

Version **10/01**



**D Software und RS-232-
Schnittstellenleitung**

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Item-No. / N^o de commande / Best.-Nr./ Bestnr.: **10 03 65**



(D) Diese Bedienungsanleitung gehört zu diesem Produkt. Sie enthält wichtige Hinweise zur Inbetriebnahme und Handhabung. Achten Sie darauf, auch wenn Sie dieses Produkt an Dritte weitergeben.

Bewahren Sie deshalb diese Bedienungsanleitung zum Nachlesen auf.!

(GB) These Operating Instructions are an integral part of this product. They also contain important information on start-up and handling. Please also take them into consideration when passing the product on to third parties.

Therefore, please keep these Operating Instructions carefully for future reference!

(F) Ce manuel d'instructions correspond à ce produit. Il comporte des consignes importantes sur la mise en service et sur l'utilisation du matériel. Respectez-le, même vous le passez à d'autres personnes.

Conservez donc ce manuel d'instructions pour une lecture ultérieure!

(NL) Deze gebruiksaanwijzing hoort bij dit product. Zij bevat belangrijke aanwijzingen aangaande de inbedrijfstelling en bediening. Let er wel goed op, ook als u dit product aan derden overhandigt.

Bewaar daarom deze gebruiksaanwijzing goed om ze te kunnen nalezen !

GB Introduction

Dear Customer,

By purchasing the Thermolink software, you have acquired a useful tool for application of the thermometers 300 K and 303 K/J in conjunction with a connected IBM compatible PC. This product requires basic knowledge in the handling of PCs or software. The diskettes and the interface cable have been tested for proper working order by the manufacturer. To maintain this condition, it is essential that the user adheres to these Operating Instructions!

*In case of queries, please contact our
Technical Consultation Department
Phone 0180 / 531 21 19
Mon. - Fr.: 08.00 to 18.00 h*

Usage for the intended purpose

Connection and operation of the interface cable and the software with thermometers of the series 300 (300 K and 303 K/J) in conjunction with an IBM compatible PC with min. Windows '95 or Windows '98.

Safety provisions

Any damage caused by non-compliance with these Operating Instructions rules out your warranty claim! We shall not be held liable for consequential damage resulting from such non-compliance.

We shall not be held liable for material or personal damage resulting from improper handling or non-compliance with the safety provisions. In such cases, any warranty claims are ruled out.

Whenever connecting/disconnecting the interface cable to/from the PC or thermometer, make sure to switch off the devices beforehand to avoid damage.

Make sure to prevent the interface cable from being bent, pinched or elongated, in order to avoid cable breaks or (internal) line breaks.

Presentation, system requirements

The (serial) interface cable serves to establish a bidirectional connection with the PC. After installation of the corresponding software in the PC, communication can be established between the digital thermometer and the PC.

The following conditions for installation and operation of the software must be satisfied:

- Min. 486 DX2/100 with 16 MB RAM and CD-ROM driver
- Min. Windows '95 or '98
- Resolution min. 800 x 600, and last, but not least, 5 MB free hard disk memory space.

Connection to PC, software installation

To enable communication between the thermometer and an IBM-compatible PC, the following conditions must be provided:

1. connection between PC and thermometer, and
2. installation of software

Re. 1

With the PC switched off, connect the enclosed interface cable to the 9-pin Sub D socket "COM 1" and subsequently to the 3.5 mm stereo jack bush on the thermometer. Subsequently, check the plug-and-socket connectors for tight fit and switch on the thermometer and the PC.

Re. 2

The scope of supplies comprises one (serial) RS 232 interface cable and one CD-ROM disk. Now, the software stored on disk must be loaded in the PC. Insert disk into the corresponding CD-ROM drive of the PC. Click on the Start button, then the "Programs" item. Below, click on the item "MS-DOS Prompt". Change the disk drive (in most cases D) by keying-in "D:".

Enter SETUP and actuate the ENTER key. The set-up procedure is accomplished. Now follow the instructions appearing on the screen:

First "Initializing" (basic elements) => window "THERMOLINK SETUP" => "Welcome ..." => Selection of "Components" => file name in start window => "Copying (decompressing) files in C:" => „Setup complete“ => "finish".

Return to the "normal" Windows window by entering "exit" at the "D: - Prompt" and by pressing the ENTER key. In the Programs item, click on "THERMOLINK", then once more on "THERMOLINK" in the small window next to it. Now the working window "Main Menu" appears more or less quickly (depending on the main memory size and the computing speed). For further details, refer to the following text.

Data Transmission

A) General

We are (still) in the Main Menu. In this window, another small window appears, showing the text "Cannot find any thermometer". This message appears if the connected thermometer is switched OFF.

Switch on the thermometer and click on the "RETRY" item. If the message does not change, there is a problem - either as regards the thermometer (battery ?) or the connecting cable (perfect fit?) or the software installation (setup fault ?). Start anew and try every thing again.

The following message appears in case of type 300 K, if the connection was established successfully (depending on computer):

```
"Serial Port      : COM 1  
Model            : One Channel, K type thermometer"
```

The following message appears in case of type 303 K/J, if the connection was established successfully (depending on computer):

```
"Serial Port      : COM 1  
Model            : Two Channel, K J type thermometer"
```

Click on "OK" to close the window.

In the "Main Menu" window, you can click on wherever the mouse pointer is transformed into a hand with forefinger:

The item "Graph" ("Real Time"), a graphic representation of the real time measurement **or**
the "Control Panel" item, a representation of the thermometer's control panel with display **or**

the "Tabular" item, a tabular progressive representation of the temperatures T1 and T2, also in real time or
the item on the right center with tabular representation "Tabular", "Graph" and "Control Panel" in a window or
the "Link Test" item, a test of the connection between the computer and the digital thermometer or
the "Help" item, the so-called help file with menu guidance in German, but help text in English or
last but not least the "Exit" item to exit the program.

B) Graph

Click on the "graph" item. If you have a colour display or a colour monitor, you will see two (in case of a two-channel thermometer, and one in case of a one-channel thermometer) continuously writing lines which represent the temperatures T1 (in yellow) and T2 (in red) as a function of the time T (time-of-day). Below, please find a brief description of the various commands:

Sampling Rate

Here you can set the scanning rates, i.e. how fast / frequently the screen is to be refreshed. The maximum setting time is 59 minutes and 59 seconds. The shortest setting is 2 sec., i.e. a new screen appears at intervals of 2 seconds (new measured values).

? = Help

The item showing the question mark "?" is tantamount to the "Help" function in which the various field commands are explained.

Main Menu

By clicking on this item, you get into the main menu.

Range

By clicking on this item, you can define the range of temperature representation, e.g. from -20° to $+60^{\circ}$ or -50° to $+200^{\circ}$. The unit depends on the thermometer setting; the bigger the setting range, the less precise the representation will be.

Option

By clicking on this item, you get into another window labelled "Customization", which means "Adjustment". Using this item and the commands it contains, you can generate a heading and a remark (main and sub-title) in various fonts, or change the background colours, or remove the grid lines, etc.

Print

By clicking on this item and by subsequently clicking on the smaller item "Print", you issue the command for printing the screens.

"Eraser" Icon

By clicking on the icon next to the printer icon, you set the graph back to the start.

"||"

By clicking on the item next to the question mark, you can stop the current representation (= pause). ">"

By clicking on the item ">", you continue with the current representation.

To close the "Graph" window, you have to click on "x" on top right.

C) Control Panel

Click on the item "Control Panel". Subsequently, the front side of your thermometer 300 K or 303 K/J is displayed with changing indication. Now you can operate your thermometer within certain limits from the PC using the mouse (not, however, certain function resets).

To close the "Control Panel" window, you have to click on "x" on the top right.

D) Tabular

Click on the "Tabular" item. Subsequently, you can see the continuous tabular representation of the measured temperature values from T1 and T2 in real time. Below, please find a brief description of the various commands.

Sampling Rate

Here you can set the sampling rates, i.e. how fast / frequently the screen is to be refreshed. The maximum setting time is 59 minutes and 59 seconds. The shortest setting is 2 sec., i.e. a new screen appears at intervals of 2 seconds (new measured values, refer to bottom line).

? = Help

The item showing the question mark "?" is tantamount to the "Help" function in which the various field commands are explained.

Main Menu

By clicking on this item, you get into the main menu.

Output to Graph or icon next to the question mark

By clicking on this item, the temperature values are displayed graphically in another window.

"||"

By clicking on the item next to the eraser, you can stop the current representation (= pause).

">", **Run**

By clicking on the item ">" or "Run", you continue with the current representation.

"Eraser" Icon

By clicking on the icon next to the printer icon, you return the graph to the start.

Printer icon = Print

By clicking on the printer icon, you issue the command to print the screen.

File or icons for folder and diskette

By clicking on "file", another small window unfolds: "New" means "new folder" (create);

"Open" means: open an existing folder; "Save" means: save the contents of the table in the current folder; "Save As" means: save contents of table in another folder (=save under); "Print" means: Print table.

To close the "Tabular" window, you have to click on "x" on the top right.

E) Item in the left center

Clicking on this window icon causes the windows "Tabular", "Control Panel" and "Graph" to appear once in a single window (overlapping).

F) Link Test

Clicking on this central window icon causes the connection between the connected thermometer and the PC to be checked. A smaller window showing the moving text "SEARCHING" appears briefly above the four buttons "OK", "CANCEL", "RETRY" and "HELP". In this context, please refer also to the description under "A) General". If the search is successful, the corresponding message will appear briefly afterwards. Click on the button "OK" to close the window "Link Test".

G) HELP

By clicking on this item (question mark above a book), you get to the help menu described above.

H) Exit

By clicking on this icon (arrow to the right top side), you exit the ThermoLog window and terminate the program.

Note!

If the "ThermoLink" menu is activated, the corresponding icon also appears as so-called "Tray Icon" on the bottom right side in the "Windows" window, to the right of the loudspeaker symbol.

Technical Data

The "OUTPUT" socket on the thermometer is a serial RS-232 interface designed as a 3.5 mm stereo jack bush. The allocation is determined as follows (view of connector):

The ground = GND = reference ground (=reference potential) is located on the back of the connector.

The RX contact = 5 V High input (= data input) is located in the center of the connector.

The TX contact = 5 V High output (data output) is located on the front tip.

The length of the interface cable is approx. 1.8 m.