# **Comfort Soft**

# **Configuration Software**



# Installation and Operating Manual

Please observe the safety instructions and read through this manual carefully before commissioning the equipment.

#### General information

# Safety information

# Safety information

#### Warranty

- ▲ Any warranty claims against the manufacturer shall become null and void in the event of installation and commissioning of the software or hardware in a way that is not in accordance with the information provided in this user manual and the documentation referred to herein.
- ▲ The manufacturer shall not be liable for any direct, special, incidental or consequential damage that may arise as a resulting of using this product. Claims based on mandatory product liability provisions shall remained unaffected.

#### Modifications of the product and operating instructions

We reserve the right to modify the product and the operating instructions at any time and without prior notice.

Information on changes made at short-notice can be found in the "Read\_me.txt" file on the installation diskettes or the CD-ROM.

# <u>NOTE</u>

- Information on whether your controller is capable of communication can be found in the pertinent user manual.
- Refer to the user manual supplied with your controller. The limit values and wiring specifications must be observed.
- After the installation of a CoCo PC (supply voltage ON), the equipment needs about 2 minutes to load the bus configuration. Error-free operation is only ensured after this initialization phase.

#### Important text passages

>> << Sections that are shown in this way represent commands that are invoked via menu assistance.

- $\triangle$  This attention symbol indicates dangerous situations.
- Lines marked in this way provide tips.

[A] Drive letter; in this case the floppy disk drive.

## System requirements

The system requirements described in the following only specify minimum default values.

## Hardware

- commercially available PC (Win95 capable)
- screen resolution min. 800 x 600
- 3.5" disk drive or CD-ROM drive
- keyboard and mouse
- modem\* or ISDN card\*
- commercially available telephone cable on telephone connection\*
- \*) Only applies to control via a telecommunication network

## Software

- Microsoft Windows PC operating system from Windows 95 or later
- Comfort Soft from Version 3.0.0

#### **Functions**

- Reading in the configuration of a heating installation
- Access controller on bus
- Read-in / modify / transmit parameters to controller
- Transmit saved parameter records to controller
- Read-in measured values
- Read-in error messages
- Documentation of temperature curves, for example, through integrated data recorder (log function)
- Automatic fault notification function via the PLC (only in connection with a "CoCo-PC active")
- **!** Telephone charges arise for connections made via a telecommunications network.

When using a "CoCo-PC active", SMS messages can be sent to up to three stored telephone numbers [e.g. mobiles] in the case of a fault.

The "CoCo-PC active" also provides the possibility of connecting the controller to a control system via the specified, integrated "Open"-RS 232 Interface (only for controllers which support this mode).

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# Scope of delivery

# Scope of delivery

Before beginning with the installation, check the package delivered for completeness based on the packing list.

#### Use

- Mobile use, e.g. for installation personnel, together with an optical adapter or a CoCo-PC for on-site service or configuration during installation/modification of the heating system using a notebook.
- In-house use with the CoCo-PC for direct connection of the PC to the heating system's bus for implementation as a monitoring unit or for programming [security personnel, proprietor].
- Remote configuration/monitoring of a heating system with the CoCo-PC + modem for communication with the heating system via a telephone and for automatic fault notification via SMS [service company, holiday accommodation].
- Remote service with the Wikon telecontrol station.

# *Comfort Soft* with optical interface

Designation

Comfort Soft on CD

Adapter cable for optical interface

### *Comfort Soft* with communications module CoCo PC as an in-house application

Designation *Comfort Soft* on CD CoCo-PC = converter for the RS232 interface of the PC Connection cable for the RS232 interface of the PC Plug-in power supply unit 230/12V (only required in certain cases)

# *Comfort Soft* with communications module CoCo PC and a modem

Designation

Comfort Soft on CD

CoCo-PC active = converter for the RS232 interface of the PC

Plug-in power supply unit 230/12V (only required in certain cases)

2 modems \*)

\*) We recommend the use of the modem we have on offer (function tested) for use in the heating system. We cannot assume any guarantees for other modems. Any commercially available modem can be used for application with the PC. A list of modems which have been tested is provided in the Modems Appendix. If you use another modem which operates error-free, please notify us so that we can extend the list. *Comfort Soft* with communications module CoCo PC and a telecontrol station

Designation *Comfort Soft* on CD CoCo-PC active = converter for the RS232 interface of the PC Plug-in power supply unit 230/12V (only required in certain cases) Fewis MP8(PLC) NT telecontrol station with transparency mode 1 modem \*)

# Installation of the software

#### NOTE

The installation and deinstallation on operating systems which support protection rights for files (e.g. NT) may only be performed with Administrator rights. Write permissions in the system directories are required for the installation.

Following installation, Comfort Soft must be started once with Administrator rights (communication test). Any user can then use Comfort Soft.

Prior to the installation of Version 3.0.0 or later, all the versions of Comfort Soft earlier than 3.0.0 must be deinstalled.

If a Beta version of V 1.7.0 is/has been installed, certain entries in the Registry must be deleted manually. To do this:

- Activate "Execute" in the Start menu
- Enter regedit.exe (registration editor)
- Open the following directory:
- HKEY\_LOCAL\_MASCHINE
- System
- CurrentControlSet
- Services
- VxD
- Delete "TDLPT"

#### Installation

- If the computer is switched off, switch it on.
- Terminate all programs (Explorer can be used to start the Setup.exe file).
   Deactivate any virus protection and screensaver programs for the duration of the installation to prevent conflicts.
- For installation from a set of disks: Insert the installation disk 1 in the disk drive and start the "Setup.exe" file on the disk.
- For installation from the CD: Insert the installation CD in the CD drive and start the "Setup.exe" file on the CD.
- For installation from the hard disk: Copy all the files from the installation CD to an installation directory on the hard disk and start the "Setup.exe" file in this directory.
- I The installation screen appears. Follow the instructions on the screen.

The installation can be stopped or interrupted at any time by clicking on >>Cancel<<.

Installation can be resumed at a later point in time. In this case, repeat al the previous steps as for a new installation.

#### General information

The following screen message appears after successful installation: "Set-up completed".

Restart the computer.

#### **USB** interfaces

If your computer is only equipped with USB interfaces, use commercially available USB-RS232 adapters to connect the dongle and optical adapter/CoCo-PC.

#### Deinstallation

The installation and deinstallation on operating systems which support protection rights for files (e.g. NT) may only be performed with Administrator rights. Write permissions in the system directories are required for the deinstallation.

- Start the computer as described in the system manual relevant for the computer.
- Start Deinstallation under Windows with:

>> Start/Settings/Control Panel<<

- Double click the "Add or Remove Programs" icon.
- In the text bar, click on "Comfort Soft" or the program name assigned by yourself and then click on "Add/Remove".
- The screen message "Delete File or Application" appears.
- Click >>Yes<< in order to confirm Deinstallation.
- Deinstallation is executed. After successful Deinstallation the following screen message appears: "Deinstallation was successfully completed".

# Use with the optical interface

#### Installation/Service personnel



## **Explanation of diagram**

- 1 Heating programmer
- 2 Optical adapter with interface cable to RS232 of the PC
- 3 Notebook
- 4 Heating installation

## **General information**

The optical interface enables mobile use of the program at different locations by using a notebook.

Only <u>one</u> controller with an optical interface is required in the heating installation.

Refer to the controller's user manual to find out whether it is equipped with an optical interface.

## Connecting up

Insert the Sub-D plug (9-pin) into the 9-pin socket (serial interface) of the computer.

Insert the optical adapter into optical interface of the controller.

Start "ComfortSoft.exe" in the installation directory.

Open the menu: >>Communication<< and select >>Make a direct connection<<.

Enter – when known - the highest heating circuit number in the heating installation and confirm it, or confirm the predefined program entry, by clicking the "OK" button.

If the following message appears: "No serial connection available!"

=> continue by reading the chapter "Fault location".

The further steps are explained in the chapter "Operation".

# <u>Use together with "CoCo-</u> <u>PC active"</u>

- A: Connection for the controller system's CAN BUS
- B: Select the "CoCo-PC active" function
- C: Connection of an additional power supply (power adapter) Only when the display or the bus symbol in an operating unit st

bus symbol in an operating unit starts to fade or goes out, or when the "CoCo-PC active" LED no longer lights up.

- D: LED, operating indicator
  - a) LED lights continuously => normal operation
  - b) LED does not light up => unit not working correctly
     1. Check CAN BUS connection: VCC (+,-) >
  - 8V
- 2. Connect power adapter (C)
- c) LED flashes=> CAN BUS is not active
  - 1. Wait at least 2 min. after Power ON
  - 2. Check CAN BUS connection:
  - Voltage level at H and L ~ 2V DC





- E: More inputs/outputs (see chapter "Functions"): Signal/Count input 1 => Pin 1 and PIN 4 (ground) Signal/Count input 2 => Pin 2 and PIN 4 (ground) Signal/Count input 3 => Pin 3 and PIN 4 (ground) Signal/Fault output => Pin 3 and PIN 4 (ground) (Conversion function Pin 3 via Comfort Soft) RS 485 -> A => Pin 1 RS 485 -> B => Pin 2 (Conversion functions Pin 1 and 2 via switch (B))
- F: RS 232 Connector for direct connection of a computer (zero modem cable) or a standard modem (RS 232 cable of the modem)
- I The CoCo-PC is configured by means of Comfort Soft (refer to chapter "Programming CoCo-PC active").



G: Using the spring supplied, the CoCo-PC can be mounted on top hat rails

#### Resetting the CoCo-PC / Loading default values

- Altering the function switch "1" while power is being supplied (power adapter or bus => LED lit up/flashing) causes the values on the "CoCo-PC active" to be reset to the factory settings.
- Connect CoCo-PC to power supply => LED flashes
- Change setting of function switch "1"
- LED lights up for approx. 4 sec. and then starts to flash
- Disconnect CoCo-PC from power supply => switch off
- Set function switch "1" to operation setting
- In order to retain the current values defined for the CoCo-PC active, set the function switch before connecting "CoCo-PC active" to a power supply (bus or power adapter).

## Function selection for "CoCo-PC active"

The function switch (DIP switch) on the front of the "CoCo-PC active" is used to set the type of use.

# "CoCo-PC active" functions

for temporarily direct connection to the bus. This address must not be chosen if the controller's optical interface is in use. [service-engineer, installation technician]

ON, ON  $\blacksquare \Rightarrow \downarrow \downarrow$  (Adr. 2)

for remote control via a modem [e.g. for holiday accommodation or monitoring by a service company]

ON, OFF  $\blacksquare \Rightarrow \downarrow \uparrow$  (Adr. 3)

for direct connection of a PC to the bus [in-house use – stationary; e.g. proprietor, security personnel]

# OFF, ON $\blacksquare$ => $\uparrow\downarrow$ (Adr. 4)

for remote control via the integrated RS 485 [e.g. using a Wikon telecontrol station, Fewis MP8, with transparent channel]

# Use together with "CoCo-PC active"

▲ Several CoCo-PCs can be operated on the bus at the same time (not applicable for all controllers, please ask your supplier). An example here is the use of one CoCo-PC for connection to the security personnel PC and another CoCo-PC to send SMS notifications via modem to your mobile phone. At the same time, a technician inspecting the system can connect his computer via a third CoCo-PC to the bus and, for example, display some temperature values online with the integrated line printer. The CoCo-PC generates its various bus IDs for the data traffic on the bus from the function switch setting. If there are two CoCo-PC with equal function switch setting on the BUS. You have to change the Address in one of them via Comfort Soft (page 20 )

# PC connected directly to bus

Security personnel, proprietor, service company (mobile



use)

## **Explanation of diagram**

- 1 Heating installation controller's CAN BUS
- 2 "CoCo-PC active" communication module
- 3 Connecting cable between serial interface of PC [RS232] and the "CoCo-PC active" communications module (zero modem cable)
- 4 Computer
- 5 DIP switch for "CoCo-PC active" function selection

## **General information**

Setting up the system with a direct connection between the PC and controller via the bus enables it to be used, for example, by a proprietor, in his office or security personnel of an industrial estate, in a control room, as a fixed monitor-ing/input station.

Its use by an installation technician, for example, for mobile application with a notebook at different locations continues to be possible.

## Establishing a connection

Connect the CAN bus cable with the "CoCo PC active". Pay attention to the designation of the connections at this point.

△ IMPORTANT! Bus lines must be spatially separated from mains cables when installed.

Connect the PC to the "CoCo-PC active" (RS 232 zero modem cable).

Now switch on the voltage supply for the controllers. => LED on the CoCo-PC flashes.

Set the CoCo-PC function switch:

- a) For fixed installation: ON, OFF  $\blacksquare => \downarrow \uparrow$
- b) For temporarily use: OFF, OFF  $\blacksquare => \uparrow \uparrow$
- Altering the function switch setting while power is being supplied (LED lit up/flashing) causes the values on the

"CoCo-PC active" to be reset to the factory settings. In order to retain the current values defined for the CoCo-PC active, set the function switch before connecting "CoCo-PC active" to a power supply.

Wait until the Function LED is constant (> 2min).

If necessary, connect a power supply unit (12 V DC) to the "CoCo PC active". Only if the display or the bus symbol in an operating module becomes weaker or the LED of the CoCo PC no longer lights up.

Start Comfort Soft on the PC, open the >>Communication<< menu and select the function >>Make a direct connection<<.

Enter – when known - the highest heating circuit number in the heating installation and confirm it, or confirm the predefined program entry, by clicking the "OK" button.

The further steps are explained in the chapter "Operation".

# <u>Remote control via modem with message</u> <u>function</u>

Proprietor, holiday accommodation, service company, manufacturer



## Explanation of diagram

- 1 Heating installation controller's CAN BUS
- 2 "CoCo-PC active" communication module

- 3 Modem in the heating installation (see modem list)
- 4 Modem in the monitoring station on the PC (also as plug-in card)
- 5 Telephone line or GSM path (with GSM modem)
- 6 DIP switch for function selection
- 7 Computer in the monitoring station

# General information

Using a PC, 2 modems and the CoCo PC communications module, the heating installation can be configured from a remote station via the telephone network. This application is particularly suited to holiday accommodation owners, service companies and system operators.

**!** Where possible, only use the recommended modems (refer to the Appendix and Read\_me.txt file in the installation data media). No guarantee may be provided for proper functioning if other modems are used.

# Programming the "CoCo-PC active" (modem operation)

When used with a modem, it may be necessary to change the configuration (modify set values on the "CoCo-PC active").

The "CoCo-PC active" can be programmed a) prior to installation by means of a direct connection to the PC, b) during installation by means of a direct connection to the PC or c) after installation by connecting a modem to the remote PC.

The modem in the heating installation is initialized by the "CoCo-PC active". The initialization string is stored in the CoCo-PC and is sent to the attached modem when the CoCo-PC is put into service. If the modem used in the system requires an initialization string other than the default setting:

## [AT &F E0 &D0 S0=1 &W0]

it must be programmed beforehand via a direct connection to the PC, otherwise it is not possible to establish a telephone connection via the modem.

## Establishing a connection

Set the "CoCo-PC active" function switch to ON, OFF  $\blacksquare$  =>  $\downarrow \uparrow$ .

Connect the PC to the "CoCo-PC active" (RS 232 zero modem cable).

#### Programming without controller:

If the "CoCo-PC active" does not receive its power supply via the controller bus (e.g. bus is not connected), the "CoCo-PC active" must be supplied with power via a mains adapter [12V DC] during programming.

Now switch on the voltage supply for the CoCo. => LED on the CoCo-PC flashes.

### Programming on the controller:

Connect the CAN bus cable with the "CoCo PC". Pay attention to the designation of the connections at this point.

△ IMPORTANT! Bus lines must be spatially separated from mains cables when installed.

Now switch on the voltage supply for the controllers. => LED on the CoCo-PC flashes.

Wait until the Function LED is constant (> 2min).

If necessary, connect a power supply unit (12 V DC) to the "CoCo PC active". Only if the display or the bus symbol in an operating module becomes weaker or the LED of the CoCo PC no longer lights up.

### **Entering parameters**

Start Comfort Soft on the PC, open the >>Communication<< menu and select the function >>Make a direct connection<<.

Enter the highest heating circuit number in the heating installation, if known, and confirm it, or confirm the predefined program entry, by clicking the "OK" button.

Select the >>Tools<< menu, open the >>CoCo PC<< window and enter the necessary values in the input window depicted below.

## Selection mode

This page compiles the data necessary for establishing the connection to the heating installation via telephone.

# Init-String

The modem in the heating installation is initialized by the "CoCo-PC active". The initialization string is stored in the CoCo-PC and is sent to the attached modem when the CoCo-PC is put into service. If the modem used in the system requires an initialization string other than the default setting, the string must be programmed beforehand via a direct connection to the PC because it is not possible to establish a telephone connection via the modem without entering the correct Init-String.

settings CoCoPC - software-number: 144.15	x
selection mode SMS target SMS mode error input/output status inputs	
rodem settings	
initetring: AT 25 E0 200 S0-1 23/0	
- code number	
new code number:	
contint:	
bus identifier: 1	
OK cancel Take over	

# Remote control via modem with message function

# Default setting: [AT &F E0 &D0 S0=1 &W0]

#### Procedure:

a) Check the function using the default Init-String

b) Initialization strings for the modems recommended are provided in the Appendix and in the Read\_me.txt file. Check whether the modem used is assigned a special Init-String and, if so, enter it.

c) If a) and b) prove unsuccessful, refer to the documentation supplied with the modem to find the valid Init-String and enter it.

# **Init-String functions**

The following options should be entered in "CoCo-PC active" for initialization of the modem in the heating installation.

- Command prefix => AT
- Load default values => &F
- Loudspeaker OFF => M0
- Ignore any RTS control lines => \Q0
- Ignore any DTR control lines => &D0
- Pick up at first dial tone => S0=1
- Save setting permanently => &W0

- Fix speed at 2400 Baud => &N3

   (only when the function is not possible without this extension => Pay attention to setting during selection with Comfort Soft)
- Modem commands will not be transferred to the end unit => E0

The AT commands specified are used by several modems – please check them using the manual supplied with the modem.

Further information on Init-Strings for modems is available in Internet under: >>www.modemhelp.org<<.

## Modem tool => Modem AT commands

The WinZip file ModemTool is located on the installation disks or the installation CD. Use this file to find out the AT commands that are valid for your modem.

Install the modem on your PC (see the installation disks or the installation CD).

In the folder "C:\Programs" on your hard disk create a subdirectory with the name ModemTool.

Extract the files from the WinZip file "ModemTool" into this folder.

### Run the file

>>ModemTool.exe<< by double-clicking on the symbol.

Select your modem in the upper window of the Tool.

Search for the desired options on the index cards of the Tool (e.g. error correction ON) and make a note of the AT commands.

CAUTION! The windows are often shorter than the commands. If you position the cursor in the window then you can scroll the entire command in the visible area by using the "left" and "right" cursor keys.

# **GSM Modem**

At use of a GSM modem the appropriate field must be activated and the pin number of the SIM card must be entered.

The Init string must be extended by the addition of "+CSNS=4". The expansion is carried out automatically if the field "GSM" will be activated.

## New code number

At this point, it is possible to assign an eight-digit code number for access to the controller system data. This code number is stored in the CoCo-PC.

When the system is selected later using Comfort Soft via a modem / telecommunication network, this code number must be entered in Comfort Soft in order to enable ac-

cess to the data. This effectively protects system data from being read or modified by unauthorized personnel.

# [Default= 12345678]

Entering the eight-digit code number after when selecting the system enables access to the entire system data.

# **Confirmation**

Re-enter the new CoCo-PC code number to prevent writing errors.

# <u>Bus ID</u>

Several CoCo-PCs can be operated on the bus at the same time (not applicable for all controllers, please ask your supplier). An example here is the use of one CoCo-PC for connection to the security personnel PC and another CoCo-PC to send SMS notifications via modem to your mobile phone. At the same time, a technician inspecting the system can connect his computer via a third CoCo-PC to the bus and, for example, display some temperature values online with the integrated line printer. The CoCo-PC generates its various bus IDs for the data traffic on the bus from the function switch setting.

# Bus ID in CoCo-PC:

1

2

- -1 => Bus ID, automatic according to function switch
  - => [OFF, OFF] Mobile use, technician
  - => [ON,ON] Modem operation
- 3 => [ON,OFF] Fixed installation PC, security

- 4 => [OFF,ON] Fewis MP8 Fernwirkstation 5 to 9 => free
- I Older controllers only support the address "0"

## Process in CoCo-PC:

- 1. The CoCo-PC generates its address according to the above list from the setting of the function switch.
- The CoCo-PC searches the bus for controllers which do not support the new addresses. If such controllers are detected, the CoCo-PC automatically switches to the address "0".
- 3. If an address not equal to "-1" is predefined by Comfort Soft, the CoCo-PC assumes this address even if it is not supported by all the controllers.

If, for example, 2 CoCo-PCs are located on the bus with their function switch in the same position, the bus ID of one of these CoCo-PCs can be permanently changed by entering a bus ID at this point.

<u>Example:</u> Two monitoring PCs are installed, fixed, in the heating system. Thus, the function switch of both CoCo-PCs are in the same position [ON,OFF]. Therefore, one of the two CoCo-PCs must be programmed to a free bus address, e.g. by entering a "3" in the "Bus ID" field, in order to guarantee the system functions properly.

#### **SMS** function

The "CoCo-PC active" in combination with a modem enables the sending of messages (SMS) to various mobile telephone numbers (maximally three target units) should certain events occur (bus failure, message or count inputs 1-3). These events and target units can be combined as required.

target phone no. 7 30 characters max.	provider / 30 characters max.	error input	new
01713678910	0,01712092522	bus error, input 1	
01773434343	0.01797673425	input 1, input 2, inc	change
<u>    </u>			
heating installation / 80 characters max. heating 023-3321/4, Kuhbrueckenstr. 2	4, Hameln; cascade, 4boiler+2ri	nixer	

#### SMS target units

This field can be used to enter the target for the SMS message and a text (e.g. the system address or name). This text is then sent for all events and messages.

## Targets

This window contains the programmed target units.

After clicking on a target already entered, the >>Change<< and >>Delete<< buttons become active. Click on the respective button to modify or delete the selected field.

After clicking on >>New<< or >>Change<<, the "SMS" window appears in which to enter/modify a message target. The MS target unit entered is saved by clicking on >>OK<<. It is then possible to enter another target unit by clicking on >>New<< again. A maximum of three target units can be entered.

# When entering new targets, please complete the following fields:

# Target:

Enter the mobile phone number of the target unit <u>without</u> extensions (e.g. "0,").

To make it more clear, the mobile phone number can be assigned a name. This is separated from the call number by means of a double click.

## Example: >>Brown:01713578910<<

SMS				×
target:	01773434343		•	ОК
provider:	0,01771167		•	cancel
protocol:	● TAP	O UCP		
error input:	<ul> <li>bus error</li> <li>input 1</li> <li>input 2</li> <li>input 3</li> <li>remote triggering</li> </ul>			

#### **Provider:**

Enter the service number of the provider for the target unit call number from the aspect of the heating installation or the CoCo-PC (the number is dialed by the CoCo-PC; refer to the provider list below).

I The provider and target unit call number must match. This means that only the D1 provider sends a message to a D1 mobile and D2 provider to a D2 mobile.

#### The following normally applies:

T-Mobile (D1): 0160, 0170, 0171, 0175, 0151 Vodafone (D2): 0162, 0172, 0173, 0174, 0152 E-Plus: 0163, 0177, 0178 O2: 0176, 0179 Example: 01712092522 for a D1 target mobile phone number (for GSM Modem use you have to dial the international access code in any way)

The fixed assignment of access code numbers to provider

## SMS providers for mobile phone networks:

will be lifted in 2003 (=> ask provider).

If the CoCo-PC or assigned modem installed in a PBX system, a zero and a comma must precede the provider number to obtain an outside line and enter the waiting period, respectively (comma not for GSM modem).

Example: 0,01712092522 for D1 target mobile phone number.

#### Protocol:

Select the associated protocol (TAP or UCP) from the provider list and activate it in the input window by clicking on the white point.

If the <TAP> protocol does not work, select <UCP>, and vice versa. Further information can be obtained by directly contacting the provider responsible for the target mobile phone number.

Provider	Log	Access, Modem	Access, ISDN	Access, GSM
T-Mobil (D1)	<tap></tap>	0049 (0) 1712092522	0049 (0) 1712521001	00491710760000
Vodafone (D2)	<ucp></ucp>	0049 (0) 1722278020	0049 (0) 1722278010	00491722270000
E Plus	<tap></tap>	0049 (0) 1771167	0049 (0) 1771167	00491770610000
O2 (Viag Interkom)	<tap></tap>	0049 (0) 1797673425	-	00491760000443

For more information please lock for ReadMe.txt in the installation directory or CD

#### Faults received:

Select the events which should cause a message to be sent to the target unit specified. It is possible to select several events for one target call number. It is also possible to activate an event with various target call number.

## For use outside Germany

# a) Select a provider in the country where you are using the mobile phone.

Find a mobile phone provider which makes an analog modem access available for your country. The technical hotline of the provider can state the service number and protocol (TAP, UCP), so that the necessary settings can be configured in Comfort Soft. Please send the information to us so that we can extend the list. The service numbers known to us are listed below (without guarantee). Other numbers may be specified in the Read\_me.txt file.

Austria: (0043)	A1 SMS	<tap></tap>	0900664914*)
Switzerland: (0041	)Natel	<ucp></ucp>	0794998990
Belgium: (0032)	Proximus	<tap></tap>	75161621
	Mobistar	<ucp></ucp>	0495955205
Ireland: (00353)	Esat	<tap></tap>	868525352
Norway: (0047)	Telenor	<tap></tap>	96890050
Netherlands: (0032	I)KPN	<ucp></ucp>	0653141414
UK: (0044)	Cellnet	<tap></tap>	7860980480
	Vodafone	<tap></tap>	7785499993
	One-2-One	<tap></tap>	7958879889

\*) can only be dialed from Austria.

The latest information is available in Internet under www.intellisoftware.co.uk/products/transports/tap-protocol-numbers.aspx

or

www.gsm4u.cz/All/smsc.htm.

## b) Use a provider in Germany

This service is provided by Vodafone, for example. A condition for this is a "roaming agreement" between the domestic network selected and Vodafone or another German provider (e.g. TD1). This agreement is available with over 100 countries, according to Vodafone. More information is available from your local mobile phone provider. In the case outlined above, enter the mobile phone number from the view of Germany in Target; i.e. with the international access code when calling the number from Germany. Under Provider, enter the number of the provider with the German access code 0049 (e.g. >>00491722278020<< as the service number for Vodafone Germany). Click on the relevant protocol according to the list (>>UCP<< for Vodafone). Select the faulty inputs as already described.

Please note: The use of these service numbers results in telephone charges.

#### System => Installation

Click on >>OK<< to save the input and close the window. More targets can then be entered (click >>New<<) or enter the further necessary data as described in the section >>SMS Target<<.

#### Heating installation / Address max. 80 characters

It is possible to enter a text with up to 80 characters which is sent with every defined message. The text must not contain umlauts ( $\ddot{u} => ue$ ).

Recommendation: Entering the name or the address of the

installation for unique identification of the origin of an SMS and enter the unique features of the installation.

## Repeat fault SMS every 24 hours

When the field is activated [click in the white field -> Tick appears], the relevant SMS message will be sent in the case of a fault event every 24 hours until the message event is reset. If this field is not activated, the SMS is only sent once. If the SMS cannot be sent successfully, the attempt to send is repeated twice. There is no further attempt.

#### **SMS** operation

Enter an AT command to process the SMS messages.

#### Default setting: [AT&F\NATE0\NATV1\NATX4\NATS11=5\NATM1\NATL0\N]

No other settings are known at present. If your software indicates another command, modify this command first if the function is not available, and note the command in the software before overwriting it.

settings CoCoPC - software	-number: 144.15	x
selection mode SMS target	SMS mode error input/output status inputs	
modem initstring:	AT&F\NATEO\NATV1\NATX0\NATM1\NATLO\N	
	OK cancel Take ov	er

# Remote control via modem with message function

## Fault input / output

This page can be used to configure the message inputs / counter and message output of the CoCo-PC.

### Port no. 3 / Output

First of al, click to define whether terminal 3 of the CoCo-PC should be evaluated as Input 3 or as a message output.

 $\underline{\text{Load:}}$  The output is an open-collector type and a maximum load of

50mA / 24 V may be applied.

In the case of 230 V consumers (e.g. optical or acoustic signal encoders), a fuse must be implemented.

#### Output switches following:

If the output is to be used as a message output, it is necessary to enter the events at which it should be switched. Activate the message events by clicking on the box provided.

### Selection:

Bus ID -> The output switches when a fault in the heating controller is at the bus for at least the defined period of time [minutes].

Input 1 -> The output switches when the event defined for this input occurs.

Input 2 -> The output switches when the event defined for this input occurs.

Remote triggering -> Output 3 can be tested by remote triggering

#### Fault inputs

input	Туре	Value	description	
bus error	input closer (nor	0	fault in installa	tion
input 1	input closer (nor	1	burglary	
input 2	Counter	3000	operating time	-> refuel
input 3				
remote triggering	input closer (nor	0		
nput 3				
🔘 input		outp	out switched on:	Dus error
				input 2
Output				remote triggering

#### System => Installation

It is possible to specify three fault or message inputs of the CoCo-PC and the bus failure which should cause an SMS message to be sent or the message output to be switched. If Port No. 3 is defined as an output, 2 fault/message inputs remain. Select an entry from the list by clicking it (inverse display) and then click on >>Change<<.

The >>Dialog<< window appears.

dialog		×
Туре:	input closer (normally 💌	OK
Value:	1	cancel
description		
burglary		

#### Туре

Select between the types input and counter:

#### Input:

If the associated terminal is puled to ground for the period defined in >>Value<<, connection to terminal 4 "Gnd", the SMS message is sent. The SMS message is comprised of the general message (system address) and the input-specific message (refer to description).

The pulse must be applied for the entire period defined in "Value"! If a shorter pulse should cause a message to be sent, the input can be configured as a counter with >>Value<< = 1.

#### Counter:

When the relevant input is pulled to ground, short circuit at terminal 4 "Gnd", a pulse is triggered and an internal counter is incremented. This input is, therefore, suitable for counting events (e.g. operating hours, burner starts, consumer/production counter, days under 0 °C, faults, etc.). hen the counter exceeds the value set in the >>Value<< field, the SMS message is sent and the counter reset to zero.

#### Value

- Type "Input" -> Number of minutes the pulse must be applied to the input for the associated message to be transmitted.
- Type "Counter" -> Number of pulses at the input after which the associated message is transmitted.

#### Description

A message text of maximum 50 characters can be entered here which is then sent together with the general text (refer to SMS target) when the defined event occurs.

The text must not contain umlauts.

Click on >>OK<< to confirm the input and close the window.

#### After completing input

- Click on >>Take over<< : Transfer values to the CoCo-PC.
- Click on >>OK<< : Transfer the values to the CoCo-PC and close the >>Settings for CoCo-PC<< window.</li>

If the CoCo-PC is connected to a controller or controller system, the bus connection can now be used, for example, to program the controller or to transfer the computer time to all the controllers in the heating installation.

When programming is complete, never change the "CoCo-PC active" function switch <u>in a connected state</u>. Altering the function switch setting while power is being supplied (LED lit up/flashing) causes the values on the "CoCo-PC active" to be reset to the factory settings. When programming is complete, disconnect the connections (power supply, bus, PC) and set the function switch to the position for the "CoCo-PC active" system's planned use [ON, ON] ■ => ↓ ↓.

#### **Status Inputs**

Allows to control the actual input-states.

After clicking >>refresh<< all status are read out again. Furthermore the remote triggering can be set for testing purposes. Click on:

>>set status of remote-control<< further on >>take over<< and disconnect the remote line.

The event will be actuated after approx 5 minutes.

#### Installation in the system

Proceed as follows to install the programmed CoCo-PC:

Ensure that the CoCo-PC function switches are set correctly

 $[ON, ON] \blacksquare \Rightarrow \downarrow \downarrow.$ 

Altering the function switch "1" while power is being supplied (power adapter or bus => LED lit up/flashing) causes the values on the "CoCo-PC active" to be reset to the factory settings. In order to retain the current values defined for the CoCo-PC active, set the function switch before connecting "CoCo-PC active" to a power supply (bus or power adapter).

Connect the modem, according to the manual supplied with it, to the telephone line socket and the power supply, and then connect the modem to the CoCo-PC using the RS232 cable supplied. If a GSM modem is used, proceed as described in the corresponding instruction manual.

I The modem in the heating installation is initialized by the "CoCo-PC active". The initialization string is stored in the CoCo-PC and is sent to the attached modem when the CoCo-PC is put into service. Therefore, switch the modem on before you put the CoCo PC into operation.

Connect the CAN bus cable with the "CoCo PC active". Pay attention to the designation of the connections at this point. ▲ IMPORTANT! Bus lines must be spatially separated from mains cables when installed. A commercially available telephone cable can be used as the data line between the controllers and CoCo-PC.

Now switch on the power supply for the controllers. => LED on the CoCo-PC flashes.

Wait until the Function LED is constant (> 2min).

If necessary, connect a power supply unit (12 V DC) to the "CoCo PC active". Only if the display or the bus symbol in an operating module becomes weaker or the LED of the CoCo PC no longer lights up.

The system is now ready to operate (=> after approx. 10 min.). Test the programmed functions, e.g. by dialing the installation or by generating a fault in the system (e.g. disconnect sensor in normal operation).

The further steps are explained in the chapter "Operation".

# **Operation with a telecontrol station**

Service company, system operator



# Explanation of diagram

- 1 Heating installation (Can BUS)
- 2 "CoCo-PC active" communication module
- 3 DIP switch for function selection
- 4 Wikon Fewis MP8-NT telecontrol station
- 5 RS485 connection, MP8-CoCo-PC active
- 6 Connection terminal for interference contact
- 7 Telephone line or GSM path (with GSM modem)

# **General information**

The CoCo-PC can be operated using a telecontrol station (via RS485) as long as it supports a transparent channel (tested with Wikon MP8-NT => there is no guarantee for use with other telecontrol stations). The fault signal output of the CoCo-PC (open collector switch 5V-20V) can be used to activate the telecontrol station signaling system.

## Establish connection (in the system)

Set the "CoCo-PC active" function switch to OFF, ON  $\blacksquare$  =>  $\uparrow\downarrow$  .

Altering the function switch "1" while power is being supplied (power adapter or bus => LED lit up/flashing) causes the values on the "CoCo-PC active" to be reset to the factory settings. In order to retain the current values defined for the CoCo-PC active, set the function switch before connecting "CoCo-PC active" to a power supply (bus or power adapter).

Connect the CAN bus cable to the CoCo PC. Pay attention to the designation of the connections.

Connect the RS485 interface of the "CoCo-PC active" with the corresponding connections on the telecontrol station (Port 1 = A; Port 2 = B).

Connect the CoCo-PC error output (Port 3) with an error input on the telecontrol station.

Connect the CoCo-PC ground (Gnd) with the ground on the telecontrol station.



Connect the telecontrol station to the power supply and telephone line socket according to the corresponding manual supplied.

Now switch on the voltage supply for the controllers => LED on the CoCo-PC flashes.

Wait until the Function LED is constant (> 2min).

If necessary, connect a power supply unit (12 V DC) to the "CoCo-PC active". Only if the display or the bus symbol in an operating module becomes weaker or the LED of the CoCo PC no longer lights up.

A commercially available telephone cable can be used as the data line between the controllers and CoCo-PC.

 $\triangle$  IMPORTANT! Bus lines must be spatially separated from mains cables when installed.

In the building where the heating installation is located, connect the telephone outlet to the telecontrol station in accordance with the manuals.

#### Working steps for the monitoring station

Install the computer with the modem in the monitoring station according to the equipment manuals and test the set up by sending a fax to a known address, for example.

#### Set the serial interface of the PC (COM):

>>Start -> Settings -> Control Panel -> Connections<<

Select the COM interface (connector) used, by double clicking the corresponding name, and enter the following values:

- Baud rate: 1200
- Data bits: 8
- Parity: none
- Stop bits: 1
- Reflection: none

#### Initializing the telecontrol station

(Using the Fewis MP8-NT SPS as an example)

The telecontrol station must be initialized before the Comfort Soft parameterization software is put into operation.

Install the WinFewis software on your PC (MP8-NT delivery quantity)

The following value must be modified in the Wfsystem.ini file in the installation directory:

=> Delay after establishing connection in ms=10

# **Start WinFewis**

Win Fewis and Comfort Soft must not be operated simultaneously on the computer. This is because the programs use the RS232 computer interface with different settings. Therefore, close Comfort Soft before starting WinFewis and vice versa.

Identifier: system Password: start (both written lower case)

Click Test!

Click WinFewis!

Open the initialization file for the corresponding heating installation. If no file is available, create a new one with >>File -> New<<.

Click OK!

# Enter the following data:

>>Settings -> Interface<<:

- <u>Connection</u>: Com1 or Com2 (refer to modem connector on PC)
- <u>Baud rate</u>: 9600
- <u>Data format</u>: 8,N,1

Open the input window and enter the values displayed in the sequence indicated:

>>Settings -> Remote Configuration -> M-P8-> Parameters -> Transparent Channel<<:

- Module makes a call:
  - ( $\sqrt{}$ ) Activate transparent mode
  - Wait 4 seconds for protocol
  - ( $\sqrt{}$ ) In identification phase ...
- Module receives call:
  - ( $\sqrt{}$ ) Activate transparent mode
  - Wait 4 seconds for protocol
  - ( $\sqrt{}$ ) In identification phase ...
- - Baud rate: 2400
  - Data format: 8,N,1
  - 60 seconds ...

>>Settings -> Modem -> Parameter...-> Modem Settings<<:

- Disconnect after: 180 seconds.
- Dialing method: "Tone dialing" or "Pulse signaling"; Dialing method: tone signaling or pulse signaling -> depending on your telephone installation; with tone signaling you hear the button tones in the receiver when you dial a number.
- Telecontrol station call number.

• Initialization string for modem on PC

The Init-String for the modem on the PC in the monitoring station must contain the AT commands for the following options (input is necessary in order to transfer the data set to the Wikon MP8 afterwards):

Command prefix (AT) Load default values (&FE) Loudspeaker OFF (M0) Hardware flow control (RTS/CTS) Data compression OFF Error correction ON <u>With telephone installation</u>: Ignore dial tone (X3) <u>Without telephone installation</u>: Wait for carrier signal (X4)

## Default: AT&FEV1S0=2&D2X3M0

Initialization strings for the modems recommended are provided in the Appendix and in the Read\_me.txt file (see "Modem AT Commands").

Confirm the entries with OK

Fill in the visible fields for the automatic signaling function.

#### Field A (Location...):

Click on "Cont. 1" (at bottom -> Tab for signal contact 1 = Connection to heating error switch)

#### "Location":

Enter, for example, the address of the heating installation. This field will be sent in case of an error.

#### "Designation":

Enter more data to be transmitted (heating system telephone number, heating system error, ...)

>>Closed -> Message -> Destination<<:

=> Activate field 1 (click mouse)

## Field B (Dialing method...):

Program the address for the error message Click on "System 1" (at bottom - tab for System 1)

#### "Dialing method":

"Tone" or "Pulse"; dialing method: tone signaling or pulse signaling -> depending on your telephone installation; with tone signaling you hear the button tones in the receiver when you dial a number.

## <u>"Type":</u>

Select the telephone service for the error message (service to be call in case of error). If the service is not listed, select a comparable service, e.g. a partner of the provider.

For example: For an SMS error message, select "D1-SMS (D)" or "D2-SMS (D)" if your provider is not listed.

## "Call no. ..... (Pager central)":

At this point, program the central service number of your service (for example the SMS number of your handy provider).

For fax => (Fax unit call no.): Enter the fax number here!!

"Outside line":

For PBX systems => Enter number for outside line (default = "0").

"Call number ..... (Pager)":

Type in the number of the message destination

For fax => (call number M-P8): Enter the number of the heating system (Wikon M-P8)!!

## Field C (routine call...):

"Further...": => mouse click

Complete the fields according to the system. Pay attention to "Number of rings before module receives".

Save the configuration to the hard disk after entering all of the parameters with >>File -> Save As<<.

Transfer the parameters into the telecontrol station with:

>>Settings -> Modem -> Send Init to modem <<

>>MP8 -> Parameters -> Transfer parameters<<

## After completing the transfer:

>>Settings -> Modem -> Handset on hook<<

Quit WinFewis with: >>File -> Close<<

# Start Comfort Soft - establish connection

#### Use with the optical interface

Insert the Sub-D plug (9-pin) into the 9-pin socket (serial interface) of the computer.

Insert the optical adapter into optical interface of the controller.

Start "ComfortSoft.exe" in the installation directory.

Open the menu: >>Communication<< and select >>Make a direct connection<<.

Enter – when known - the highest heating circuit number in the heating installation and confirm it, or confirm the predefined program entry, by clicking the "OK" button.

If the following message appears: "No serial connection available!"

=> continue by reading the chapter "Fault location".

#### Use directly on the CoCo-PC

- In the case of stationary installation: Connect the PC to the "CoCo-PC active" (RS 232 zero modem cable). Pay attention to the setting of the "CoCo-PC active" function switch => ON, OFF ■ => ↓ ↑
- In the case of mobile use: Connect the PC to the "CoCo-PC active" (RS 232 zero modem cable). Pay attention to the setting of the "CoCo-PC active" function switch
   => OFF, OFF ■ => ↑ ↑ Connect the heating controller bus to the corresponding terminals on the CoCo-PC. To do this, interrupt the power supply to the controller (not absolutely necessary).

Start "ComfortSoft.exe" in the installation directory.

Wait until the Function LED is constant (> 2min).

Open the menu: >>Communication<< and select >>Make a direct connection<<.

- If the following message appears: "No serial connection available!"
  - => continue by reading the chapter "Fault location".

## Remote control via modem with message function

Install the computer with the modem in the monitoring station according to the equipment manuals and test the set up by sending a fax to a known address, for example.

# Set the serial interface on the PC (COM):

>>Start -> Settings -> Control Panel -> Connections<<

Select the COM interface (connector) used, by double clicking the corresponding name, and enter the following values:

- Baud rate: 1200
- Data bits: 8
- Parity: none
- Stop bits: 1
- Reflection: none

# Start Comfort Soft on the PC

Click on the menu items >>Communication -> Establish modem connection<< and fill in the fields.

• COM1:

Enter the PC interface used (e.g. COM1 -> only where selection is possible)

- Telephone number: Enter the telephone number of the heating installation (without extensions)
- Code number: Enter the 8-digit code number for data access

# Default: 12345678

• Transmission rate:

Select between 2400 and 9600 bit/s. In the case of CoCo-PCs with a production date after 01/03, a higher transmission rate can be used (new modems may be necessary).

• Exchange code In the case of a PBX system, enter the number for an outside line here (normally = 0).

Interface: COM2  Telephonenumber: 05151987654  Codenumber: ************************************	Init-String: &FE0 Q0 V1 dial process: MFV (sound) INVV (impulse) W waiting for dial tone
--	--

Operation

- Wait for dial tone: In the case of a PBX system with exchange code, activate this item by clicking the box.
- Init-String: Default => &F E0 Q0 V1 M0
- Dialing method
   Dependent on the telephone system
   DTMF (tone) => Tones are issued during dialing (default)
   IMF (pulse) => "Crackling" noises are issued during dialing

Click on >>OK<< and wait until the connection has been established.

It is now possible to use the bus system, e.g. to program the controller or transfer the time to all controllers in the heating installation (refer to chapter "Operation").

# <u>Disconnect</u>

If necessary, save all the open protocols and/or data windows.

Terminate an existing connection with >>Communications -> Disconnect<<.

# User interface

The user interface for Comfort Soft is a typical Windows user interface.

Wen for a	
File View Communication Davisor Tools 2	크니스
The view communication bevices roots :	
na de la companya de	COM . 2
Keduy	COM Z //

#### File menu

#### New

The "New" command is used to create a new controller or a parameter file for a controller. Without establishing a connection to a controller, parameter sets can be specified here first and then be transferred into the memory of the relevant controller at a later point. The file extension is automatically specified (e.g. *filename\_e6*) when the type of controller is selected.

#### Open ....

The "Open ...." command is used to load/open a parameter file which was previously saved. The "Device" folder in the *ComfortSoft* installation folder is provided for storing created files (saving). If you have stored the file which is being sought at another storage location, then select the corresponding folder via the pull-down menu "Search In:" and then open the file by >>double-clicking<< on the file name. You can also load and, for example, update saved data logs (e.g. temperature distributions) via the command "Open ...".

#### Close

The "Close" command is used to close the currently active window or file.

#### Save

The "Save" command is used to save the currently active window or file (e.g. parameter file or log). If a file does not already exist then the same window will open as in the case of "Save as ...".

Operation

#### Save as ....

An existing file can be saved under a new file name with this command.

With the command "Save As ..." you save the currently active window or file. ComfortSoft first invokes the "Comfort-Soft" installation folder as the storage path. First select the desired

storage path and then enter the file name. ComfortSoft automatically specifies the file type (e.g. xxx.e6). The "De-vice" folder in the *ComfortSoft* installation folder is intended for storing created files (saving).

## Export

With the command "Export", you can export a log read-in by the CAN bus, e.g. into an ASCII file format, that can be read-in by a spreadsheet program. Select >>File / Export Log<< and enter the file name with the extension (e.g. *Filename.xls*).

# C:\....\File name

This is where you will find the files that were last opened. Open again by >>clicking<< on them with the mouse.

## Quit ....

Use this command in order to end ComfortSoft.

#### View menu

This menu item is used to activate/deactivate the icon bar and the status bar in the *ComfortSoft* window. The " $\sqrt{}$ " sign in front of the icon bar and/or status bar indicates whether or not this menu item is activated.

#### Icon bar

Click on >>View/Tool Bar<< in order to deactivate the icon bar. Repeating this procedure reactivates the icon bar.

#### Status bar

Click on >>View/Status Bar<<

in order to deactivate the status bar. Repeating this procedure reactivates the status bar.

# **User interface**

#### **Communication menu**

#### Make a direct connection

Use >>Communication/Make a direct connection<< and the optical adapter or the "CoCo-PC active" communication module, to setup a connection to all controllers directly attached to the heating installation that are capable of communication.

The maximum bus code can be entered (bus code corresponds to the number of the heating circuit) in order to shorten the processing time). For example, the maximum bus code should be set to 2 if there are only heating circuits for bus codes 1 and 2 in the heating installation.

Set the number desired and then click on " OK".

Wait a moment until the system configuration has been completely read. The progress of this operation is shown by the counting bar in the status bar.

## Make a modem connection

Setup a modem connection in order to be able to adjust controllers via the telephone line and a modem or via a telecontrol station with an integrated modem.

A condition for successful connection is the correct modem setup at the sending and the receiving station (cf. associated manuals). Have the call completion number and the code number (password) to the receiving station at hand. After entering >>Communications/Make a modem connection" a window opens in which you should enter the following:

- the interface used on your computer (e.g. COM1),
- the telephone number of the receiving station (e.g. modem or telecontrol station) and
- the code number (password) of the receiving station Default:12345678

In addition, the modem attached to the PC can be initialized by using this menu. To do so, please enter the following data:

Exchange code (for external connections via a PBX -> e.g. 0)

<u>Wait for dial tone</u>: For external connections ON ( $\sqrt{}$ ) For internal connections OFF ( )

Dialing method DTMF (tone), IMF (pulse)

-> depending on your telephone installation; with tone signaling you hear the button tones in the receiver when you dial a number.

<u>Init-String:</u> The input window for the initialization string displays the default string "<u>&F E0 Q0 V1 M0</u>", which is valid for most modem connections.

# Disconnect

Use >>Communications/Disconnect<< to terminate an existing connection. Save the opened file windows if required.

# Read configuration again

Use >> Communications/Read configuration again<< to reread a configuration into an existing connection.

# **Devices menu**

All of the controllers in the heating installation that are supported by your version of *ComfortSoft* are listed under this menu item (only after establishment of a connection).

#### Indicate

Click on >>Devices/Indicate<<. The various controllers are represented by their bus code (e.g. <0>).



# Key:

- 1 Controller symbol
- 2 Controller type
- 3 Bus code = heating circuit number
- 4 Error code (refer to the controller manual)

Double-clicking the controller symbol opens the controller adjustment window. The current controller parameters are shown.

# **User interface**

You can find information on limit values and adjustment parameters in the associated user manual for the controller.

The controllers listed in the pull down menu and their abbreviations are supported by your *ComfortSoft* version. If your controller is not displayed, please refer to the chapter "Troubleshoting".



The controllers that are highlighted in black are, in part, addressable via the bus line, i.e. reference values and/or actual values can be read-in by the controller, modified and transferred into the controller again.

The above example shows that at present only 1 controller with type designation "E6" is addressed.

The bus code of the controller is represented in parentheses, e.g. <0>. Thus E6 can also indicate two bus codes since this controller can also regulate two heating circuits (<1> <2>).

#### **Tools menu**

This menu item is only active if no adjustment or log window for a controller is opened.

#### Protocol

You can open a log window under >>Tools/Protocol<<. Settings for the log can now be made under >>Protocol<<, the new menu item that appears.

#### Time

Use >>Tools/Time<< to transfer the current time and date on the PC to all the controllers on the bus. This item is only active when the connection to a controller has been completed. The date (from Version 3.0.4) is only transferred to the controllers which support this function.

- Update the time/date on the PC. Select >>Start / Settings / Control Panel<< and double-click >>Date/Time<<./li>
- If necessary, change the time by overwriting it.
- Click on "Apply" and "OK".
- In Comfort Soft, click on "PC>>System".
- The time/date on the controller are synchronized with that on the PC.
- To exit, click on (X) => Window closes.

## Select language

Use >>Tools/Select language<< to select one of the national languages indicated. Display of the menus will then be in the national language selected. After selecting the desired language click "OK". The new setting takes effect after a restart.

## Change code number

(Only active if a CoCo PC is connected to the PC) The heating installation is protected against unauthorized intervention by a code number (applies only for telecontrol via a telephone line).

A 2-digit code number can be entered under >>Tools/Change code number<<. Enter the new code number into both fields and confirm with OK.

# CoCo-PC

When used with a modem, it may be necessary to change the configuration (modify set values on the "CoCo-PC active").

I This function is only active when the connection to a CoCo-PC was established beforehand!

Detailed descriptions of the input windows are provided in chapter "Programming 'CoCo-PC active' (modem operation)".

## **Protocol menu**

his menu item is only active if at least one log window is open.

Open the menu items >>Tools -> Protocol<<.

## >>Protocol -> Settings<<

Specify the parameters to be logged. To select a parameter you must enter the following data:

- Device type
- Parameter name
- Module type (if the field is active)
- Bus ID = number of heating circuit or number of the heat generator (only if the field is active)

The parameter is then transferred to the log with >>Add<<.

Before leaving the field "Log Settings" with >>OK<< please check the interval time that is set (data recording frequency).

#### >>Protocol -> Start<<

Start of data recording: The measured data is displayed in the log window.

In the case of data recording over longer periods, ensure that all the energy-saving functions of the PC are switched off.

## >>Protocol -> Stop<<

End of data recording.

## >>Protocol -> Delete<<

Deletion of the data recorded in a log.

#### >>Protocol -> Open graph<<

This function starts a line printer which represents the data recorded graphically online.

#### Window menu

In accordance with all other Windows software, the different windows can be managed via the functions under menu item >>Window<<.

The active window is marked in the window menu with a checkmark. The active window can be changed by clicking another window.

In addition, the active window can be duplicate with the menu item >>Window -> New window<<.

#### ? menu

The menu item >>? -> About Comfort Soft<< provides information on the version number of your software. Keep this information ready for inquiries at your supplier's customer service department.

# Frequently used functions

## Read configuration / controller data

The menu item >>Devices<< lists all the controllers in the heating installation which are supported by your version of *ComfortSoft*.

// ComfortSoft				
File View Communication	Devices To	ols	?	
	Indicate	_		
	MM1			
	BM	•		
	KM1	×		
	E6	•		
	IWS	×		
	WPM	×		
	KKM	$\rightarrow$		
	KM6	+		
	KM-CICH	+		
	BM-CICH	+		
	RSZ	×		
	LZM	$\rightarrow$		
	WPM2	<b>x</b>		
	R××	+		
	E8	•		
	DFB	•		
	BMB	•		

The controller types displayed black are present in the heating installation. The inversely colored controller types were not located on the bus.

Double-clicking the controller symbol opens the controller adjustment window. The current controller parameters are shown.

There are two possible reasons why some of the controller types on the bus are not displayed:

- a) The controller is not supported by Comfort Soft.
- b) The controller is a special version and must be entered in the cc.dat file in the installation directory (C:\Programme\G. Kromschröder AG\ComfortSoft).

#### Procedure for b):

After starting up (Power ON), the software number (2-3 digits) followed by the software index (2 digits) of the controller appear briefly in the display.

Only note down the software number displayed.

Open the cc.dat file located in the installation directory in an editor.

Select the controller type from the list [BEGIN\_SOFTWARENUMBERS], which represents the basis for your controller (ask your dealer or fitter).

Enter the controller's software number following the controller, e.g. SoftwareNoE6=34,44;

In the case outlined, al the controllers on the bus with software numbers 34 and 44 are displayed on the graphical interface of the standard E6.

# **Frequently used functions**

Then restart Comfort Soft.

## Indicate

Click on >>Devices/Indicate<<. All the controllers on the bus which can be accessed appear in this window together with their bus ID (heating circuit or boiler number => e.g. <0>).



# Key:

- 1 Controller symbol
- 2 Controller type
- 3 Bus code = heating circuit number
- 4 Error code (refer to the controller manual)

Double-clicking the controller symbol opens the controller adjustment window. The current controller parameters are shown.

The "Bus configuration" window cannot be placed into the background of the user interface. Move the >>Bus configuration<< window to a free space on the screen or click the Close field.

Use the menu item >>File -> Save<< to store the data in the window currently open so that it can be processed later or transferred to another controller.

#### **Change parameters**

▲ IMPORTANT!

Make certain that you know and observe the limit values for the respective controller before inputting or transmitting setting data (see user manuals).

None of the fields highlighted gray can be modified by the user. They contain measured or computed values from the heating installation and/or data which, for certain reasons, cannot be changed.

The setting window of each controller contains index cards with headers, for example: "Heating parameter for heating circuit 1", etc.

The desired index card can be accessed by clicking on these headers.

Change the data in the white fields on the index cards by overwriting it.

Operation

Click >>Discontinue<< in order to cancel all of the settings changed in the active window.

Click on >>Send<< to write the changes to the memory of the controller.

The message "Update parameters" appears in the status bar during the transmission operation. During transmission the message on the port used (e.g. COM1) is briefly faded out in the status bar. After successful transmission the message of the port used appears again.

Use the menu item >>File -> Save<< to store the data in the window currently open so that it can be processed later or transferred to another controller.

#### **Edit parameters**

The >>File -> New<< command is used to create a new controller or a parameter file for a controller. Without establishing a connection to a controller, parameter sets can be specified here first and then be transferred into the memory of the relevant controller at a later point. The file extension is automatically specified (e.g. *filename.e6*) when the type of controller is selected.

- Open the default profile with >>File/New/Controller name<<.
- Modify parameter as needed.
- Store the created parameter profile with >>File/Save<< or >>File/Save As<<.</li>

#### **Transmit parameters**

A stored or edited parameter profile can be opened >>File/Open<< and transferred to a controller at any time.

- Click >>Send<<.
- If there are several controllers of the same type on the bus: Select Device-ID (= bus ID of the controller).
- Click >>OK<<.</li>

As a rule, parameter setting is carried out as already described. However, establishment of a connection to the system bus is not necessary. Instead, it is possible to adjust the parameters during off-line operation. This is recommendable, in particular, if a connection to the system bus of the heating installation must first be established via the telecommunication system.

# **Frequently used functions**

#### Write protocol

The system configuration for the system bus of the heating installation has already been read-in.

You can log a set of parameters from the heating installation as a one-shot display. This can be carried out once or at selected intervals. The following description explains the procedure for parameter setting with a notebook having an optical adapter or a PC with CoCo PC as an in-house application.

Select >>File -> New -> Protocol<< or >>Tools -> Protocol<< in order to specify the parameters for a new log.

Select >>Protocol -> Settings<<, the "Protocol settings" window opens.

- Select Controller, 2. module type and 3. Bus ID.
- Select the parameters for logging.
- Click on >>Add<<.</li>

The parameters selected then appear in the parameter list. Repeat the operation until all the required parameters have been entered.

- Select interval value (sec/min/h).
- Select interval period.
- Confirm entry with >>OK<<.</li>

Click on >>Protocol -> Start<< to start recording.

Click on >>Protocol -> Graphic<< to start the line printer.

Click on >>Protocol -> Stop<< to terminate or interrupt logging.

Save the log file >>File -> Save As -> "Name.log"<<.

For subsequent evaluation the data can be exported into a file format which can be read-into a spreadsheet analysis program such as Microsoft Excel.

To export the file, select >>File -> Export protocol<< and enter the file name with the extension, e.g. "*Name.xls*".

To process and edit the data with Excel, open the file with Excel and click on the window >>Continue<< until the table is displayed. All of the Excel functions can then be used, e.g. graphic editing.

# **Troubleshooting**

## Message: "Please install dongle."

Check that the plug connection for the dongle is correct.

Set the address of the serial interface (printer port) to "378" (only in the case of the old, black dongle). Correct the setting in accordance with the data in the user manual for the operating system and/or printer.

Check under >> Start / System Settings / System / Device Manager / Printer port / Resources<< whether the default value "378" is set. If "378" is not set, then change this value. Proceed here as described in the operating system and/or printer manual.

Under NT installation may only be performed by the system administrator => write authorization in the system directories!

Check whether the files Tdkmw32.dll, Tdlpt.vxd and Tdlpt.sys were copied from installation disk #2 into the proper system directories.

(E.g.: C:/Windows/system32, C:/Windows/system or C:/Windows/system32/drivers)

If not, this must be executed manually (observe write permissions – copy as Administrator). Start the Inst\_KM.exe file in the installation directory (insert disk #2 into drive A beforehand) and pay attention to error messages in the DOS window that appears.

# Selecting target device, no device ID

At present, no heating circuit (bus ID) has been selected. Make certain that a connection to a heating circuit has been established.

Controllers with a production date prior to 6/98 are not suitable for operation using Comfort Soft. Use controllers with a production date 6/98 or later.

### No serial connection available

Make certain the plug connection to serial port is correctly installed.

Check whether the optical adapter is correctly plugged in.

## Controller is not displayed in the "Devices" menu

Repeat calling procedure.

The CoCo PC needs approx. 3 min after start-up for the bus configuration to be read. After this waiting period you can read the controllers in again under >>Communication / Read configuration again<<.

If, despite this, not all the controller types on the bus are displayed, it may be due to one of two reasons:

a) The controller is not supported by your version of Comfort Soft (the current version is available in Internet under www.comfort-controls.de).

# Troubleshooting

 b) The controller is a special version and must be entered in the cc.dat file in the installation directory (C:\Programme\G. Kromschröder AG\ComfortSoft).

Procedure for b):

After starting up (Power ON), the software number (2-3 digits) followed by the software index (2 digits) of the controller appear briefly in the display.

Only note down the software number displayed.

Open the cc.dat file located in the installation directory (default: C:\ Programme\ G. Kromschröder AG\ Comfort Soft) in an editor.

Check to see the type of device to which the controller must be assigned => The device type must be activated with "YES" in the >>BEGIN\_DEVICES<< list.  $\triangle$  Do not add device names!

Enter the first two digits of the software number in the >>BEGIN\_SOFTWARENUMBERS<< table behind the name of the associated controller type e.g. "SoftwareNoE6=34,44;"

In the case outlined, al the controllers on the bus with software numbers 34 and 44 are displayed on the graphical interface of the standard E6.

Then restart Comfort Soft.

#### LED at the CoCo PC flashes/communication disrupted

- 1.) after power "ON" wait at least 2 minutes
- 2.) check the wiring
- 3.) measure tension at the eBus clamps of the CoCo PC and if necessary attach power supply to the Coco PC.

# <u>Glossary</u>

In this chapter you will find explanations of the concepts employed in this user manual.

## In-house application

The PC is linked with the bus of the heating installation via the serial interface and CoCo PC and/or optical interface.

### Memory path

Description of complete path under which the operating system of a computer has stored a file.

Example: C:\ Programs\ ComfortSoft\ Device\ xxx.e6

## System hard disk

Non-removable disk of a computer on which the operating system is stored.

## Dongle

Hardware for protecting licensing rights.

# **Optical interface**

Interface transmits information by means of a light signal.

## CoCo-PC ⇔ CoCo-PC active

Communications controller for linking the bus system of the heating installation with a PC, a modem or a telecontrol station.

#### Offline operation

A computer operates without connection to a network or a telecommunications network.

## <u>NOTE</u>

When using the optical interface, make sure that only controllers with a manufacturing date from 6/98 have an optical interface.

# USB-to-Serial-Adapter

Successfully tested with the Coco-PC active and the visual interface have been the USB-to-Serial-Adapters of the following companies: Sitecom

# Modem List

# Modem List

	Initialization String		
Modem	in the heating installation	on PC page	
Acer 56K Surf AME-AE01	AT &F E0 &D0 S0=1 &W0	&F E0 Q0 V1 M0	
Acorp - 56EMS	AT &F E0 &D0 S0=1 &W0	&F E0 Q0 V1 M0	
C-Net PCMCIA 56K Fax Modem PCcard	Not possible with internal construction	&F E0 Q0 V1 M0	
Devolo MicroLink 56K Fun II	AT &F E0 &D0 S0=1 &W0	&F E0 Q0 V1 M0	
Elsa MicroLink 56K Fun	AT &F E0 &D0 S0=1 &W0	&F E0 Q0 V1 M0	
Elsa MicroLink 56K Fun II	AT &F E0 &D0 S0=1 &W0	&F E0 Q0 V1 M0	
SmartLink USB V.90/56K	Only possible through USB with adapter	&F E0 Q0 V1 M0	
Toshiba Internal (Laptop)	Not possible with internal construction	&F E0 Q0 V1 M0	
US Robotics 28.8 Fax	AT &F E0 &D0 S0=1 &N3 &W0	&F E0 Q0 V1 M0	

Malfunctions due to improper operation or settings are not covered by the warranty.