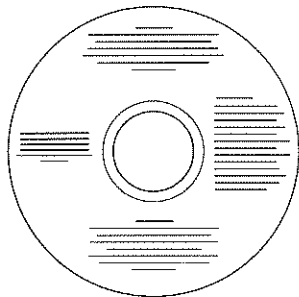
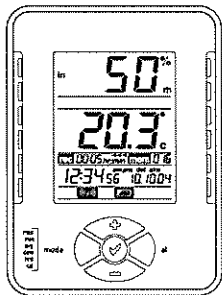


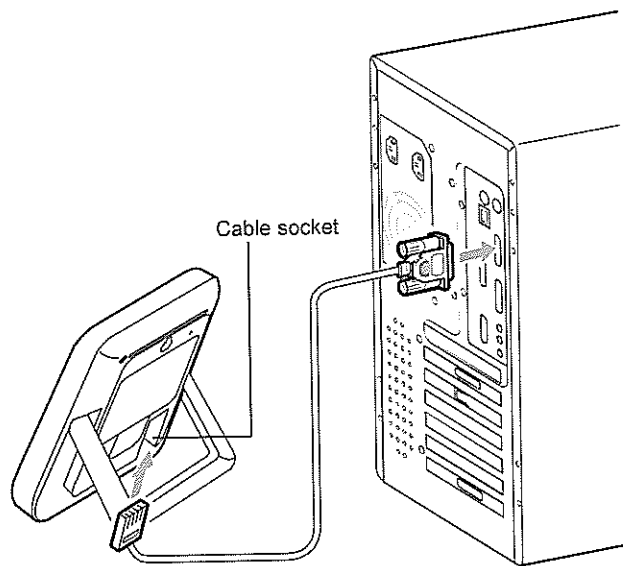
INSTRUCTION MANUAL OF DATA RECORDER SOFTWARE (FOR WS-9010)

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 and the transmitters are functioning normally.

User shall replace batteries of the temperature station when the battery low indicator is displayed at the LCD. If user does not replace batteries, working error may be resulted.

Note:

- After changing batteries in temperature station, there is no need for user to reset the temperature station. In fact, the temperature station can remember all transmitter information and sequence as per the pervious set-up. However, user may require to reset the desired LCD contrast, Alarm On/Off condition and the Clock (by re-entering the date and time manually or simply wait for the DCF time signal).

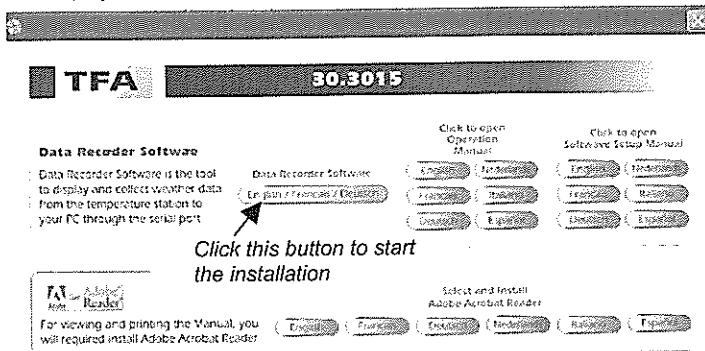
If the battery of a transmitter is used up, user needs to carry out the re-learning of the particular transmitter after replacing new battery to it.

(See "LEARNING/ REMOVING A TRANSMITTER (CHANNEL)" in the main user manual for the procedures of relearning a transmitter.)

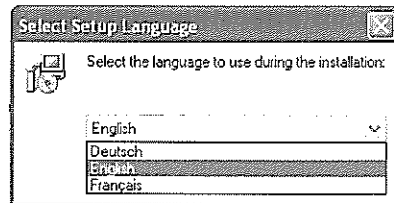
Then install the Data Recorder software as follows:

1. Switch on the PC and insert the CD-ROM into the CD-ROM Drive.

- The CD-ROM will be automatically run and the following screen will be displayed:



- User shall click the button below the text "Click to install Data recorder software" to start the installation.
- The below Dialogue box will be displayed. User shall then choose the desired program language (German, English or French).



- Follow the steps as instructed by the Install menu to finish the installation
- A shortcut icon "Data Recorder" as below will appear onto your PC desktop after successful installation.



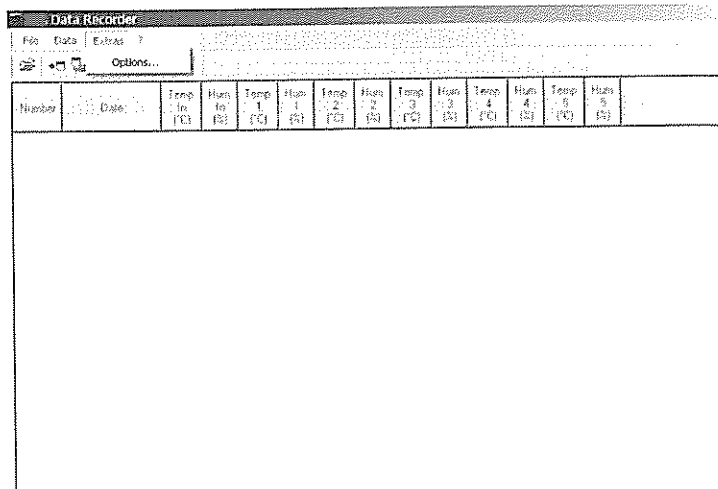
Note:

- In case the automatic installation routine does not start after the CD-ROM is inserted, click the "Start" button in MS Windows. User shall thereafter run the "autorun.exe" file in the CD-ROM manually to start the installation of the software. Then follow the steps as advised by the program to complete the installation.

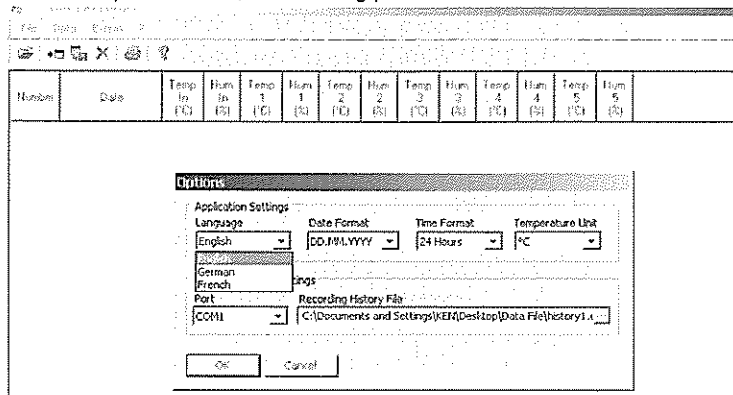
Setting the parameter of the Data Recorder software

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.



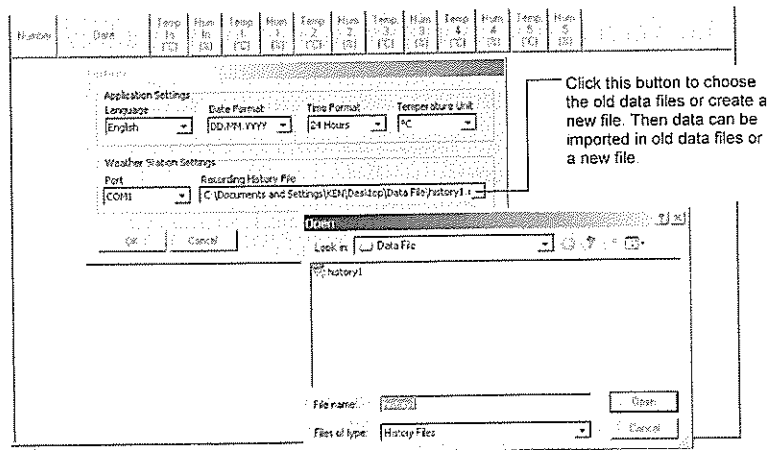
Display format:

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

Data storing options:

- a. Port ID (COM1 to 4) – decide which COM port to be used
- b. 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.

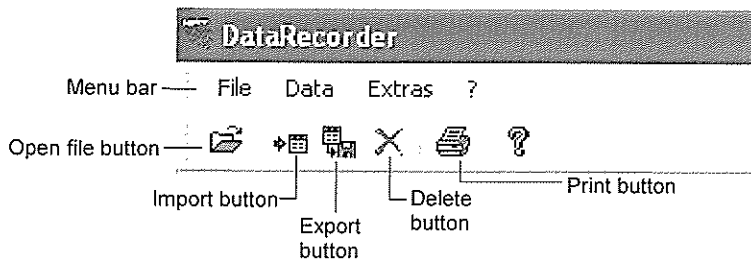
Therefore user need to create a new file in the "Recording History file" (see below figure), if he wants to place the additional data to a separated new file. Then the newly imported data will be stored in this new file.



Click this button to choose the old data files or create a new file. Then data can be imported in old data files or a 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



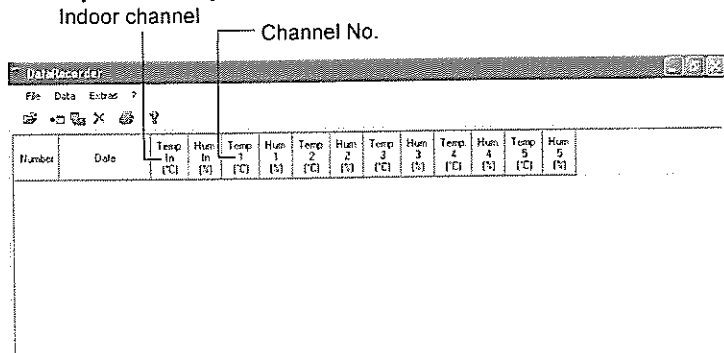
Opening files

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

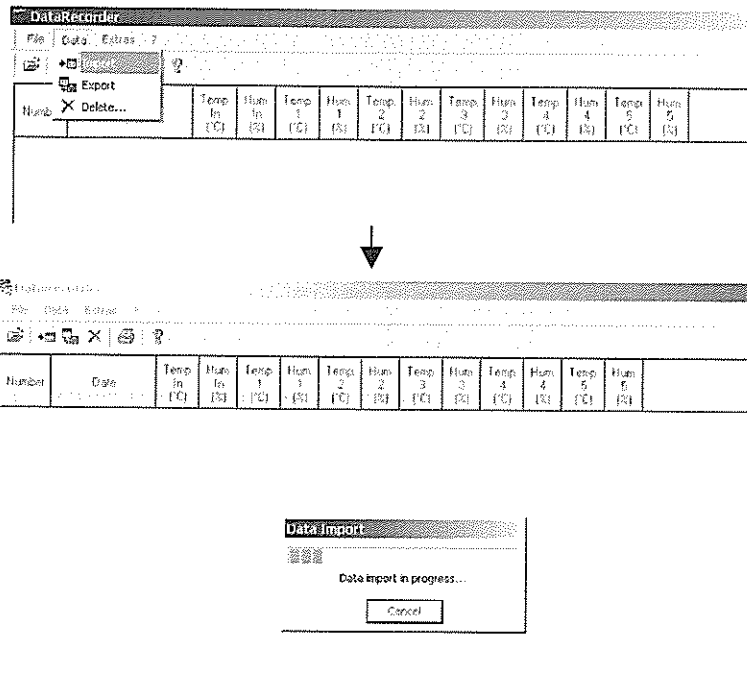
Note: If user wants to place additional data into a new separated file, he shall advance to the Options mode and create a new file name first (See "Setting the parameter of the Data Recorder software" above).

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".



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.



DataRecorder

File Data Extras ?



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	22.8	48	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	22.8	48	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	---

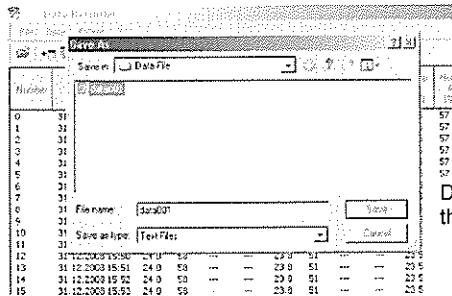
The data stored in the temperature station are now displayed in the program, with the date and time of record and the corresponding temperature and humidity readings.

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.

The screenshot shows the 'DataRecorder' application window. The 'Export' option in the menu bar is highlighted. Below the menu, a data table is visible, showing columns for 'Number', 'Date', 'Temp. In (°C)', 'Hum. In (%)', and five additional temperature/humidity pairs (Temp. 1-5, Hum. 1-5). The data rows correspond to the table shown on page 32.

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

Row	Col 1	Col 2	Col 3	Col 4	Col 5	Col 6	Col 7	Col 8	Col 9	Col 10	Col 11	Col 12	Col 13	Col 14	Col 15	Col 16	Col 17	Col 18	Col 19	Col 20	
1	24.12.2004	0.95	24.3	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2	24.12.2004	0.96	24.0	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3	24.12.2004	0.97	24.4	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4	24.12.2004	0.98	24.3	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
5	24.12.2004	0.99	24.3	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
6	24.12.2004	0.40	24.2	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
7	24.12.2004	0.41	24.3	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
8	24.12.2004	0.42	24.9	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
9	24.12.2004	0.43	24.4	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
10	24.12.2004	0.44	24.5	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
11	24.12.2004	0.45	24.2	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
12	24.12.2004	0.46	24.3	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
13	24.12.2004	0.47	24.3	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
14	24.12.2004	0.48	24.3	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
15	24.12.2004	0.49	24.3	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
16	24.12.2004	0.50	24.3	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
17	24.12.2004	0.51	24.4	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
18	24.12.2004	0.52	24.3	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
19	24.12.2004	0.53	24.3	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
20	24.12.2004	0.54	24.0	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
21	24.12.2004	0.55	24.3	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
22	24.12.2004	0.56	24.3	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
23	24.12.2004	0.57	24.4	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
24	24.12.2004	0.58	24.4	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
25	24.12.2004	0.59	24.4	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
26	24.12.2004	0.60	24.4	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
27	24.12.2004	0.61	24.3	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

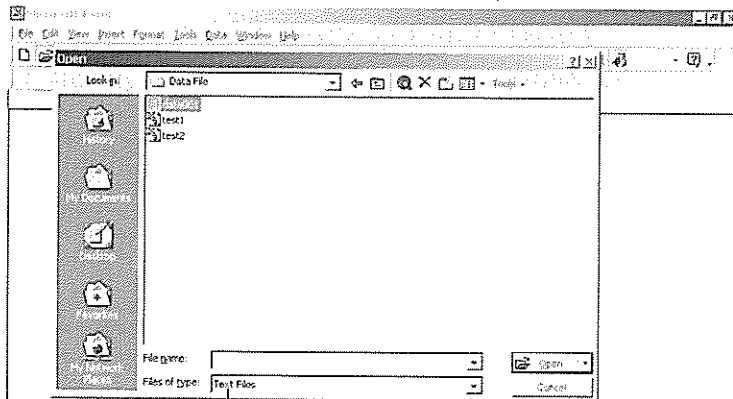
TEXT File opened in Microsoft Excel

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

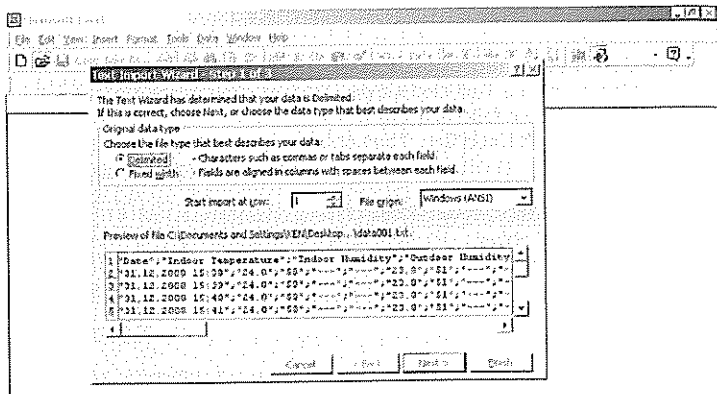
Once user have created a Text file for data, he can view the file and convert it into Microsoft Excel file by the following steps:

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



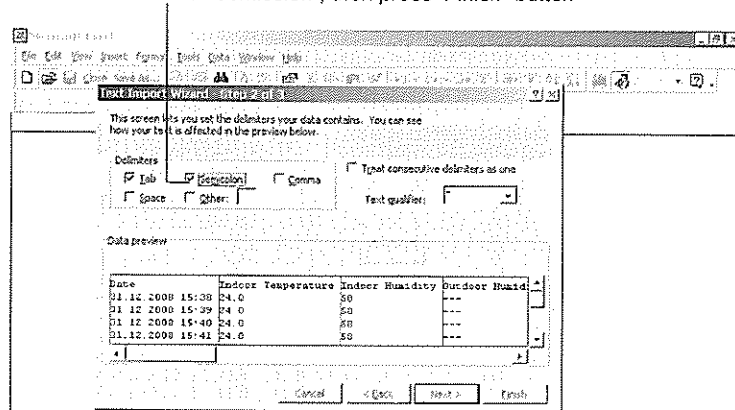
Choose "Text files"

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



4. 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.

1	Date	Indoor Tem	Indoor Hum	Indoor	Hum	Outdoor T	Indoor	Hum	Outdoor	T	Indoor	Hum	Outdoor	T	Indoor	Hum	Outdoor	T
2	31 12 2008	24	50	---	---	23.8	51	---	---	23.6	---	---	---	---	---	---	---	---
3	31 12 2008	24	50	---	---	23.8	51	---	---	23.6	---	---	---	---	---	---	---	---
4	31 12 2008	24	50	---	---	23.8	51	---	---	23.6	---	---	---	---	---	---	---	---
5	31 12 2008	24	50	---	---	23.8	51	---	---	23.6	---	---	---	---	---	---	---	---
6	31 12 2008	24	50	---	---	23.8	51	---	---	23.6	---	---	---	---	---	---	---	---
7	31 12 2008	24	50	---	---	23.8	51	---	---	23.6	---	---	---	---	---	---	---	---
8	31 12 2008	24	50	---	---	23.8	51	---	---	23.6	---	---	---	---	---	---	---	---
9	31 12 2008	24	50	---	---	23.8	51	---	---	23.6	---	---	---	---	---	---	---	---
10	31 12 2008	24	50	---	---	23.8	51	---	---	23.6	---	---	---	---	---	---	---	---
11	31 12 2008	24	50	---	---	23.8	51	---	---	23.6	---	---	---	---	---	---	---	---
12	31 12 2008	24	50	---	---	23.8	51	---	---	23.6	---	---	---	---	---	---	---	---
13	31 12 2008	24	50	---	---	23.8	51	---	---	23.6	---	---	---	---	---	---	---	---
14	31 12 2008	24	50	---	---	23.8	51	---	---	23.6	---	---	---	---	---	---	---	---
15	31 12 2008	24	50	---	---	23.8	51	---	---	23.6	---	---	---	---	---	---	---	---
16	31 12 2008	24	50	---	---	23.8	51	---	---	23.6	---	---	---	---	---	---	---	---
17	31 12 2008	24	50	---	---	23.8	51	---	---	23.6	---	---	---	---	---	---	---	---
18	31 12 2008	24	50	---	---	23.8	51	---	---	23.6	---	---	---	---	---	---	---	---
19	31 12 2008	24	50	---	---	23.8	51	---	---	23.6	---	---	---	---	---	---	---	---
20	31 12 2008	24	50	---	---	23.8	51	---	---	23.6	---	---	---	---	---	---	---	---

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	22.8	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.



↖