Operating Manual

Windows™ Operating Software
GSOFT 3050
for GMH 3xxx Handheld-measuring Instruments

as of version 2.0

Contents:

This manual is subject to being changed

1 General Information

1.1 Software Operation

Unless the user of this manual has a basic knowledge of how to handle a personal computer and work with the operating system Windows™, we recommend that he acquires same prior to installation of this software (operating manuals, specialised literature, introductory courses etc.)

1.2 Software License Agreement

We kindly ask you to carefully read the software license agreements on the disk package. By opening the package you agree to the stipulations mentioned.

1.3 Software Registration

Get your software registration now! It is worth it!
As a registered customer you will have the following advantages:

- **Technical support:** It is only our registered clients who will receive support as far as technical questions on the programs are concerned.
- **Low-priced update offers:** It is only our registered customers who may use our low-priced update offers.
- **Latest Information:** We are enlarging our product range constantly. As a registered customer we will keep you informed about our new and improved products. We want you to be up to date!

Your opinion counts: Let us know your wishes and recommendations.
Your opinion counts and may be used when we modify existing, or develop new products.

A blank registration form is included. Simply fax us the completed form.

1.4 System Requirements

- IBM compatible PC (Pentium ™)
- At least 20 MB hard disk capacity available
- CD-ROM drive
- At least 32 MB main memory
- Windows™ 95, 98, 2000, XP, NT 4.0 (with Service Pack 3.0) or higher
- mouse
- One unassigned serial interface
- Interface adapter (e.g. GRS 3100 for 1 GMH3xxx-Hand-measuring instrument; GRS3104 for max. 4 GMH3xxx)

1.5 Software Installation

- Start Windows™
- Insert CD-ROM in CD-ROM drive
- Select "Execute" in Menu "Start"
- Enter "d:\setup" - d stands for the letter of your CD-ROM drive – and acknowledge. In case your CD-ROM drive is not ‚d', please use the corresponding letter.
- Follow now the instructions given by the installation program.
- A new program group with the following program icon will be created:
  The software will be started by double clicking on this symbol.
- Start program, choose the language that you desire, and the interface to which you have connected your interface adapter.

1.6 Significance of Computer Time

 Each GMH 3000 instrument with logger function includes a real time clock which can be adjusted to the computer time. To adjust the GHM time correctly it is absolutely necessary to prove the computer time. When required, this time can be corrected by changing the referring system settings.

2 Operating Software GSOFT3050

GSOFT3050 allows usage of logger functions of the GMH3000-handheld-measuring instruments (GMH3250, GMH3350, ... ; which will be called GMH in the following texts). Logger recordings can be started, stopped, read in and shown. It is also possible to use more than one measuring instrument simultaneously and show their Data together in Diagrams.
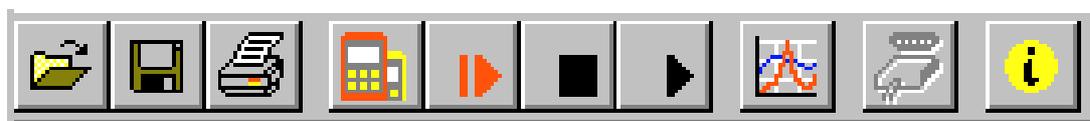
2.1 Screen Elements

2.1.1 Menu bar
You can easily have access to all software functions by using the menu bar. The content of the menu bar depends on the program status:
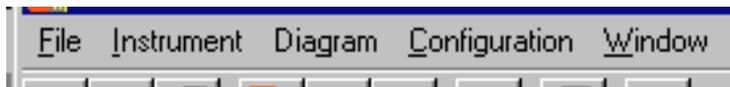
2.1.2 Toolbar
To ensure comfortable software operation the most important software functions have been put together at the Toolbar. The content of the toolbar depends on the program status:

| 1.1   1.2   1.3   2.1   2.2   2.3   2.4   3.1   4.1   4.2 |

File functions: Logger functions: Data representation:
1.1 open file   2.1 connect measure instruments   3.1 create new diagram
1.2 save file   2.2 restart logger recording   Further functions:
1.3 print file   2.3 stop logger recording   4.1 interface configuration
                            2.4 read logger data   4.2 program information

When moving the mouse pointer over a symbol a short description of the function is shown after a short time.

2.2 Logger Functions

2.2.1 Open GMHs

- Connect GMHs to the interface adapter and switch it on
- In case of connecting more than one GMH to an interface:
- To adjust the basic address of a GMH (only supported by instruments of the new generation) use the menu (please read the GMH's operating manual) and give each instrument a different address.
- Choose menu 'measure instrument / open...´ or click at the corresponding toolbar symbol.
- GSOFT3050 is now searching for connected measure instruments.
- The GMH's found will be shown as follows:
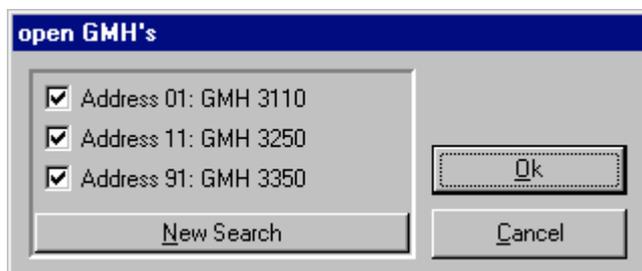
Please check the following points, if no instrument was found:
- Are the GMHs switched on and connected to the interface adapter ?
- Did you choose the correct interface ? ("configuration / interface")
- Did you connect the interface cable with the correct connector of the PC?
- As far as GRS3104 and 3105 are concerned: provided tension voltage OK ?
- Using more than one instrument: Are the base addresses different ?

Marked GMHs will be opened by ´OK´. Each GMH will be shown by a different window.

2.2.2 GMH Data Window
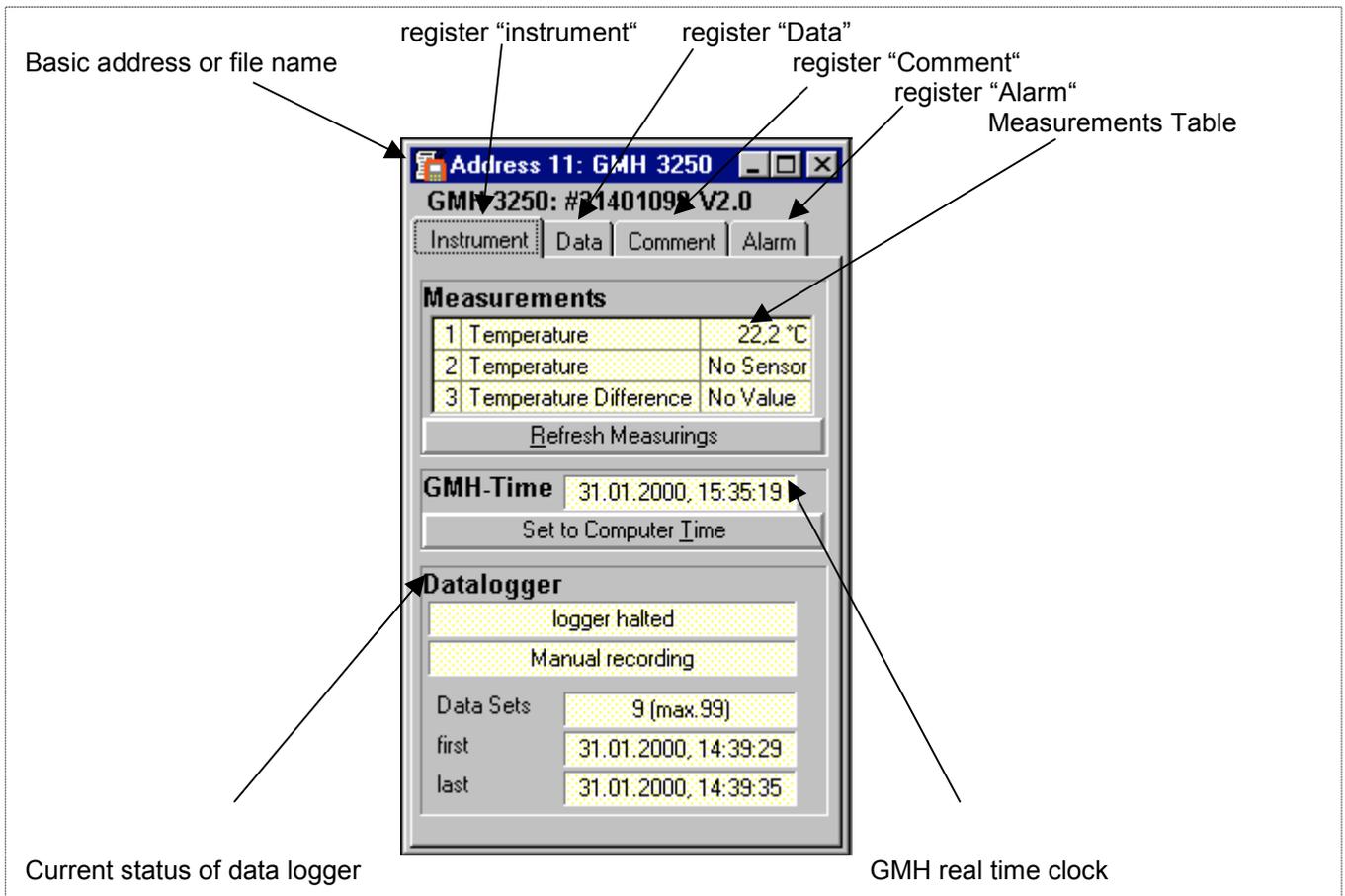
Please check real time clock and adjust it when necessary (by ´Set at GMH-Time´)

2.2.3 Start Logger Recording

⚠️ **When logger recordings are restarted, all Data which have been recorded until that moment will be deleted!! Please read in and save important information immediately!**

To start a new recording please select "instrument / start new logger recording" or click at the corresponding toolbar symbol.
A selection of loggers which can be started will appear:

Marked GMHs will be started.
Selection of recording type:
- Manual recording: GMH records Data, when the key 6 (´store´) is being pressed.
- cyclic logger: GMH records Data automatically within the selected interval, the recording will be stopped when memory is filled.
- deactivate logger: the instrument will behave like a standard instrument without logger, key 6 is used for 'freezing' the displayed value: 'HLD'

2.2.4 Reading in of Measurements
In case that more than one GMH with logger data are connected, you can select the GMHs which should be read in.
Loggers, operating on cyclic recording have to be stopped before their data can be read in. This means that you have

to interrupt recordings of a logger which is operating on cyclic recording! The information and instructions you need will be given by the program. After loading the data you can see them by selecting register „Data". The field which have a whit background and are used for table headlines can be changed. You can enter any text at the register „comment". Please save them now by selecting menu „file" function „save file", if you might need these data in future

2.2.5 Stop Logger Recording

If recording is stopped (as far as cyclic loggers are concerned), data which have been saved until that moment are preserved.

2.3 File Operation

If you have saved logger data by selecting menu „file" function "save" or "save as" you can re-load them at any time into the program to see the data or to analyse them. In that case please select "File / open..." and open the corresponding file.

2.3.1 Export Files

Files can be saved as ASCII (=text) – file to be able to open them e.g. in word processing programs or spreadsheet programs. Select therefore the data window in question and select at the menu „file/export ...". Please pay attention to make the correct adjustments in the following dialog window „ export files", especially with spreadsheet programs.

2.3.2 Copying Data To Clipboard

Table data can be copied to the clipboard, from where they can be inserted to other applications again:
Select the desired data range by with the mouse (select all: click on upper left field of table) and press key combination **Strg and C** -> The table data will be copied to the clipboard.

2.4 Working with Views

With your mouse you can arrange data windows and diagram windows (see below) on the screen. You can save such a screen view by selecting the function "file / save view". In case that the view will be opened by "file /open view" the complete view will be restored, including all diagrams and adjustments.

2.5 How to Print Data

The selected window (logger window with data or diagram) can be printed via 'File – Print' provided a printer has been installed to the computer. Use 'File – Printer Setup' to change printer parameters or to chose another printer.

If the diagram is not printed: for some types of graphics cards it may happen that the diagram will not be printed if the color depth is set to 16 bit. In such a case please reduce or increase the color depth of your screen display.

2.6 Measurement Diagrams

The logger data and logger windows loaded can also be displayed as diagrams.
To do so select 'Create New Diagram' from the 'Diagram' menue.
A selection of all possible graphs will be displayed. Select the graphs desired and acknowledge selection by pressing 'Ok'. The diagram will be opened.

System limitations: ***- max. 2 different units (°C, % RH. etc.) per diagram***
                                        - max. 15 graphs per unit

Y-Axes: if you select graphs with different units, two Y-axes will be displayed.

Zoom Left/Right y-Axis:
chose here if the mouse zoom
function is to be applied to the
left or right Y-axis.

Zoom Back:
cancel last zoom action

Change Name:
The name of the diagram (here:
'Diagram 1') can be changed

Add/Delete Labels: to describe
measuring points (see below)

Settings:
manual zoom,
grid and color
settings

Add/Delete Series:
the number of graphs
displayed can be
changed (see below)

Zoom all:
Show max.
diagram area

Display Points:
Display (marking) of
measuring points

Scrollbar: if a
zooming action
has been carried
out the scrollbar
can be used to
'go through' the
diagram.

Cursor: if activated a crosshair cursor will be displayed to
show the individual measuring points. The measuring point
data will be displayed in the statusbar.

Legend: if activated a
short description of the
graph will be displayed.

2.6.1 Adding Data Labels

To add a comment to a specific measuring point select menue item "Diagram/Add Data Label" or click on the corresponding symbol. By moving the mouse over the diagram the symbol will appear as mousepointer. A text line that can be filled freely will be placed at the position desired by a mouseclick

2.6.2 Adding Series

To be able to display additional measuring series in a diagram, select the menue item "Diagram / Add Series" or click on the corresponding symbol of the diagram window. The data source selection will appear again for you to select an additional measuring series.

2.6.3 'Zoom': Enlarge a Area of the Display

If 2 units are displayed : Use the   and   symbols to select the Y-axis desired.

Place mouse at the beginning of the area desired, keep left mouse key pressed, move mouse to the end of the area desired, release mouse key: the part selected will be enlarged (zoomed). Use "Diagram – Zoom Back" to get back to the original view. Use "Diagram – Zoom All" to get back to the entire diagram.
Use scrollbar to move the zoomed part to the left or right or upwards and downwards. To display exact parts of the screen we recommend using the "Diagram – Settings". This function can be used to enter the exact position (entering of figures and time settings) of the segment to be displayed.

2.6.4 Copying Data To Clipboard

Diagrams can be copied to the clipboard, from where they can be inserted to other applications again.
Click on the desired diagram and press the key combination **Strg and C** -> The diagram will be copied to the clipboard as a bitmap.