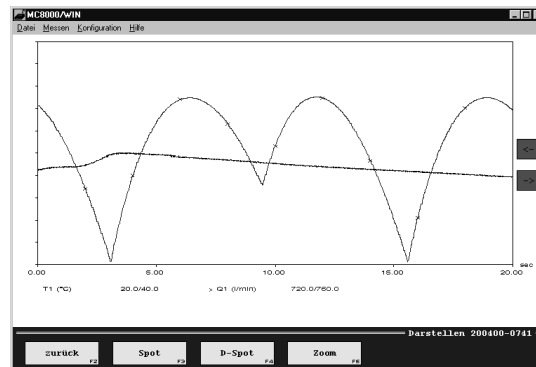
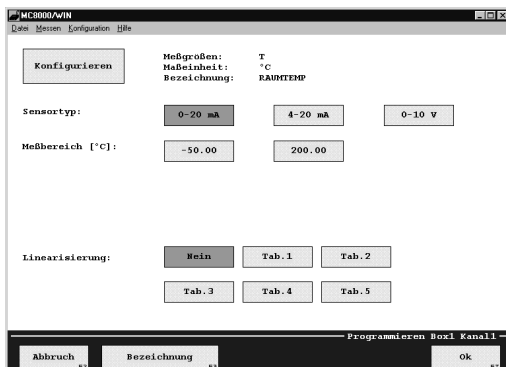


User manual
for
MC8000Win Version 4.2
(Short version)



Foreword

This short user manual helps the user when installing the software MC 8000 WIN / 24 channels. The installation will be carried out by use of InstallShield for Microsoft visual C++ version 6, copyright 1990 - 1997 by InstallShield Corporation.

The software MC 8000 WIN / 24 channels has been developed by use of Microsoft visual C++ 6.0, copyright 1994 - 1998 by Microsoft Corporation.

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Before starting the programme for the first time, you should read the "Features" Section and the README file!

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Index

<i>Installation of the software</i>	4
Requirements of the system	4
Installation	4
Installation of the driver	5
Interface problems	6
Problems by printing with Windows programmes	6
<i>Re-installation of the software</i>	7
Uninstall of MC8000Win	7
Delete the parallel port driver	7
<i>Operation of the software</i>	8
General	8
Alterations in comparison to the DOS - version	8
Menu functions	9
Menu "File"	9
Installation of the printer	9
Hardcopy	9
... Adapt pages	9
... Print all	9
Menu "Measure"	10
Demo	10
online	10
offline	10
Menu "Configuration"	10
Load	10
Store	10
The first steps	11
Configuration of the measuring system	11
Configuration of the measuring instrument	11

Installation

Installation of the software

Requirements of the system

- Microsoft Windows, Windows 95/98, Windows / NT4, Windows 2000
- PC with at least Pentium processor, 100 MHz (recommended Pentium III, from 350 MHz on), CD-ROM drive
- At least 32 MB memory capacity. We recommended for a stable running at least 64 MB
- At least 2 MB available memory capacity on hard disk for the installation of the programme
- 1 bi-directional printer interface or EPP – interface
For the parallel interface the following recommended adjustments have to be carried out in the BIOS:
LPT1: Address 0x378 IRQ7
LPT2: Address 0x278 IRQ5
Some PC's will be delivered by the manufacturer with an onboard – LPT1 – interface on the address 0x3BC and IRQ7. If this adjustment should not be changed, this interface can only be used in the SPP and never in the EPP modus.
- Recommended is, to use the 2nd interface for the connection of any Windows – printer or for the connection to the network printer

Installation

- Install the programme MC 8000 / WIN from the Hydrotechnik CD-ROM via the menu point: "Installation of the software"
- Follow the instructions on the screen. You can freely select the directory, into which MC 8000 Win should be installed. The standard adjustment is "C:\MultiControl 8000 Win".
- In the menu point "Selection of components" the following parts of the software are available:
 - Programme data
 - Driver for Windows 95/98
 - Driver for Windows NT4
 - Driver for Windows 2000

You can only choose one of these components! The other have to be de-activated.

Installation

Installation of the driver

Windows 95/98

A separate installation of the driver is not necessary. The file EPPW95.VXD will be put at your disposal at the software installation automatically.

Windows NT 4.0 / Windows 2000

To install the driver, the user have to log in with the administration rights. After this the context menu for the setup information file **epp_drv.inf** has to be activated. For this you have to choose the file with the mouse in the Explorer and then you have to operate the right key of the mouse. The function "Installation" has to be chosen. After installation the PC has to be re-started. Subsequent to this the user programme MC 8000 Win can be started.

After the installation the features of the programme should be changed. Therefore the user has to enter in the parameter "Links" in line "Execute in" the path of the programme (see line "Aim"). If this is not effected, all files will be stored on the desktop. In addition to this at Windows 95/98 the driver will be not found.

Interface problems

If an online connection to the measuring instrument is not possible, different reasons can be possible:

Error: IRQ not available

Please check, if the correct address and an interrupt has been chosen at the BIOS for the printer interface. If yes, certain adjustments have to be checked in the operating system.

Windows 2000

Selection of the symbol "Place of work" on the desktop, operate the right key of the mouse and select the function "features". Within the features the element "Hardware" has to be chosen. Over the switch "Instrument – Manager" in the hardware menu the printer connection can be activated and there the menu for the connection adjustment. Following option have to be adjusted: "Use each interrupt which is assigned to the connection. After an installation of the operating system the option "Never use interrupt" is adjusted as a standard adjustment.

Error: File requires the latest version of Windows...

This error appears, if a new driver for another operating system has been chosen during the installation (for example: Windows 2000 driver on Windows 95 – PC). In this case the installation has to be carried out completely new or the user has to copy the corresponding driver files with the Explorer in the directory of the application programme.

epp_api.dll	
epp_port.sys	only for Windows NT/2000
epp_drv.inf	only for Windows NT/2000
eppw95.vxd	only for Windows 95/98

If a new installation of the driver has effected, the old driver has to be de-installed. This should be effected via the system control – software – remove "Thesycon: EPP-Parallel Port Driver".

Problems at printing with Windows programmes

It is also possible, to send data to measuring instrument which is connected to a printer from different programmes. If problems occur, different reasons can be possible:

- The measuring instrument has a PLD-software smaller than version 086
- MC 8000 software operates the measuring instrument in the online – modus. Printing is only possible, if the measure modus is offline.
- Problems at individual laptops at the use of a bi-directional printer driver. Another printer driver should be selected for the printer. Perhaps it helps, if the bi-directional support will be de-activated in the printer features in the characteristic "Details – Spool adjustments".

Re-installation of the software

Uninstall of MC8000 Win

In the programme group MC8000 Win the user will find a programme symbol, which offers the possibility to undo the installation. In this case all installed files will be removed at the work index of MC 8000 Win and the programme groups will be cleared.

Remove of the parallel port driver

Windows 95/98

A separate de-installation is not necessary.

Windows NT 4.0 / Windows 2000

The component "Software" has to be chosen in the system control of the operating system. The entry "Thesycon: EPP Parallel Port Driver" has to be removed.

Operation of the software

Operation of the software

General

MC8000 Win is a user programme for the operation of the measuring instruments

- Multi System 8000
- Multit Control 8000

via the PC. The operation of the measuring instrument effects here via mouse or keyboard at the screen. It is possible to connect max. 4 of this measuring systems to the parallel interface at the PC and extensive measuring jobs can be carried out. The operation with MC 8000 Win is except of a few exceptions identical with the operation of the Multi System 8000.

Alterations in comparison to the DOS - version

External there are no changes between the both programmes, excepts of the Windows programmes usual menu line. But just the functions in this menu line contains the higher competitiveness of the software.

- Connection of the measuring instrument to a LPT1: or LPT2: is possible
- Support of all Windows printer for Hardcopy – print outs. With this a snapshot during a graphical online representation is possible or a print out of $y=f(x)$ – graphics are available.
- Loading of different measuring configurations without a new start of the programme (with DOS only via a new start of the programme with different parameters is possible)
- One software for different types of the printer interface. Also easy bi-directional interfaces will be supported.
- The software works unrestricted with all Windows – operating systems from Windows 95 on.
- Easy switching over to an “offline – modus” for an autonomous handling of stored measuring series without a connected measuring instrument.
- Scroll at the graphical online – representations

Menu functions

Menu "File"

Installation of the printer

This menu has only the influence to the Hardcopy-printer. Which concrete adjustments can be carried out with this menu is essentially depended on the used printer driver of the printer manufacturer. As a rule here are the adjustments for the paper size (vertical/diagonally) or the colour adjustments (colour/greyscales) are interesting.

For print outs, which have been activated with the programme button "Print – graphic/table", the adjustments have to be carried out in the corresponding menu "Print – Printer – Printer adjustments" in the user software.

Hardcopy

At any time a printout of the actual representation on the screen can be effected via a Windows printer. For this function it is favourable if the printer is not directly connected on the measuring instrument. It would be favourable if a network printer or a second printer is connected at a second parallel interface. The form of the print out can be influenced via the options.

Important! If this printer is connected to a measuring instrument, a Hardcopy print out can only effected, if the measuring instrument is not in the online – modus. The instrument has been activated before in the offline –modus or in the demo modus. Also in this case the instrument should not be activated directly in the online – modus after activating of the Hardcopy function. The user have to wait so long, until the Windows printer driver has printed the complete side on the printer. In another case data collisions between the printer data and the measuring data appear.

...Adapt pages

This Hardcopy option influenced the size of the print out. After a programme start this option is always activated. If this option is not activated the print out effects in a size, so that the proportion of height and width is according to the screen representation. At a print out in vertical format only the half of a DIN A4 sheet will be printed on, because the width was pretended and the height has been adapted accordingly. If this option is activated, the complete available paper size will be used.

...Print all

With this Hardcopy-option is influenced, if the complete screen contents should be printed out. Normally this option is not activated after a programme start. With this a print out of the menu range (blue range at the end of the screen edge) with the menu title and the menu buttons is suppressed.

Menu "Measure"

Demo

This known modus from DOS programme (start: MC8000/demo) is furthermore integrated in the Windows version. This modus can be used for training without a connected measuring or it is very helpful for the training with the measuring system.

Online

With this function the connection to one or several connected measuring instrument can be build up. For this the measuring instrument will put automatically in the EPP – modus and will be mentioned one after another. Then the user has the choice to take on the configuration of the measuring instrument or to transfer the actual configuration of the PC to the measuring instrument.

Offline

Brake off the connection to the measuring instrument. In this modus new storing can not be activated. Evaluations of already stored measuring series or the programming of channels, instruments- and storing parameters are possible. This modus can also be used for the construction of different configuration files.

Menu Configuration

Loading

Normally the last adjustments of MC 8000 Win (programming of channels, definition of the display, storing parameters...) will be stored in a setup file with the name MC8000 Win. This configuration file will be used at each new start of the programme. With this function any other configuration file can be loaded and is immediately available in the PC and in the measuring instrument. A list with all available configuration files is shown for the loading. Within this function the user has the possibility to erase configuration which he do not use any more.

Storing

With this function the actual configuration could be protected. For this normally the name of the actual configuration is used. It is also possible to enter a new name for the configuration. For this long file names can be used corresponding the Windows conceptions.

The first steps

If one of the following questions is answered with YES, than please read this section very carefully. In another case this section can be left out.

- Is the first programme start after the installation?
- Should a MS 8000 be connected?
- Should a MC 8000 be connected, which has no address?

Configuration of the measuring system

The menu buttons "KONFIG-SYSTEM" has to be activated, so that menu "Configuration System" appears on the screen.

Following adjustments have to be checked or changed:

- MC8000 interface
- Modus interface
- Printer connection instrument printer (not Hardcopy – printer!)
- Number of measuring systems

The right adjustment of the first 2 points is very important, otherwise a connection to the measuring instrument can not be picked up.

Configuration of the measuring instrument

The measuring instrument has to be connected via the EPP – cable to the selected interface. After this the function "online" at the menu function "measure" has to be activated. Error messages at this time point out to a faulty configuration or a faulty installation of the driver.

For detailed information please read the point "Interface problems".

If the measuring instrument has no address, this will not be accepted by the software. Because of this the menu buttons "KONFIG-INSTRUMENT" have to be activated. In the menu "Instrument parameter" an address for the connected measuring instrument can be entered. If the choice of the buttons is blocked, interface problems can be the reason or the software is not in the online modus. With the menu button "OK" the selected address will be send to the measuring instrument.

The correct transfer of the address is apparent in the display of a Multisystem 8000. For the next step the menu function "offline" has to be activate absolutely. As of now the user can change with the measuring instrument at each time between the online and offline modus. At a following activation of the online modus the instrument will be recognised and data can be exchanged between the PC and the measuring instrument.

Attention!

If the measuring system is configured, so that only one instrument should be connected to the PC, the last described step will be executed automatically from the programme.