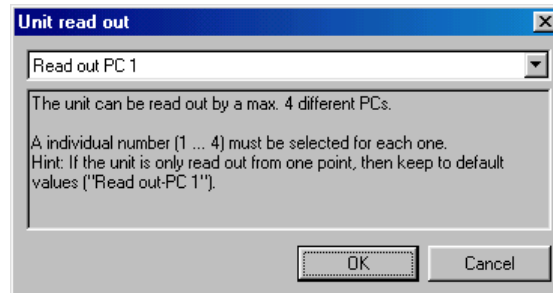
One unit can be read out by a maximum of four PCs.

Each must have its' own individual number selected (1 - 4).



Note

If the unit is only read out from one point then please retain the factory default setting ("Read out-PC1").



4.4 Exit programme

Ends this programme.

5 Menu 'Display' - Visualise measured data

5.1 Display actual measured values

The actual measured data from connected units can be displayed in real time. The display mode is selectable. The measured values can be displayed as a graph, digital values or as bar graphs.



Note

At least one unit must be connected to the PC either by using the interface/modem or TCP/IP. It must also have been stored in the database.

More than one unit can be displayed simultaneously.

5.1.1 Display measured values as digital values

Select the menu **Display -> Display instantaneous values -> Digital values**.

Select a unit from the unit list.

Using a double click or **Unit -> Open unit** from the menu initiates this programme to make connection with the selected unit.

If the unit is not connected to the PC instantaneous values cannot be displayed on line.



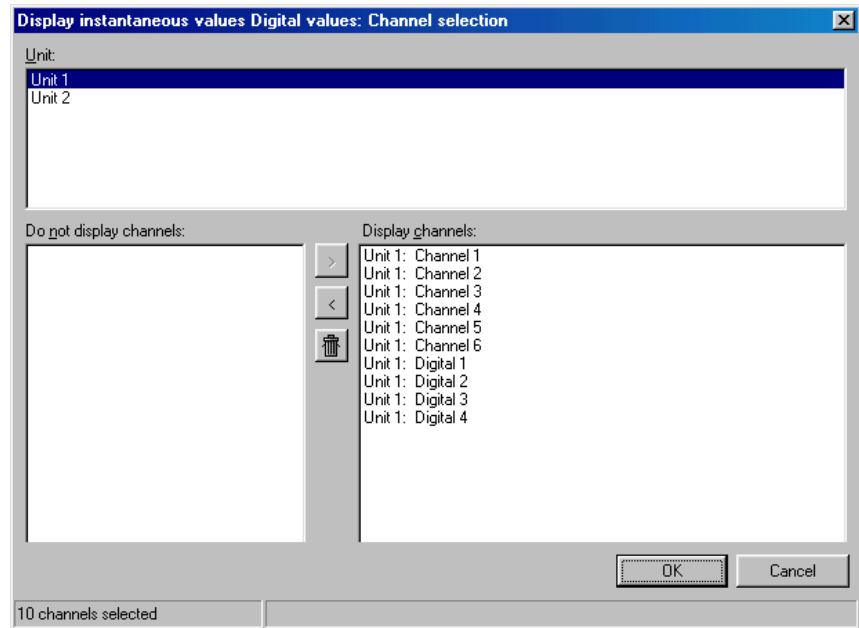
Note

Up to 20 units or 100 channels can be displayed as digital values..

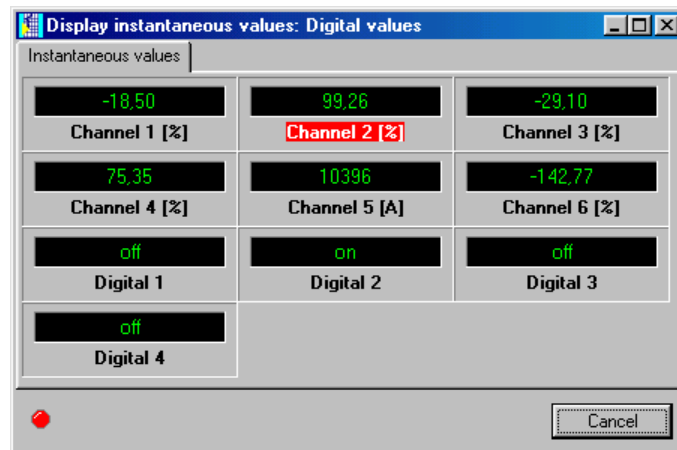
A selection window that is divided into 3 areas appears. The upper area shows the units that have been selected. If a unit is highlighted then a list of the active channels appears in the left lower window.

As many channels as are required can be independently selected and moved to the right hand window.

If more than one channel is to be selected then highlight one channel and drag the cursor over the list to include the channels required. Click on the symbol '>' and the highlighted channels are automatically moved to the right hand window **Display channels**. The channels that remain in the **Do not display channels** window are obviously not displayed.



Once the selection has been confirmed with **OK** the instantaneous measured values of the selected channels are displayed. In addition to the instantaneous value the channel identifier and engineering units are also displayed.



Instantaneous values are displayed in green. If the channel goes into alarm (set point infringement) the channel identifier is highlighted in red. This means that a fault can be immediately recognised.

In order to end this display mode click on the **Abort** button.

5.1.2 Display measured values as curves

The instantaneous values can be graphically displayed in the form of curves.

Select the menu **Display -> Display instantaneous values -> Curves**.

The unit list appears.

Using a double click or **Unit -> Open unit** from the menu initiates this programme to make connection with the selected unit.

If the unit is not connected to the PC instantaneous values cannot be displayed on line.



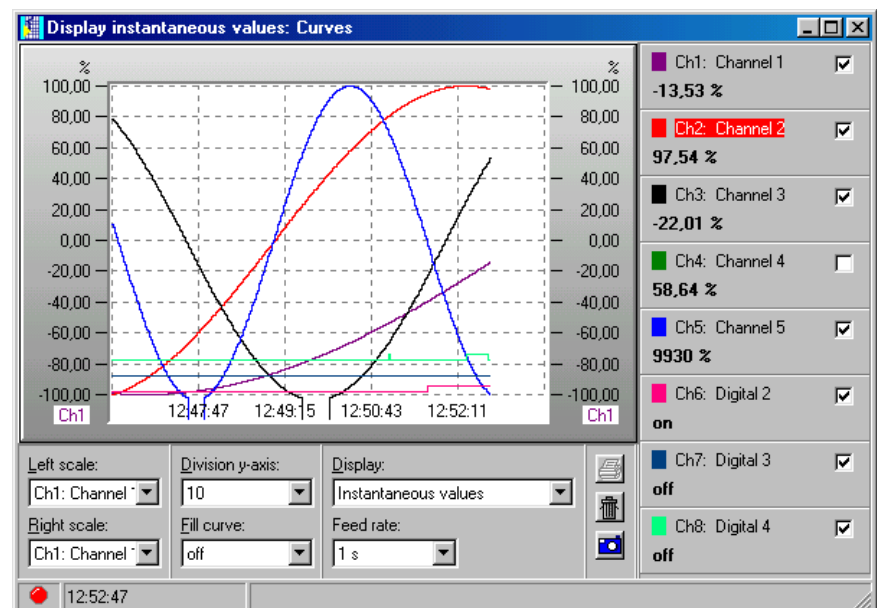
Note

Up to 20 units or 100 channels can be displayed as digital values.

A selection window that is divided into 3 areas appears. The upper area shows the units that have been selected. If a unit is highlighted then a list of the active channels appears in the left lower window.

As many channels as are required can be independently selected and moved to the right hand window.

If more than one channel is to be selected then highlight one channel and drag the cursor over the list to include the channels required. Click on the symbol '>' and the highlighted channels are automatically moved to the right hand window **Display channels**. The channels that remain in the **Do not display channels** window are obviously not displayed.



For this display mode there are a number of settings possible:

- Scale identification (left and/or right).
- Division of the y axis (1 - 10).
- Displays: display of actual value or the measurement cursor.
- Fill curve: Here the channel that is to be highlighted by a filled curve can be selected.
- The feed rate can be selected from 1 sec. To 30 minutes.

Using a double click on the colour window can change the colour of the channel.

Print measured values

The instantaneous value curve can be printed out on a connected printer.

Snap shot

By clicking onto the camera symbol a snap shot of the curve is copied to the RAM and can then be used by another programme.

The graphic can be deleted by clicking on the waste paper basket icon.

5.1.3 Display measured values as bar graphs

Instantaneous values can be displayed as bar graphs.

Select the menu **Display -> Display instantaneous values -> Bar graph**.

Select the channels that are to be displayed as bar graphs. (See Display measured values as digital values.)



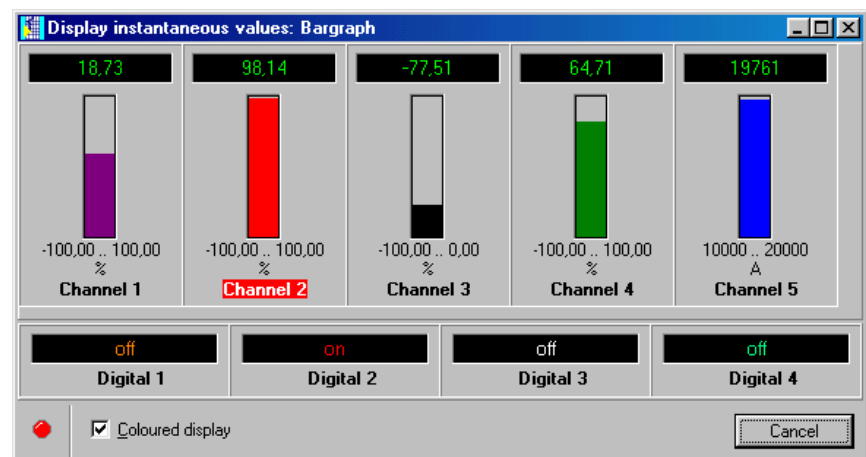
Note

A maximum of 20 units or 100 channels can be displayed as bar graphs.

There are two different possible display modes:

- Multi-coloured: This display mode can also be deactivated in **Multi-coloured window display**.
- Green: This setting can be changed at any time.

Multi-coloured bar graph display mode



Change channel colours

The channel colours can be selected independently. Select the bar graph using the cursor and open the colour selection window with a double click. Here the required colour can be chosen.

Green/black bar graph display mode

If the multi-coloured display selection window is deactivated the bar graphs appear in green. If an alarm (set point infringement) is active then the channel identifier is highlighted in red.

In order to end this display mode click on the **Abort** button.

5.2 Display historic measured values

The daily minimum, maximum, average and instantaneous values of the active analogue channels are displayed.

Additionally, if available, counter values for the digital channels or integrated analogue channels are also listed.

On alarm (set point infringement) the respective values are display in red.

For units with remote operation: Relays can be switched and analogue outputs controlled (independent of unit features).

5.2.1 Measured value display using one unit only

Select the unit from which the data is to be displayed from the unit list indicated in menu **Display --> Display measured values from data base: Select unit.**

5.2.1.1 Select time base

Select time base

A dialogue window is opened. The required time window must be selected.

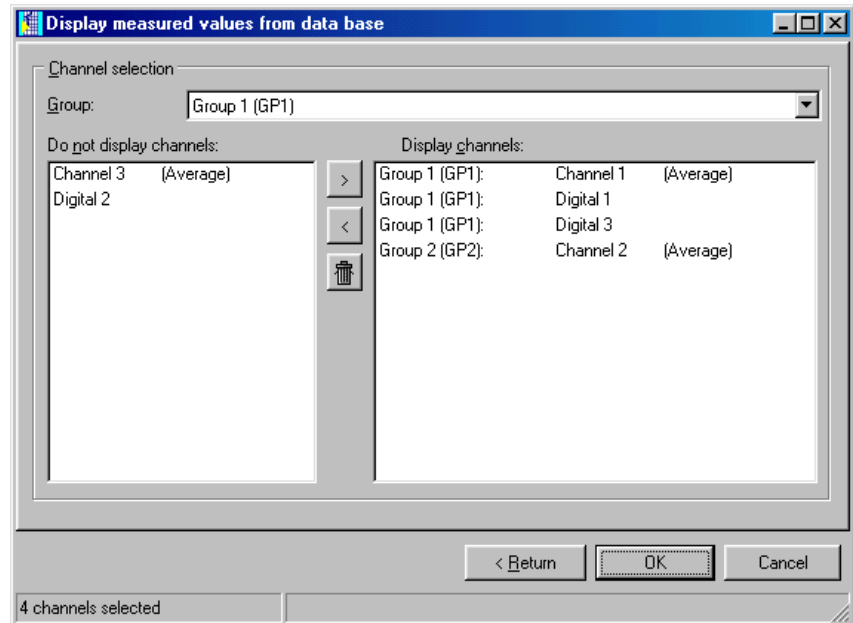
The screenshot shows a Windows-style dialog box titled "Display measured values from data base". It contains several sections for configuring data display:

- Base time axis:** A dropdown menu currently showing "Same as unit graphic".
- Values available for time range:** Two text boxes for "from:" (05.04.01 06:00:00) and "to:" (11.05.01 22:48:00), with a "Take over" button below them.
- Display values:** A section with a "Time scale" dropdown set to "1 day", and "from:" (05.04.01 00:00:00) and "to:" (06.04.01 00:00:00) time range selectors.
- Analogue values:** A group box containing four checkboxes: "Average" (checked), "Instantaneous value", "Minimum", and "Maximum".
- Buttons:** At the bottom right are "< Return", "Continue >", and "Cancel" buttons.

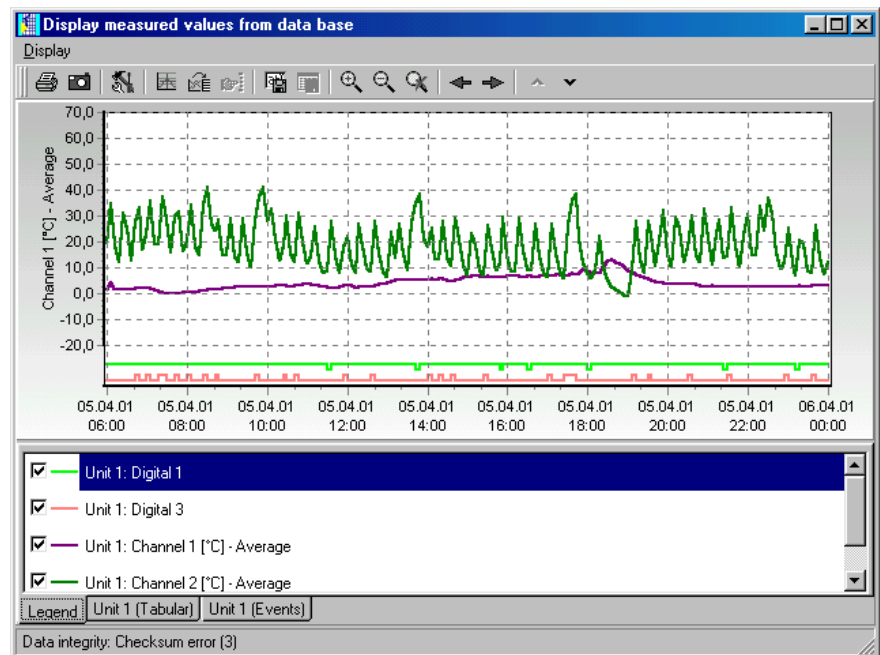
5.2.1.2 Select channels

Select channels

Once this has been acknowledged with "Continue" a further dialogue window opens. Here the channels required that are to be displayed can be selected. A maximum of 40 channels can be displayed.



The stored data is displayed once the selection has been acknowledged with "OK". The window is divided into an upper and lower area.



The graphic is displayed in the upper area.

A number of different items can be displayed in the lower area, these are also dependent on the type of unit to be displayed.

Here are a number of examples:

1. Legend
2. Unit description (Tabular)
3. Unit description (Events)

5.2.1.3 Channel set up/Formatting/Scaling y axis

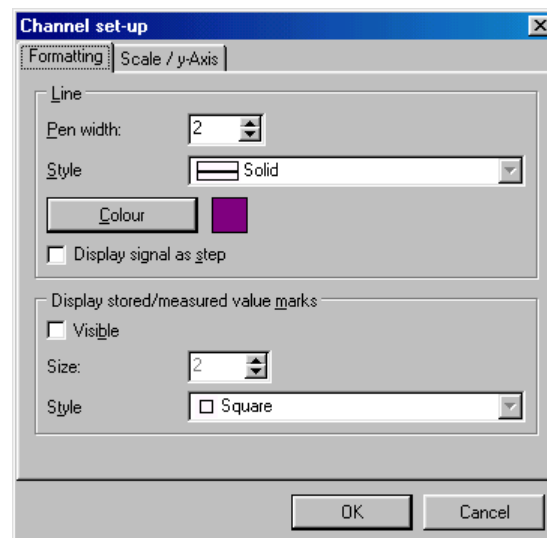
Display: **Legend**

The channel settings can be changed in the display **Legend**. This means the format and y axis scale can be changed.

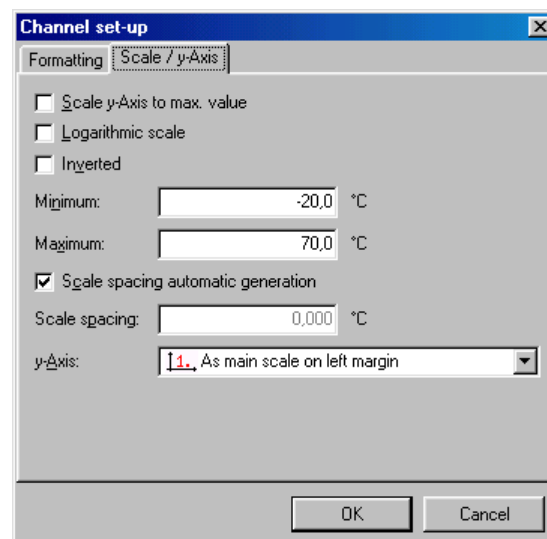
Individual channels can be activated and de-activated by clicking on the line colour mark box.

Channel colour

The channel colour can be changed in the menu **Formatting**. By double clicking on the respective channel in the Legend display a dialogue window opens in which the channel colour, line width or patter can be changed.



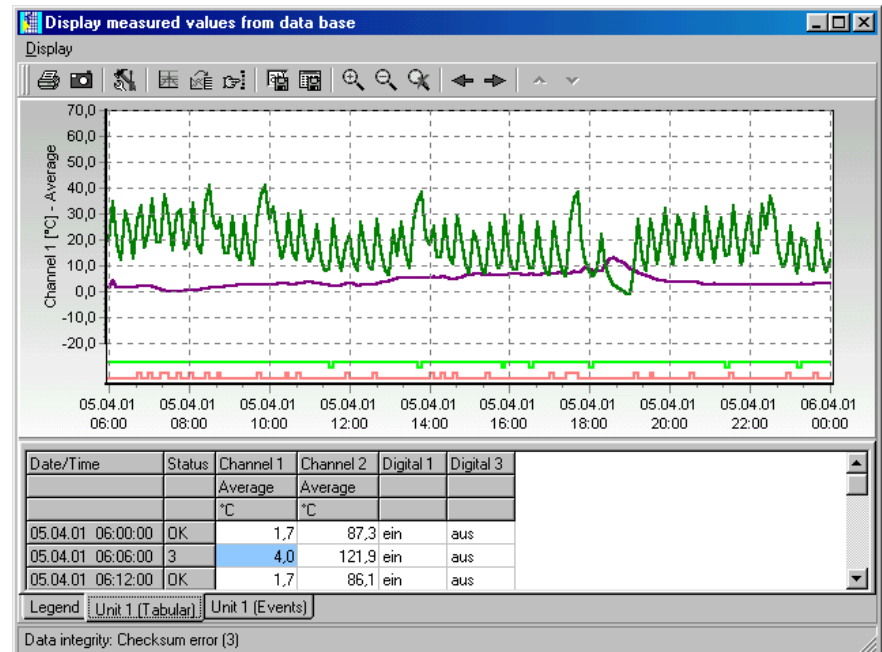
The y axis scale can be changed or optimised in the menu **Scale/y-Axis**. It is also possible to blend in or remove the scale or to use this channel scale as the main display scale in the graphics.



5.2.1.4 Tabular display

Display: **"Unit description" (Tabular)**

The measured values are displayed in table form in the display "Unit description" (Tabular).



5.2.1.5 Event list

Display:
**"Unit description
(Events)"**



Any event stored in the selected unit are displayed in this table. These are always displayed including date and time of occurrence.

Note

It is also possible to manually add comments later in the events list. These comment entries cannot be deleted later.

See: Save comments in events list

5.2.2 Measured value indication from more than one unit

It is also possible to simultaneously display historic data from more than one unit. In order to do this the units to be displayed must be selected from the units list.

Now the channels to be displayed can be selected from each individual unit, whereby the time range is the same for all units selected.

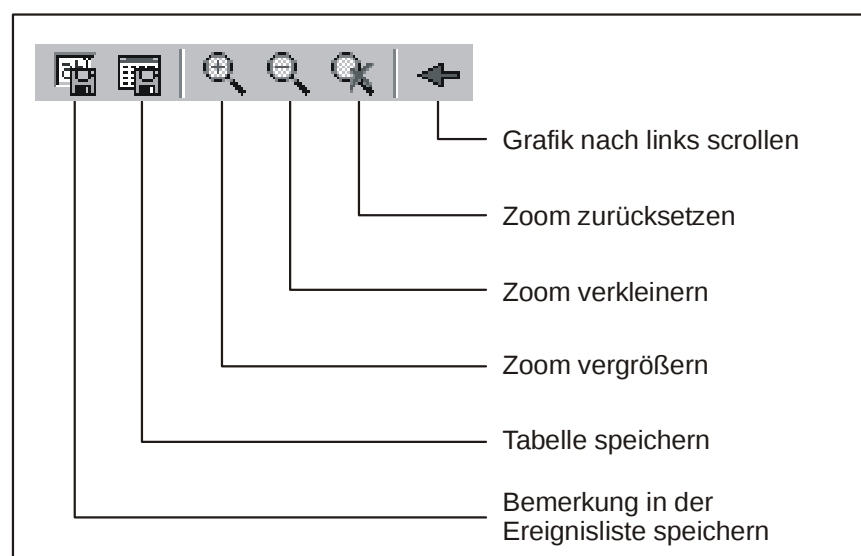
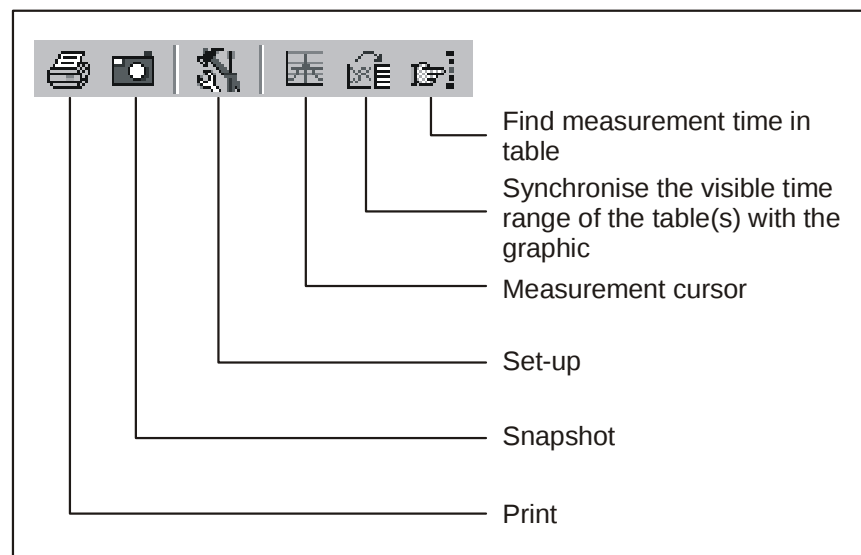
Note

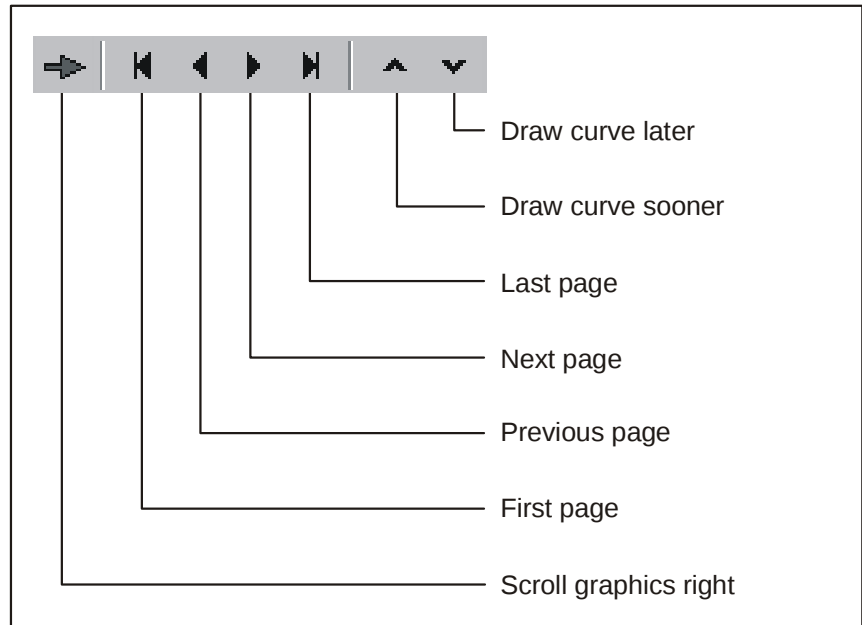
A maximum of 10 units can be displayed simultaneously.



5.2.3 Menu "Display"

The commands can be activated within the menu Display or by a double click on the relevant icon in the Icon bar.





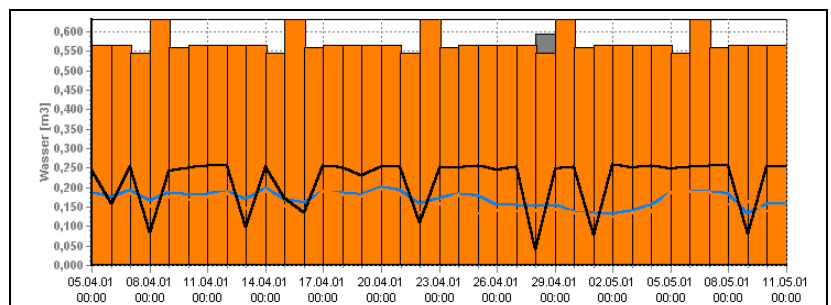
5.2.3.1 Printout

By using the menu **Display --> Print** or by activating the printer Icon in the Icon bar historic data can be printed out as a graphic and/or table by a connected printer (also see **Print historic measured** values).

5.2.3.2 Snapshot function

By using the menu **Display --> Snapshot (copy graphic to clipboard)** or by activating the Snapshot Icon in the Icon bar the graphic can be copied to the clipboard and can then be added to other programmes when required.

Example of a Snapshot:



5.2.3.3 Set up

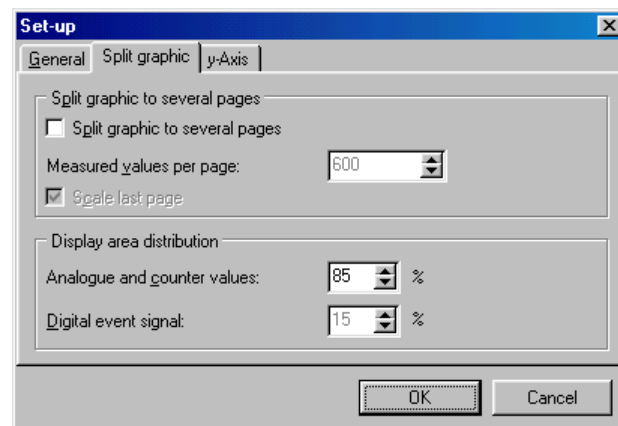
Using the menu **Display --> Set up** the following set up for the graphic display can be defined.

- General

Here the general set up for zoom or legend can be made.

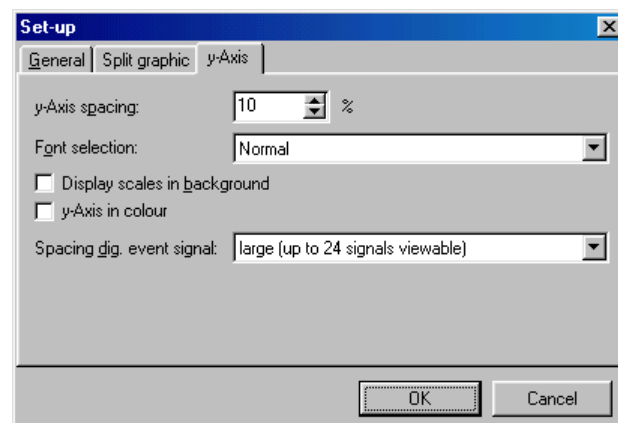
- Split graphic

Using this function it is possible to divide the graphic into a number of pages, if there is a large amount of data available the graphic can be displayed quicker.



- y-Axis

The settings for the y-axis can be matched here. This can be used to optimise the graphic display. The changes are only visible when the y-axis are used (also see **Channel set up/Formatting/Scaling y axis**).

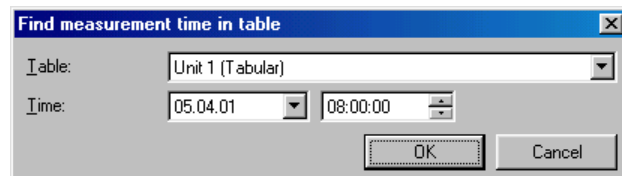


5.2.3.4 Synchronise the visible time range of the table with the graphic

If the time range of the table differs from that of the graphic then by using the menu **Display or by activating the respective icon in the Icon bar** the range can be synchronised.

5.2.3.5 Find measurement time in table

If a table is active then by using the menu **Display --> Find measurement time in table** a specific measurement date and time can be searched for.



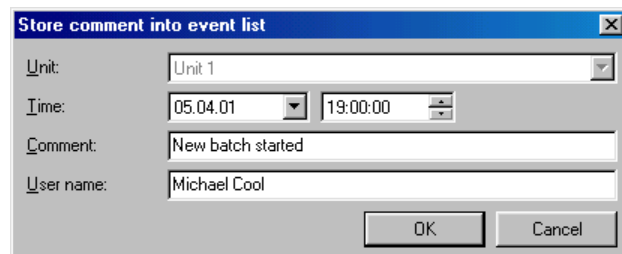
5.2.3.6 Store comment in event list

Using the menu **Display --> Store comment in event list** it is possible to manually enter a comment into the event list. Here up to 43 characters can be used for the comment. Additionally a user name must also be entered.



Attention

Due to the need for data security and integrity a manual entry in the event list cannot be deleted.



5.2.3.7 Save table

Using the menu **Display --> save table**, the displayed table will be stored as an Excel file. This means that a number of data can be displayed in an Excel table.



Note

This menu point is only active if a table containing historic data is active.

5.2.3.8 Return to channel selection

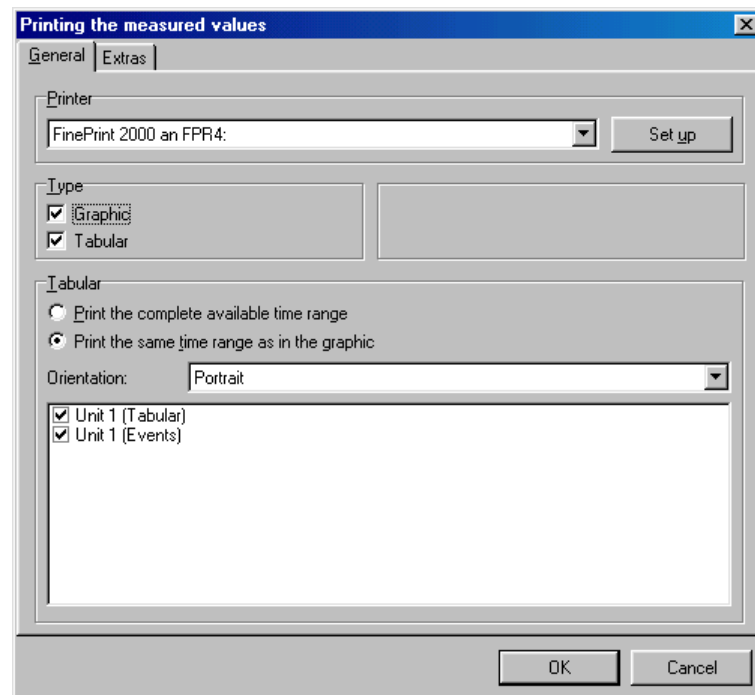
In order to activate or de-activate channels it is possible to return to channel selection at any time. Enter the menu **Display Return to channel selection**. Now channels can be added or deleted from the display.

5.2.3.9 Close display of historic measured values

The display function is closed and the programme returns to the main menu by using the menu **Display --> Close**.

5.2.4 Print historic measured values

Historic measured values can be printed out using a printer connected to the PC. Here it is possible to printout the values as a table and/or a graph.



5.2.5 Zoom

Zoom in:

It is possible to enlarge or decrease the size of the graph by using the Zoom function.

There are 2 ways to enlarge the graph.

1. Click the Icon **Zoom in** .on the Icon bar
2. Place the cursor into the graph, holding the left mouse button in move the cursor from the upper right corner to towards the lower left. The graph is enlarged.



Zoom out:

There are 2 ways to decrease the size of the graph.

1. Click the Icon **Zoom out** .on the Icon bar
2. Place the cursor into the graph, holding the left mouse button in move the cursor from the left lower corner to towards the upper right corner. The graph is decreased in size.



Reset Zoom:

Click the Icon ***Reset Zoom*** in the Icon bar and the graph is returned to the original size.

6 Menu 'Read out' - read out measured values

6.1 Read out measured values using interface/modem

The measured values stored in the units can be transmitted to the PC using an interface or modem. Select the command **Read out measured values using interface/modem** in the main menu **Read out** or use the **F7** function key.

Read out	Automatic	Extras	?
Read out measured values using interface/modem			F7
Read measured values using PC card drive			F8
Read out measured values using diskette			F9

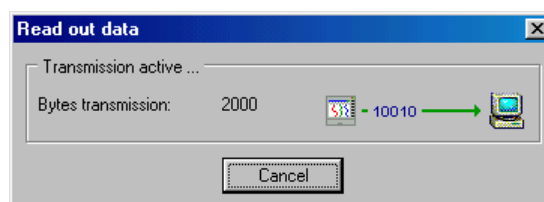
The unit dialogue window (see **Overview**) is initialised. Select the required unit from the unit list. Data transfer starts immediately. The target directory on the PC for the read out data must be determined in the registration card under **Extras -> Programme options -> Programme set-up -> Directory**.



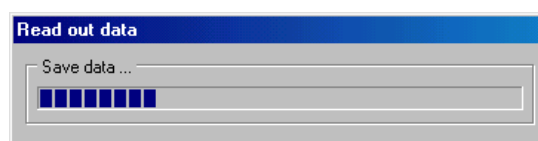
Note

The unit must first be entered in the database (see Add new unit). Connection is made with the unit using the preset interface parameters.

The following window shows that connection has been made with the connected PC and transmission is active.

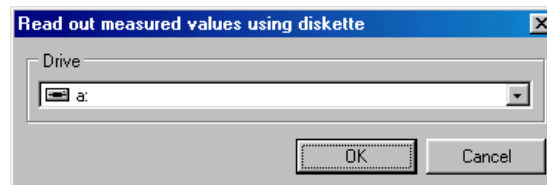


The following window indicates that the measured data is being read into the PC target directory:



6.2 Read out measured data using PC card drive or diskette

The measured values stored on the memory card/diskette are transmitted to the PC using the internal or external PC card drive or diskette drive. Select the command **Read out measured values using PC card drive or diskette** in the main menu point **Read out** or use the **F8 / F9** function keys. The following dialogue window appears:



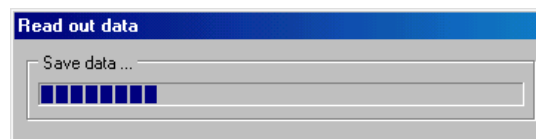
Select the necessary drive for the PC card or diskette and acknowledge by selecting with **OK**.



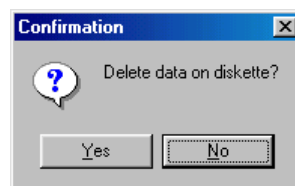
Note

The drive must first be installed correctly. In order to do this please read the PC or PC card drive operating manual.

The following window indicates that the measured data are being transferred from the PC card or diskette to the target directory of the PC:



Once the data transfer has been completed this programme requires confirmation whether the data on the data carrier (PC card, diskette) are to be deleted.



7 Menu "Automatic"

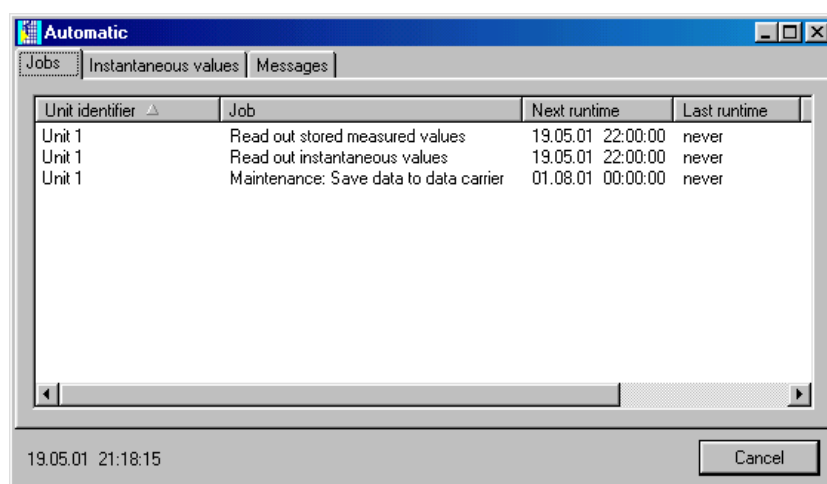
7.1 Starting the automatic function

Using this menu point the automatic function can be started. In the main menu click onto the menu point **Automatic --> Start** or operate the **Function key F10**.

The preset functions (jobs) are only available once the automatic function has been started.

The functions for the automatic are set up or changed in the menu point **Display/change unit set up/add new unit /change --> Extras --> Set up automatic** (also see Configure automatic).

Once the automatic has been started a dialogue window opens. This window shows the jobs that need to be completed and all messages received. If the automatic function has been set up for reading out the instantaneous values; then a further register **Instantaneous values** appears.



The automatic function can be closed by operating the **Cancel** button.

8 Menu 'Extras'

8.1 Store/save measured values

The measured values stored on the PC hard drive can be saved (=copied) or stored (=moved) to a different drive (e.g. network drive or diskette).

On save measured values for the selected time span are copied to a different drive ('unlimited') or on a single diskette ("1,4 MB diskette"). Data remains stored in tact in the database.

On store the measured values are first saved and then deleted from the measured value database.

Select the dialogue window **Store/Save measured values** under the main menu **Extras**. The unit dialogue window opens (see Overview). Select the unit from which the data is to be saved or stored by a double mouse click in the directory **Unit group/plant**. Data transfer starts immediately.



Note

The target directory for the stored/saved data on the PC must be determined in the registration card under **Extras -> Programme options -> Programme set-up -> Directory**.

8.2 Load measured values

Measured values that have been removed from the database (see Store/save measured values) can be transferred back into the database for further use.

Select the command **Load measured values** from the menu **Extras**. Select the stored data new data type (*.rdf) or the old data type (*.rsd). Acknowledge the selection with the command **Open**.

The stored measured data is re-stored into the database of this programme.

8.3 Export measured values

It is possible to export measured values stored in the database as ".txt" files and use these in other applications (e.g. for further analysis in table spread sheets).

In order to do this select the command **Export measured values** in the menu **Extras**. Select the unit from which the measured values are to be exported from the unit list.

Select the required time range and the channels.

Export measured values

Base time axis:
Same as unit graphic

Values available for time range
from: 05.04.01 06:00:00
to: 11.05.01 22:48:00
Take over

Display values
Time scale: Presetable
from: 05.04.01 06:00:00
to: 11.05.01 22:48:00

Analogue values
☒ Average
☐ Instantaneous value
☐ Minimum
☐ Maximum

< Return Continue > Cancel

Select the necessary set up for the other programme to be used from the window "Formatting" ("manual"). For this please consult the programme handbook. (When selecting "MS Excel" the settings for that programme are automatically set up. The file can now be directly loaded from there.)

Export measured values

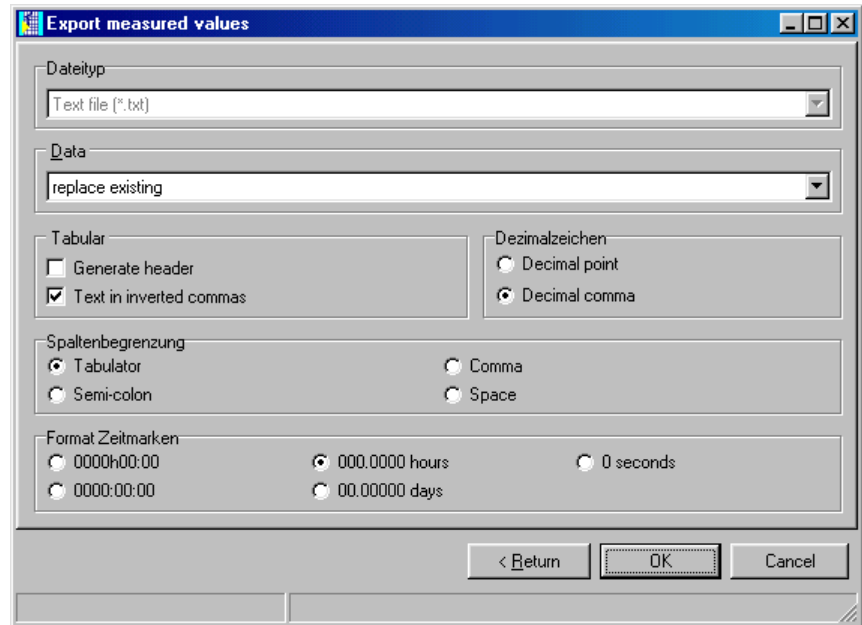
Channel selection
Group: Group 1 (GP1)

Do not display channels:
Channel 3 (Average)

Display channels:
Group 1 (GP1): Channel 1 (Average)
Group 1 (GP1): Digital 1
Group 1 (GP1): Digital 2
Group 1 (GP1): Digital 3
Group 2 (GP2): Channel 2 (Average)

< Return Continue > Cancel

5 channels selected



8.4 Special unit functions

8.4.1 Transmit program

Select the unit from the selection list for which the programme is to be transmitted. Activate the command **Transmit program**.

Set up the serial interface parameters of the unit and acknowledge with **OK**.

Select the **File name** of the unit programme and acknowledge programme transmission with **Open**.

8.4.2 Set up batch information

Select the unit from the selection list. Now enter the Batch number, Identifier and Name and transmit this to the unit.

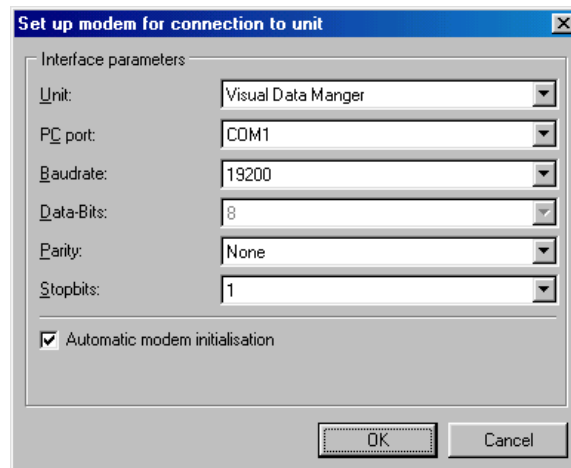


Note

Only available on units using the batch software.

8.5 Set up modem for connection to unit

When transferring data from a modem connected to a unit the modem must be prepared for this task. For this certain settings must be made and saved in the modem. First the modem must be connected to the PC and select the command **Set up modem for connection to unit** under the main menu **Extras**.



In this dialogue window set up the preset unit interface parameters and the initialisation string of the modem to be used. Select between automatic modem initialisation and the selection in a pull down menu (remove the tick in the selection box). Once the settings have been confirmed by selecting **OK** the modem is then configured for use at the unit selected.



Note

Please take note of the modem operating instruction manual.

The modem connected to the PC is automatically initialised by this programme (see Add new unit).

8.6 Service

Reserved for Service - only available by using the necessary security code.

8.6.1 Show unit details

Using the command **Show unit details** in the sub menu **Service** general unit details can be displayed. These include:

- Unit type
- Programme name
- Software version
- CPU number
- Last unit fault (for 'Process display' and 'DIN rail transmitters')

Activate the dialogue window **Interface set-up** in the command **Service -> Show unit details**.

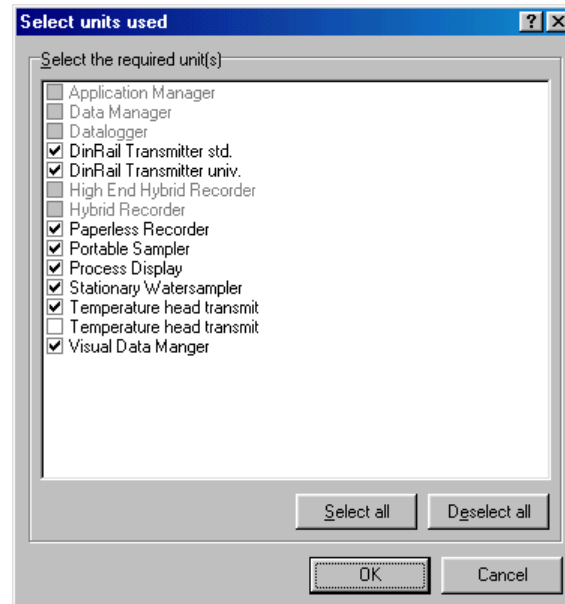
Enter the transmission mode required in this window and confirm with **Continue >**.

Enter the required interface parameters in the following dialogue window and confirm with **OK**. Connection will be made with the unit. Once connection has been successfully established the unit details are displayed.

8.7 Programme options

8.7.1 Select unit used

The command **Select Units Used** from the sub menu **Programme Options** leads to the following dialogue window:



The ticks indicate the units selected. Using the mouse pointer click into the selection boxes of the units required and either activate or deactivate them. Using the commands **Select all** or **Deselect all** either activates or deactivates the complete unit list.

8.7.2 Change language

Using the command **Change language** you can select the operating language for this programme. Confirm selection using **OK**.

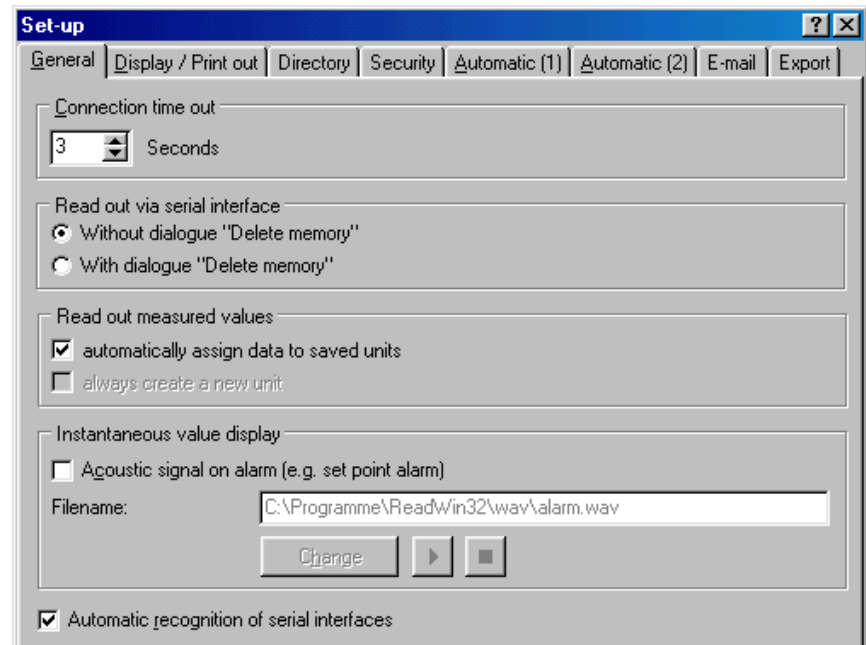


8.7.3 Programme set-up

Using the command **Programme Options -> Programme set-up** in the menu **Extras** a number of dialogue windows can be activated (listed as a registration card), in these general settings for this programme can be made:

8.7.3.1 General

General



Select the time for Connection time out (arrow upwards = longer; arrow downwards = shorter).

Activate or deactivate if the question 'Delete memory' is to appear before data transmission. This is done under the section Read out using serial interface.

Select whether on Read out measured value, the read out values are to be allocated to already stored units or if a new unit is always to be generated. The tick shows which selection is active.

On instantaneous value display click onto Acoustic signal on alarm (e.g. set point alarm). Once an alarm condition is active an acoustic signal is generated from the PC.

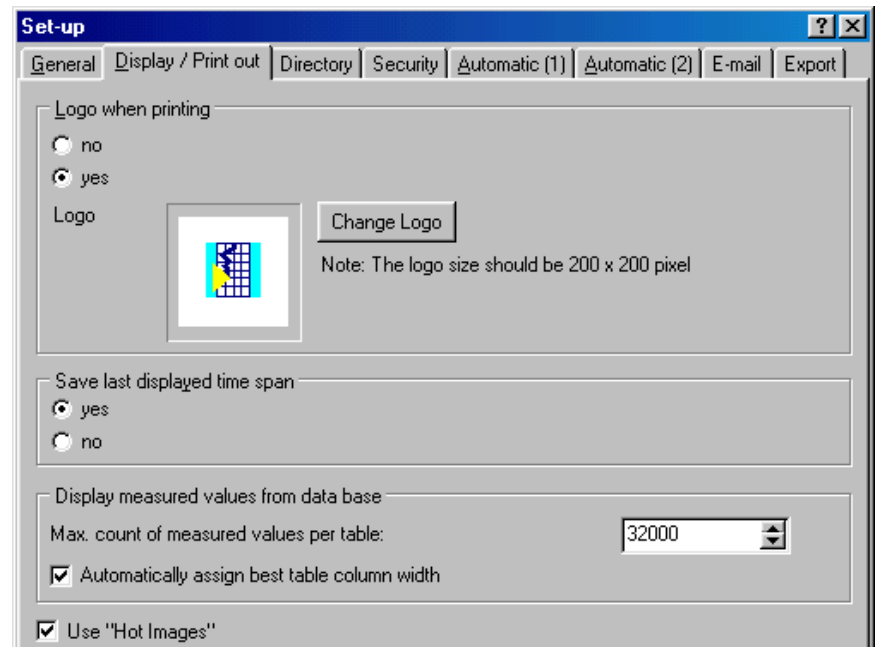
Activate or de-activate Automatic recognition of available serial interfaces.

Always confirm set-up changes by selecting **OK**.

8.7.3.2 Display/print out

Display/print out

Activate/deactivate (**Yes/No**) if company logos are to be printed on print tasks. This is selected under the section **Logo when printing**. Select the individual logo by using **Change logo**. The logo to be used is then displayed in the left hand window.



Note

Before you select the desired logo you should first copy the file into the directory where you installed this programme.

This programme supports following file types: *.jpg, *.jpeg, *.bmp, *.ico, *.emf, *.wmf. The logo size should be 200 x 200 pixel.

De- / activate (Yes/No) the selection: **Save last displayed time span**. When active this programme remembers the last displayed time span for the historic measured value display. When de-active, the total time span available is shown.



Using "HotImages". Activate this function by clicking on the tick.

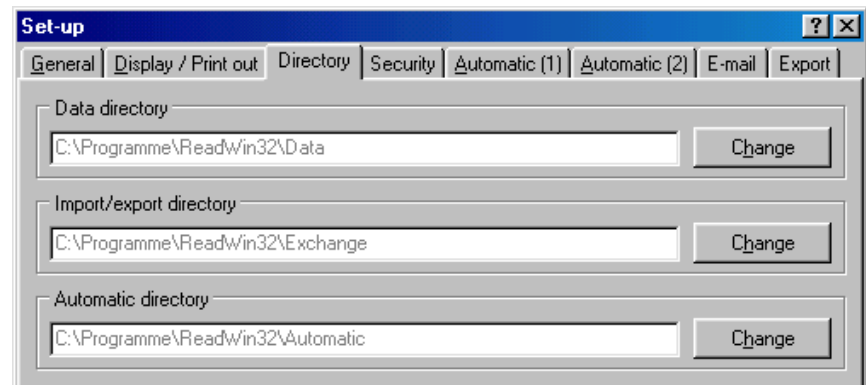
Note

If there are display errors when displaying the Icon bar then please deactivate the „HotImages“.

8.7.3.3 Directory

Directory

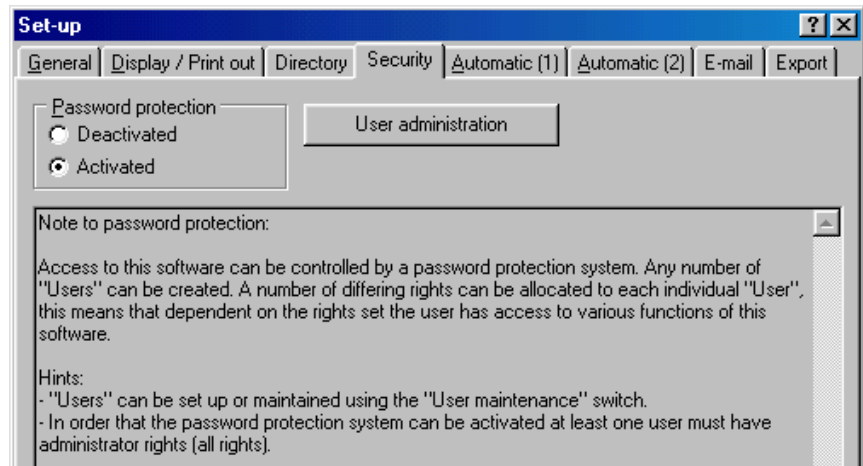
This registration card shows the directories that are used by this programme to store data on the hard drive. By using the command **Change** a different directory can be selected from a directory window.



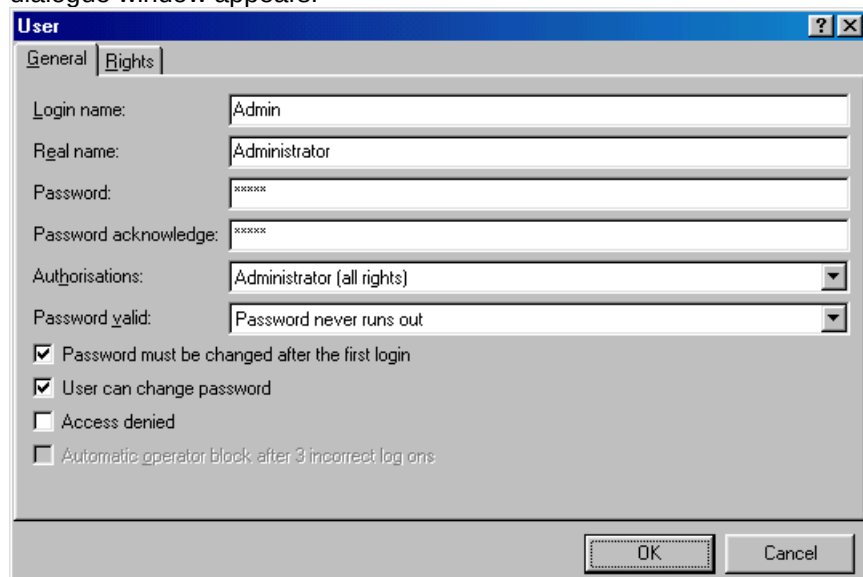
8.7.3.4 Security

Security

In this registration card you can activate a **Password protection** which can handle the access to this programme.

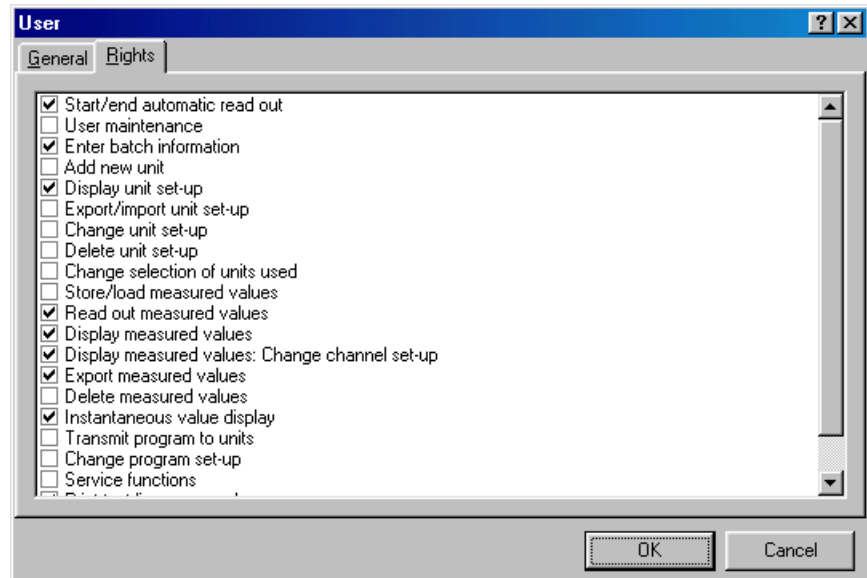


If the **Password protection** is activated the necessary dialogue field is called up by selecting **User administration**. Mouse click the command **Add**, enter a further user into the **Password protection**. The following dialogue window appears:



Enter all the required information regarding the new user into the entry lists and confirm with **OK**.

Using the dialogue window **Rights** select which functions the new user has access to (tick = function enabled for new user):



Using the command **Edit** the password entries for the user are changed in the dialogue window **User**. With **Delete** the active user is removed from the **User maintenance**. The command **Details** show the settings in the **User** dialogue field.



Note

Access to this software can be controlled by the password system. A number of 'Users' can be generated. These 'Users' can all be allocated various access rights, this means that dependent on the access rights allocated various functions of the software are available to different users.

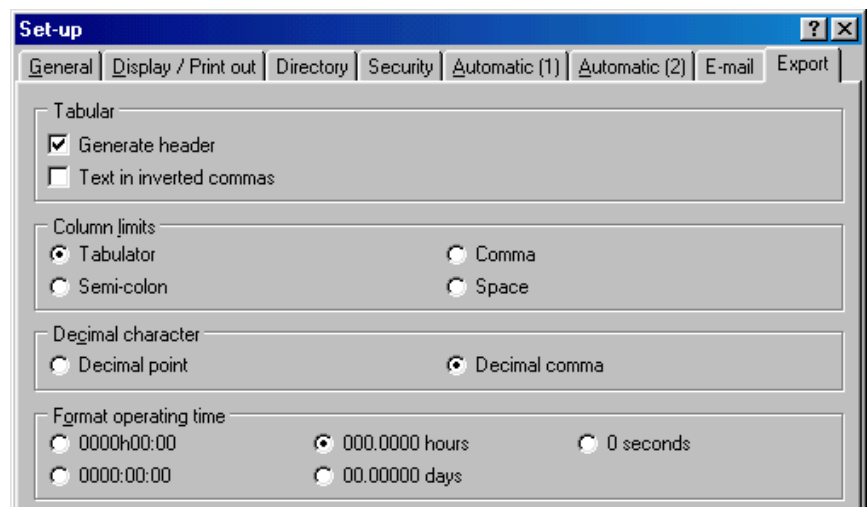
'Users' can be set up or edited in the section **User administration**.

So that the password protection can be activated at least one user must have administrative (all rights).

8.7.3.5 Export

Export

In the registration card **Export** there is a possibility to set the format of the table for the automatic data export (*.txt). The following format possibilities for the table are available:



Confirm selection with **OK**. Then the settings are accepted and stored.

8.7.3.6 E-mail

E-mail

This registration card contains the set-up for data transfer using e-mail.

Server set-up: Enter the relevant sever set-up in the respective dialogue window.

Local set-up: Enter the **user name** and **user address** for access to the e-mail server in this dialogue window.

Test set-up: Test for correct e-mail set-up by using the commands **Make connection**, **Send E-mail** and **End connection**.

The screenshot shows a Windows-style dialog box titled "Set-up" with a standard Windows XP-style title bar (blue with a question mark icon and a close button). The dialog has a tabbed interface with the following tabs: "General", "Display / Print out", "Directory", "Security", "Automatic (1)", "Automatic (2)", "E-mail" (which is the active tab), and "Export". The "E-mail" tab is divided into three sections: "Server set-up", "Local set-up", and "Test set-up". The "Server set-up" section contains three input fields: "SMTP Host:" with the text "SERVERNAME", "Port:" with a dropdown menu showing "25", and "User-ID:" with the text "michael.cool". The "Local set-up" section contains two input fields: "User name:" with the text "Michael Cool" and "User address:" with the text "michael.cool@company.com". The "Test set-up" section contains three buttons: "Make connection", "Send E-mail", and "End connection".

8.7.3.7 Automatic (1)

Automatic (1)

The Automatic (1) registration card shows the set-up for automatic printout of various incoming messages or fault messages.

Mouse click a tick next to the command **Automatically printout incoming messages/fault messages** in order to activate an automatic printout or on **Transmit incoming messages/fault messages by E-mail** in order to automatically transmit the fault messages by E-mail. The following window appears if automatic is active:

Set-up

General | Display / Print out | Directory | Security | **Automatic (1)** | Automatic (2) | E-mail | Export

☒ Automatically print out of messages/fault messages received

☒ E-mail transmission of messages/fault messages received

Messages

Immediate print out (one message per side)

E-mail transmission of messages/fault messages received

To:

Copy:

Hints:

In order to ensure that E-mails can be sent the server set-up must first be entered (Main menu --> Extras --> Program options --> Program set-up --> E-mail).

If E-mails are to be sent to more than one recipient then the E-mail addresses must be separated using a semi-colon (e.g. address1@test.com;address2@test.com).

There is no guarantee that the E-mails will be sent. This is the responsibility of your E-mail server or provider.

Messages:

- Collect and print when page is full
- Immediate print out (one message per page)

8.7.3.8 Automatic (2)

Automatic (2)

In this registration card set up the **Modem set-up**.

Check the set-up by using the command **Check set-up**.

The screenshot shows a 'Set-up' dialog box with the 'Automatic (2)' tab selected. The dialog has a title bar with a question mark and a close button. The tabs are: General, Display / Print out, Directory, Security, Automatic (1), Automatic (2), E-mail, and Export. The 'Modem set-up for receiving messages' section contains five dropdown menus: PC port (COM1), Baudrate (19200), Data-Bits (8), Parity (None), and Stopbits (1). Below these is a 'Check set-up' button. The 'Automatic' section has a checked checkbox 'automatically starts after' followed by a spinner box set to '5' and the text 'minutes'. The 'Printer' section has a dropdown menu showing 'FinePrint 2000 an FPR4:'.

Modem set-up for receiving messages	
PC port:	COM1
Baudrate:	19200
Data-Bits:	8
Parity:	None
Stopbits:	1

Check set-up

Automatic	
☒ automatically starts after	5 minutes

Printer
FinePrint 2000 an FPR4:

Printer:

Select the printer, from the pull down menu, to which the messages are to be transmitted and printed out.

9 Help

9.1 Notes to the Help function



Notes to the Help function

Note

An operation manual for this programme can be found on your installation CD-ROM. It is possible to open, read and print out this file using the free of charge Adobe® Acrobat Reader software.

9.2 Programme information

Programme information selection displays the actual programme version used. Using the command **Details** all programme details of the programme version used are displayed.

10 Network operation

10.1 Multiple use of data base

Network operation enables more than one user to have access to the data base of this program.

Certain important settings must be made.

10.1.1 Important note for network operation



In order to avoid data loss a stable network must be available.

Attention

When maintenance work is being done on the network then it is absolutely necessary to close all started versions of this programme. If not done this could lead to a loss of data.

10.1.2 Generate data directory

A directory must be generated on the network. Here this program will generate the data base.



Note

All users need both read and write access for this directory. These should be given by the network administrator.

Start this program. Look at the register **Directory** in the menu **Extras --> Program options --> Set up**.

Set up the now preset directory for the data directory.

Now it is easy to use the data base. For security reasons the security system of this program should be activated. This will then protect the stored data (see also Security)

10.1.3 Limitation

10.1.3.1 Log on

Every user can only log on to the data base once. If a user attempts to log on more than once this will lead to an error message and the process is cancelled.

10.1.3.2 *Deleting units from the data base*

Before deleting units from the data base make sure that no other user has access to these units at the time of deleting.

11 Database conversion (16 to 32 bit)

11.1 Manual conversion of unit set-up / stored measured values

To convert the unit set-up and/or the stored measured values from your existing 16 bit database into the new 32 bit database format follow these steps:

1. Please start your 16 bit PC software.
2. Export the unit set-up (*Miscellaneous --> Export unit settings*)
3. Store measured values (*Miscellaneous --> Store/Save measured values*)
4. Please start the new 32 bit PC software.
5. Import the unit set-up (*Unit --> Display/change unit set-up/add new unit --> Import unit set-up*)
6. Import measured values (*Extras --> Load measured values*)

If you have more than one unit please repeat steps 2 to 6.

11.2 Automatic database conversion

The conversion from your existing 16 bit database including the unit set-up and/or the stored measured values into the new 32 bit database format can be done automatically.

1. Start the 32 bit PC software.
2. In the menu *Extras --> Service* start the menu *Database conversion (16 to 32 bit)*.
3. Follow the instructions of the conversion assistant.



Notes:

- The old data base will not be changed, this means that all data remains intact.

- Make sure that the data base is not used during the conversion.
- With large amounts of data or / and a lot of units the conversion could take longer (e.g. some hours). We recommend to convert the database in several steps to assure, that the PC will not be occupied for a long time.

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