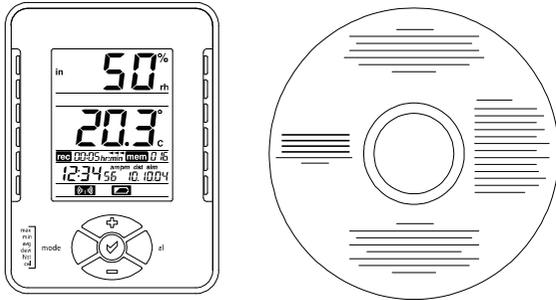


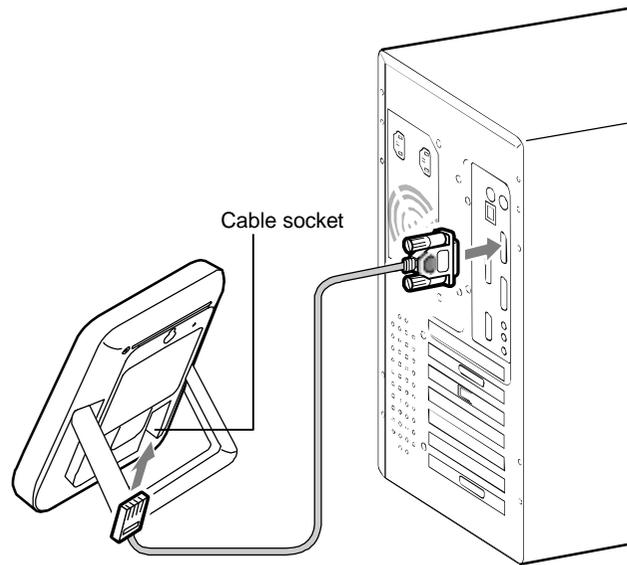
INSTRUCTION MANUAL OF DATA RECORDER SOFTWARE (FOR WS-9010)

Introduction

This Temperature station together with the Data Recorder software is a high quality, easy to use data-logging system.

After installing the program on this CD-ROM to your PC, you will get all the soft copy of the stored data in all preset outdoor channels and the indoor channel. To operate the system, simply use the PC cable supplied and connect the Temperature to the PC using the desired COM port on your PC.





PC System Requirements

To install the Data Recorder software onto your PC, the minimum requirements are as follows:

- Operating system: Windows 98 or later version
- Processor: Pentium 166 MHz or above
- CD-ROM Drive

- Microsoft excel 5.0 95 or later version

Installation of the Data Recorder Software

User shall first check to ensure the Temperature Station is functioning normally.
Then install the Data Recorder software as follows:

1. Switch on the PC and insert the CD-ROM into the CD-ROM Drive.
2. Connect the Temperature station to PC with the provided connecting cable.
3. Click to the "Start" menu in MS windows.
3. Click the "Start menu" and select "Run".
4. Run the "setup.exe" in the CD drive and follow the steps as instructed by the Install menu to finish the installation.
5. A shortcut icon "Data Recorder" as below will appear onto your PC desktop after successful installation.



Data Recorder

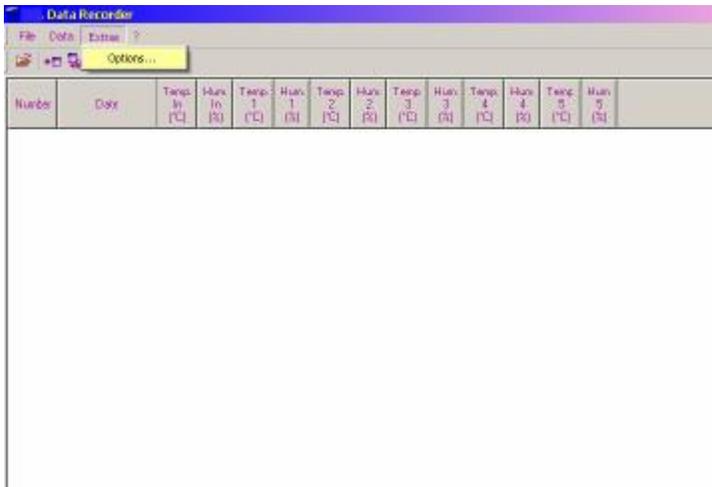
Note:

- In case the automatic installation routine did not start, double click the "setup.exe" file found in the root directory of the CD-ROM to manually start the installation of the software. Then user shall follow the steps as advised by the program to complete the installation.
- User may then need to create the shortcut icon on desktop on his own.

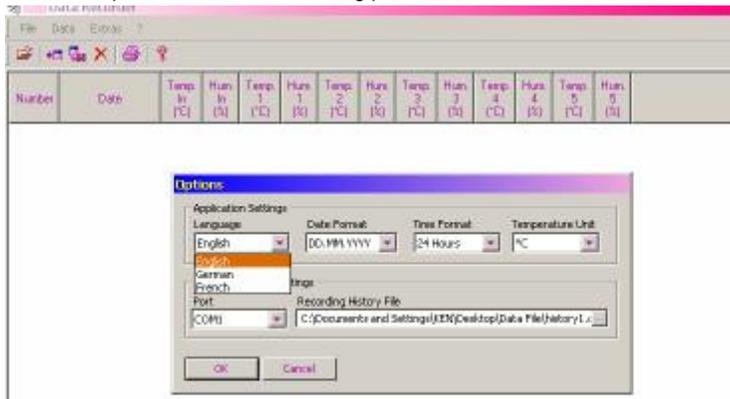
Setting the parameter of the Data Recorder software

Before importing data from temperature station, user may set the display format in the Options mode:

1. Click the “Extras” in the menu bar. Then user may advance to the “Options menu”.



2. In the “Options” mode, the following parameters can be altered.



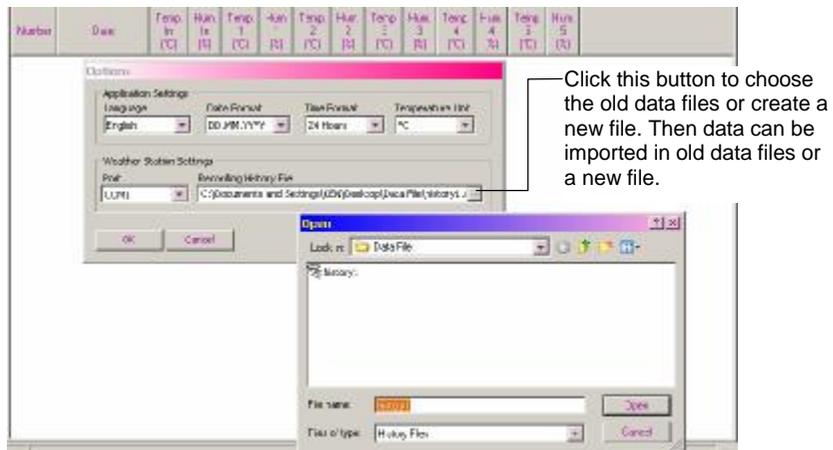
Display format:

- Language – (English, German or French to select)
- Date format (different date format to select)
- Time format (different time format to select)
- Temperature unit (°C / °F)

Data storing options:

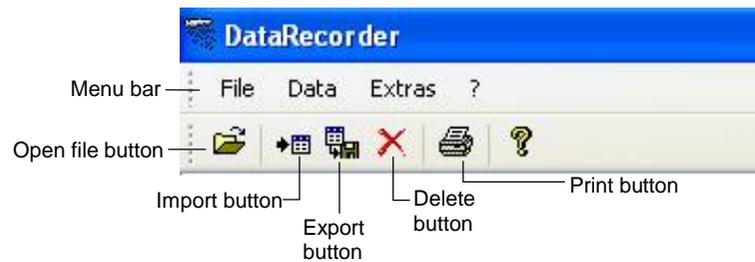
- Port ID (COM1 to 4) – decide which COM port to be used
- Choosing Recording history file – Once user import a set of data from the temperature station at the first time, a history file* will be generated by the program and the data will be stored in it. If user afterwards imports additional data to PC, the new data will still be stored and accumulated in the same history file as before.

Therefore user need to create a new file in the “Recording History file” (see below figure), if he wants to place the additional data to a separated new file. Then the newly imported data will be stored in this new file.



Note: *This history file carries data only for the Data Recorder program and can only be viewed with this program. If user need to use the data in other program, for instant Microsoft Excel, he shall “export” the data in a Text file first (See Exporting the data to PC below).

Menu bar and function button



Opening files

By clicking the "Open file" button user may choose to view the previously saved history files.

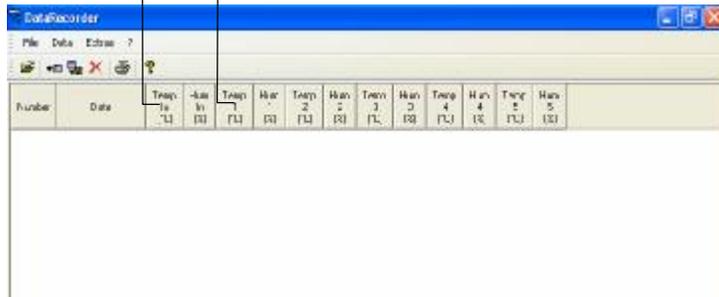
Note: If user wants to place additional data into a new separated file, he shall advance to the Options mode and create a new file name first (See "**Setting the parameter of the Data Recorder software**" above).

Importing data from Temperature station to PC

1. After successful installation, user may open the Data Recorder program by clicking the "Data Recorder" icon. Then the below screen will be displayed. The number of channel shown will be the number which user has set in the temperature station for the "Number of outdoor transmitters to be saved in the system memory".

Indoor channel

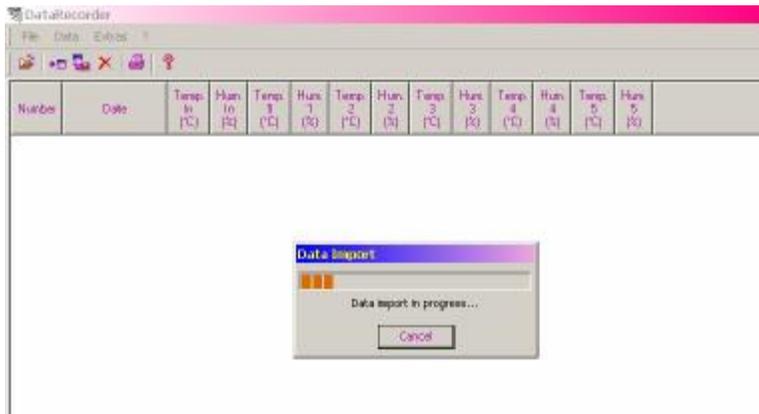
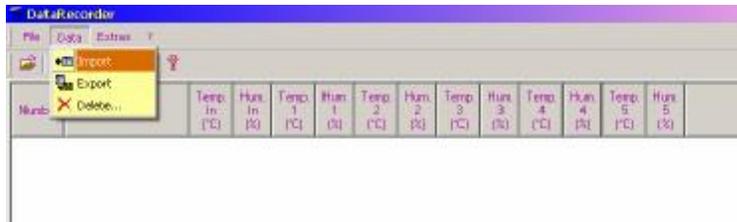
Channel No.



The screenshot shows the Data Recorder application window. The title bar reads "DataRecorder". Below the title bar is a menu bar with "File", "Data", "Edit", and "?". Underneath the menu bar is a toolbar with several icons. The main area of the window contains a table with the following columns: "Number", "Date", "Temp 1", "Hum 1", "Temp 2", "Hum 2", "Temp 3", "Hum 3", "Temp 4", "Hum 4", "Temp 5", and "Hum 5". The table is currently empty.

Number	Date	Temp 1	Hum 1	Temp 2	Hum 2	Temp 3	Hum 3	Temp 4	Hum 4	Temp 5	Hum 5
--------	------	--------	-------	--------	-------	--------	-------	--------	-------	--------	-------

2. Click the "Data" in menu bar and then click "Import" or simply click the "Import" button. Then the data stored in the Temperature station will be transferred to PC and shown on the screen.



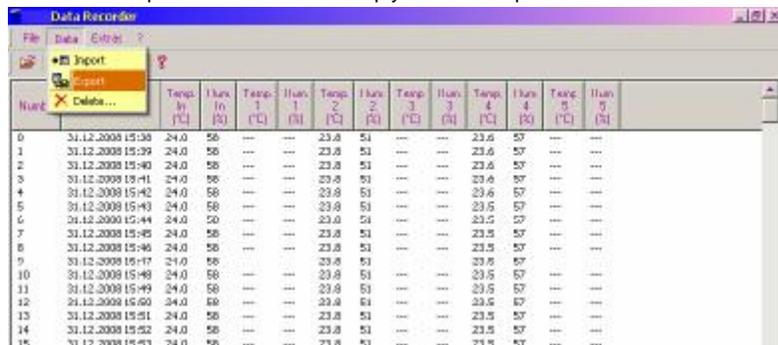
Number	Date	Temp. In [°C]	Hum. In [%]	Temp. 1 [°C]	Hum. 1 [%]	Temp. 2 [°C]	Hum. 2 [%]	Temp. 3 [°C]	Hum. 3 [%]	Temp. 4 [°C]	Hum. 4 [%]	Temp. 5 [°C]	Hum. 5 [%]
31	17.02.2004 22:12	22.6	46	35.4	34	22.6	53	23.2	--	22.3	--	23.0	--
32	17.02.2004 22:13	22.8	48	35.4	34	22.7	54	23.2	--	22.3	--	23.0	--
33	17.02.2004 22:14	22.7	48	35.4	34	22.7	54	23.2	--	22.3	--	23.0	--
34	17.02.2004 22:15	22.8	48	35.4	34	22.7	54	23.2	--	22.3	--	23.0	--
35	17.02.2004 22:16	22.8	48	35.4	34	22.7	54	23.2	---	22.3	---	23.0	---
36	17.02.2004 22:17	22.6	46	35.4	34	22.7	54	23.2	--	22.3	--	23.0	--
37	17.02.2004 22:18	22.8	48	35.4	39	22.7	54	23.5	--	22.3	--	23.0	--
38	17.02.2004 22:19	22.8	48	35.4	39	22.7	54	23.5	--	22.3	--	23.0	--
39	17.02.2004 22:20	22.8	48	35.4	39	22.7	54	23.5	--	22.3	--	23.0	--
40	17.02.2004 22:21	22.9	48	35.4	39	22.7	54	23.5	---	22.3	---	23.0	---
41	17.02.2004 22:22	22.9	48	35.4	39	22.7	54	23.5	--	22.3	--	23.0	--
42	17.02.2004 22:23	22.9	49	35.4	40	23.1	55	23.7	--	22.4	--	23.0	--
43	17.02.2004 22:24	23.0	50	35.4	40	23.1	55	23.7	--	22.4	--	23.0	--
44	17.02.2004 22:25	23.0	50	35.4	40	23.1	55	23.7	--	22.4	--	23.0	--
45	17.02.2004 22:26	23.0	50	35.4	40	23.1	55	23.7	---	22.4	---	23.0	---
46	17.02.2004 22:27	23.0	50	35.4	40	23.1	55	23.7	--	22.4	--	23.0	--
47	17.02.2004 22:28	23.0	50	35.4	39	23.1	55	23.9	--	22.5	--	23.1	--
48	17.02.2004 22:29	23.0	50	35.4	39	23.1	55	23.9	--	22.5	--	23.1	--

The data stored in the temperature station are now displayed in the program, with the date and time of record and the corresponding temperature and humidity readings.

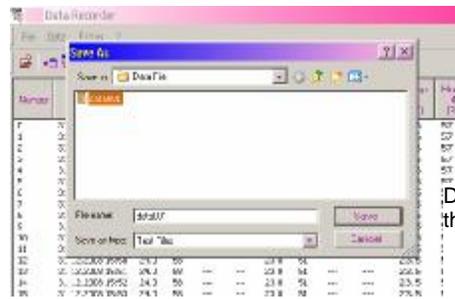
Exporting data to PC (saving the data in a user-generated file in PC)

User may save the data in a file so that he can use the data in other programs afterwards:

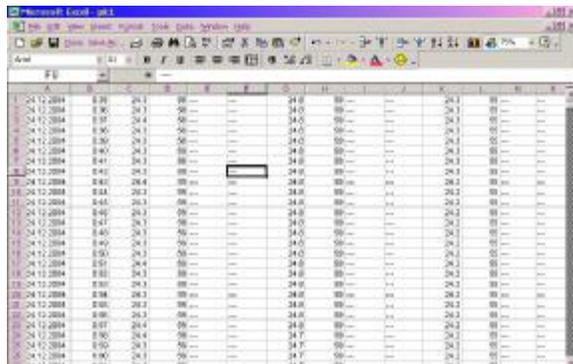
1. Click the "Export" in menu bar or simply click the Export button.



2. Decide the destination in which the data to be saved. Then the data will be stored in a Text file in the selected destination. The Text file is compatible to the software Microsoft Excel where user may conveniently study and utilize the data.



Decide a destination of the file to be saved



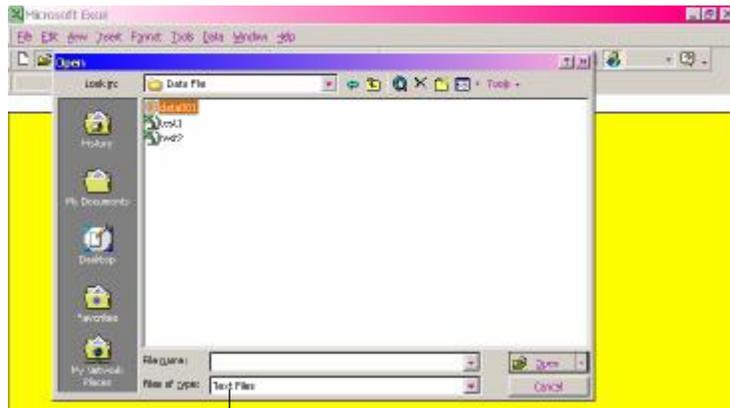
TEXT File opened in Microsoft Excel

Note: In Microsoft Excel, user may need to do the Text import setting, to make a spreadsheet format with each figure carried in a single cell. (See “Open the Text file in Microsoft Excel”)

Open the data file in Microsoft Excel

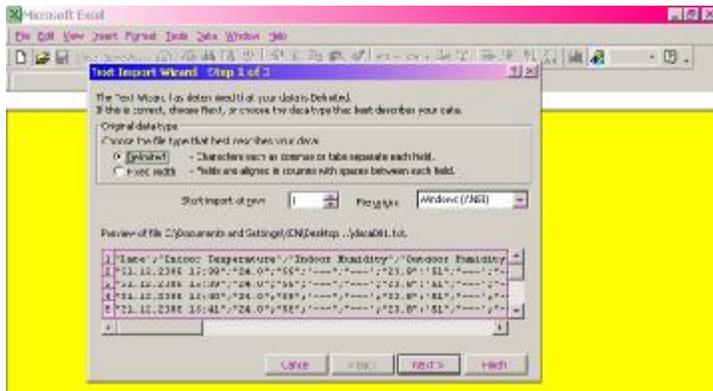
Once user have created a Text file for data, he can view the file and convert it into Microsoft Excel file by the following steps:

1. Open the Microsoft Excel first. Then choose to open the Text file.



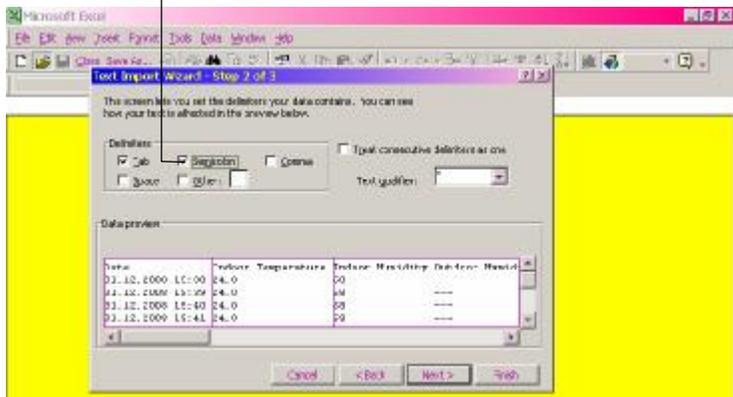
Choose "Text files"

2. User will go to the Text import setting and see the below screen. User shall then click "Next" to advance to the next screen.



3. User shall choose the "Semicolon" as delimiters and then press "Finish".

Tick the "Semicolon", then press "Finish" button



- After finishing the Text import setting, each data will be carried in a separated cell and user will find it conveniently to utilize the data. In addition user may save the data in a Excel formatted file thereafter.

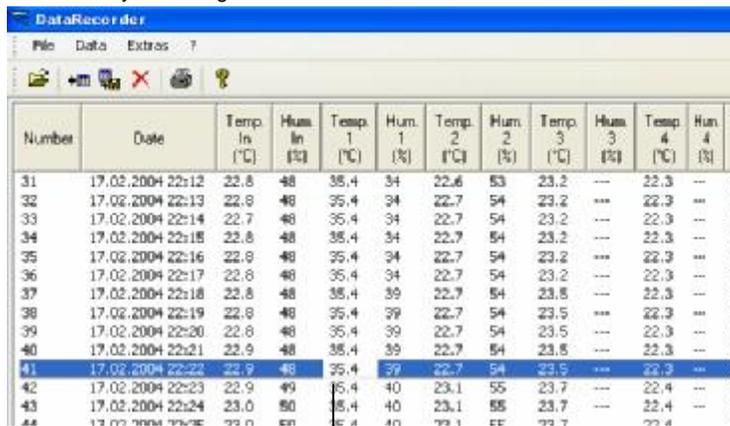
The screenshot shows a Microsoft Excel spreadsheet with the following data:

1	A	B	C	D	E	F	G	H	I	J
	Date	Indoor	Temp	Indoor	Humidity	Outdoor	Temp	Outdoor	Humidity	Outdoor
2	31.12.2008	24	58	---	---	23.8	5	---	---	23.8
3	31.12.2008	24	58	---	---	23.8	5	---	---	23.8
4	31.12.2008	24	58	---	---	23.8	5	---	---	23.8
5	31.12.2008	24	58	---	---	23.8	5	---	---	23.8
6	31.12.2008	24	58	---	---	23.8	5	---	---	23.8
7	31.12.2008	24	58	---	---	23.8	5	---	---	23.8
8	31.12.2008	24	58	---	---	23.8	5	---	---	23.8
9	31.12.2008	24	58	---	---	23.8	5	---	---	23.8
10	31.12.2008	24	58	---	---	23.8	5	---	---	23.8
11	31.12.2008	24	58	---	---	23.8	5	---	---	23.8
12	31.12.2008	24	58	---	---	23.8	5	---	---	23.8
13	31.12.2008	24	58	---	---	23.8	5	---	---	23.8
14	31.12.2008	24	58	---	---	23.8	5	---	---	23.8
15	31.12.2008	24	58	---	---	23.8	5	---	---	23.8
16	31.12.2008	24	58	---	---	23.8	5	---	---	23.8
17	31.12.2008	24	58	---	---	23.8	5	---	---	23.8
18	31.12.2008	24	58	---	---	23.8	5	---	---	23.8
19	31.12.2008	24	58	---	---	23.8	5	---	---	23.8
20	31.12.2008	24	58	---	---	23.8	5	---	---	23.8

Editing/ deleting the imported data

User may edit or delete the imported data if necessary in the program. To edit the data:

1. Highlight the particular data row.
2. Move the cursor to point at the figure to be altered and click the left button (of the mouse) three times consecutively. Then the figure will be highlighted and user can key in new figure.



Number	Date	Temp In (°C)	Hum In (%)	Temp 1 (°C)	Hum. 1 (%)	Temp. 2 (°C)	Hum. 2 (%)	Temp. 3 (°C)	Hum. 3 (%)	Temp. 4 (°C)	Hum. 4 (%)	T
31	17.02.2004 22:12	22.8	48	35.4	34	22.6	53	23.2	---	22.3	---	2
32	17.02.2004 22:13	22.8	48	35.4	34	22.7	54	23.2	---	22.3	---	2
33	17.02.2004 22:14	22.7	48	35.4	34	22.7	54	23.2	---	22.3	---	2
34	17.02.2004 22:15	22.8	48	35.4	34	22.7	54	23.2	---	22.3	---	2
35	17.02.2004 22:16	22.8	48	35.4	34	22.7	54	23.2	---	22.3	---	2
36	17.02.2004 22:17	22.8	48	35.4	34	22.7	54	23.2	---	22.3	---	2
37	17.02.2004 22:18	22.8	48	35.4	39	22.7	54	23.5	---	22.3	---	2
38	17.02.2004 22:19	22.8	48	35.4	39	22.7	54	23.5	---	22.3	---	2
39	17.02.2004 22:20	22.8	48	35.4	39	22.7	54	23.5	---	22.3	---	2
40	17.02.2004 22:21	22.9	48	35.4	39	22.7	54	23.5	---	22.3	---	2
41	17.02.2004 22:22	22.9	48	35.4	39	22.7	54	23.5	---	22.3	---	2
42	17.02.2004 22:23	22.9	49	35.4	40	23.1	55	23.7	---	22.4	---	2
43	17.02.2004 22:24	23.0	50	35.4	40	23.1	55	23.7	---	22.4	---	2
44	17.02.2004 22:25	23.0	50	35.4	40	23.1	55	23.7	---	22.4	---	2

— This figure is highlighted and can be altered

On the other hand, user may delete a particular row of data by first highlighting it and then clicking the "Delete" icon in the menu bar.

Printing the data file

The Data Recorder program enables the function to print the data. User may click the printing button to print the currently viewed data file.

R&TTE Directive 1999/5/EC

Summary of the Declaration of Conformity : We hereby declare that this wireless transmission device does comply with the essential requirements of R&TTE Directive 1999/5/EC.