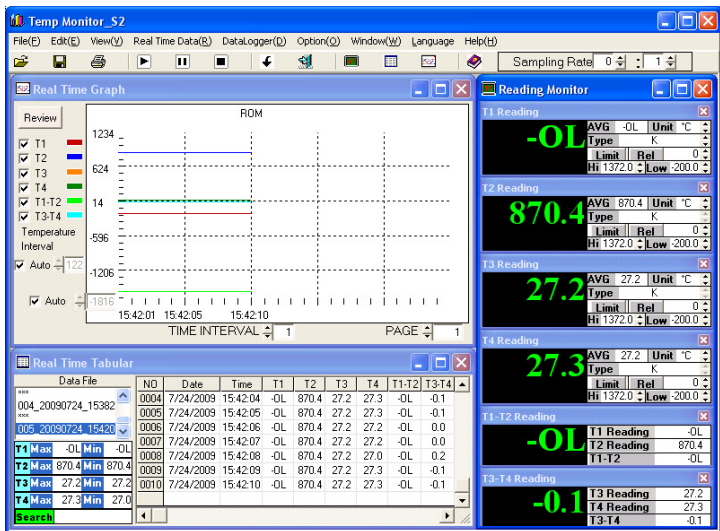


TEMP MONITOR_S2



Software operation
instructions

1. Installation / Remove

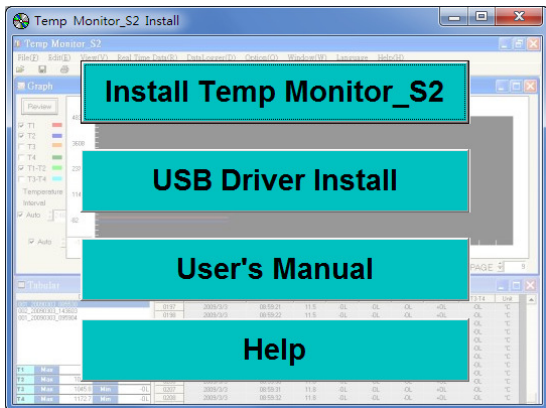
1.1 The minimum hardware requirements for Temp Monitor_S2 software is:

- **Windows 2000 / XP / 7**
(Windows XP / 7 are recommended)
- **800 megahertz (MHz) processor or faster (1.6 GHz is recommended)**
- **At least 128 megabytes (MB) of RAM (256 MB is recommended)**
- **At least 250 megabytes (MB) of available space on the hard disk**
- **CD/ DVD-ROM driver**
- **Keyboard and a Microsoft Mouse or some other compatible pointing device**
- **Video adapter and monitor with Super VGA (800 x 600) or higher resolution**
- **This software supports Excel to save / open files function, if need please install Microsoft Excel 2000 / 2003.**

1.2 Installation

Notice: Before on-line the thermometer, need to finish the installment of the software and USB driver first.

It please install the thermometer software and USB driver first to on-line the thermometer on a Windows platform of computer.

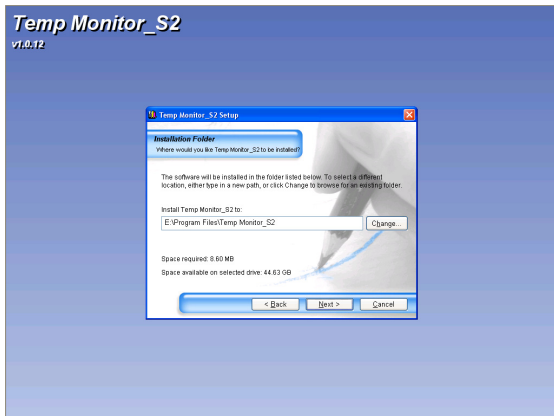


1. Insert CD-ROM in the CD-ROM driver of the PC. Manual is sprung automatically. If manual can't be sprung automatically, double click CD-ROM icon, double click “install.exe”.

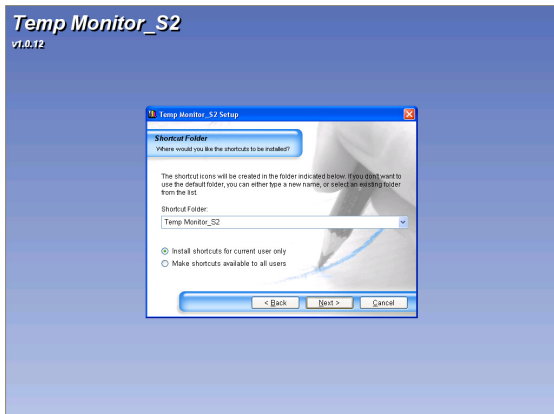
2. Install Temp Monitor_S2 software, click in spring “Install” of the menu or browse “setup_5.exe” of the CD-ROM and install. (D:\setup_5.exe -Suppose D is a CD-ROM driver)

Notice: If the operating system is Windows 7, please click on setup.exe.

When installing beginning, the following picture will appear.



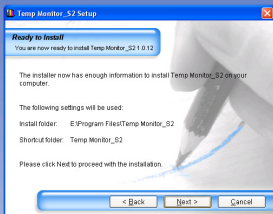
Click “Next”



Click “Next”

Temp Monitor_S2

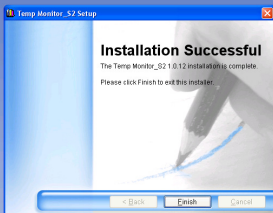
v1.0.12



Click “Next”

Temp Monitor_S2

v1.0.12

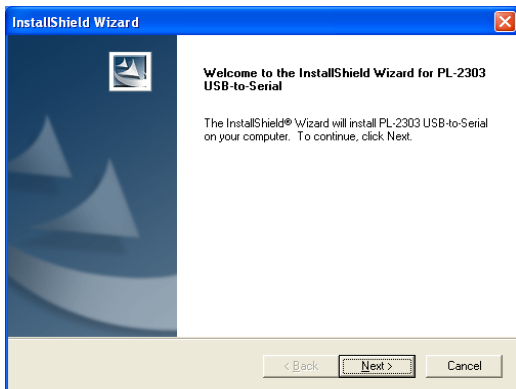
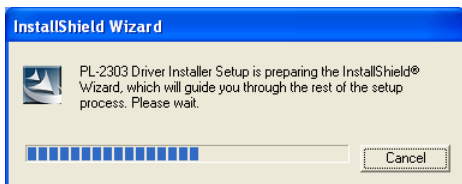


When appear the above picture behalf software installation of Temp Monitor_S2 is finished, click “Finish”.

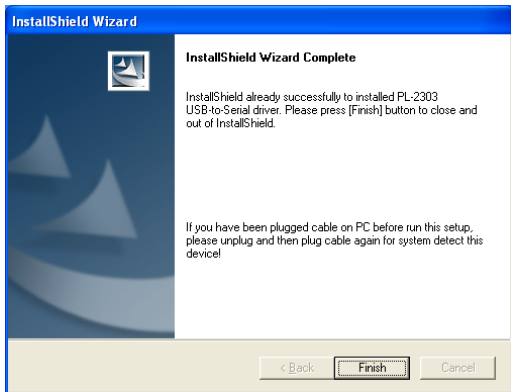
3. Install USB driver, click in “USB Driver Install” springing in menus automatically or browse “USB driver” folder → “PL2303_DriverInsatller.exe” folder to carry out the installation.

(D:\USB driver\ PL2303_DriverInsatller.exe -Suppose D is a CD-ROM driver)

When installing beginning, the following picture will appear:



click “Next”



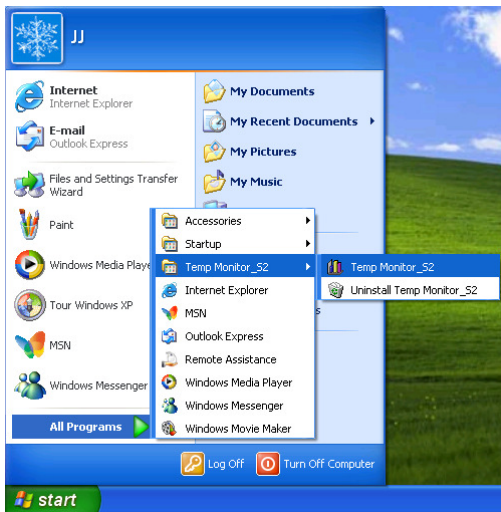
When appear the above picture behalf software installation of USB driver is finished, click “Finish”. And CD-ROM that inserts the PC is taken out from the CD-ROM driver.

1.3 Remove Temp Monitor_S2 and USB driver

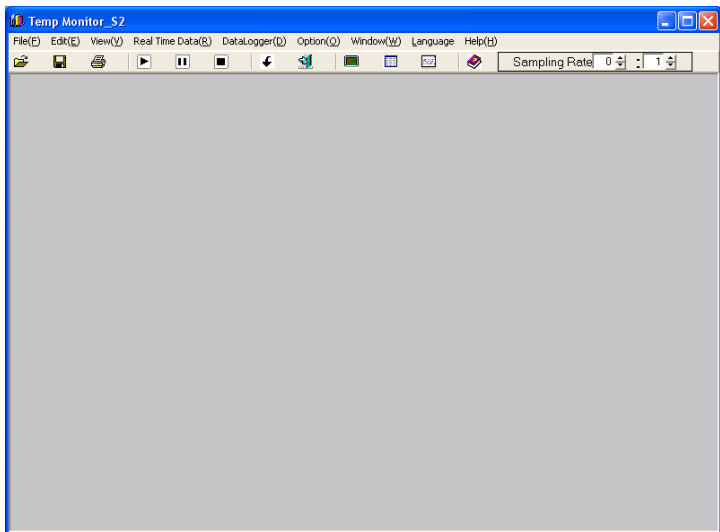
- 1. Please to close the use software first.**
- 2. Click “start”.**
- 3. Click “Control Penal” → “Add or Remove Programs” → “Temp Monitor_S2” to uninstall.**
- 4. Click “start”.**
- 5. Click “Control Penal” → “Add or Remove Programs” → “PL-2303 USB-Serial Driver” to uninstall.**

2. On-line / download to PC

1. With USB wire / RS-232 wire to connect PC and thermometer well.
2. Click “start”→ “All Programs” → “Temp Monitor_S2” → “Temp Monitor_S2”.

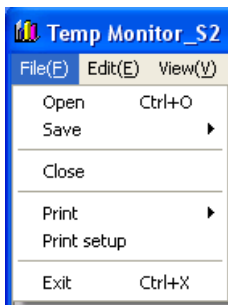


3. Picture of the software.



2.1 Brief introduction of every function:

File menu:



Open  : open file.

Save  : save file.

Close: Close picture while carrying out.

Print  : print file.

Print setup: Set up printer.

Exit  : Finish program.

Edit menu:



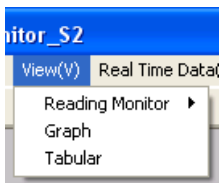
Clear real Time: Remove record data.

Review: The window GRAPH is described again.

Notice: Clear real Time uses the record data to clear under the real time recording mode, first please is it can carry out some program recording after click “Stop” to carry out record data to clear.

“Stop” please consult page 10 Real Time Data menu.

View menu:



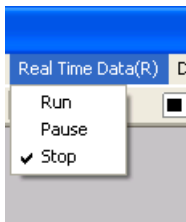
Reading Monitor  : open / close


Reading Monitor window.


Graph  : open / close Graph window.


Tabular  : open / close Tabular window.

Real Time Data menu:




Run  : on-line, carry out Real Time function.

Pause  : Real Time record is suspended.

Stop  : off-line (off-line with Meter).

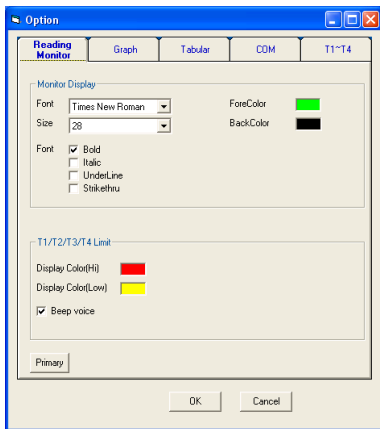
DataLogger menu:



ON  : Loaded the record data of datalogger from METER to PC.

Option menu:

Reading Monitor - The reading of selects and sets up



Monitor Display

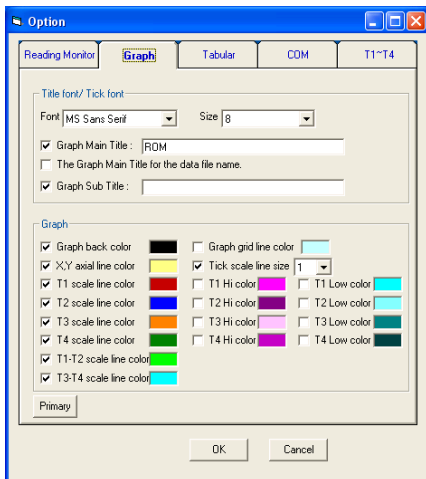
Set up style, size of script, the color and background color of the reading window.

T1 / T2 / T3 / T4 Limit (T1 / T2 / T3 / T4 critical value restraint in setting up)

Set up warning background color and the opening and closing of the warnings of the maximum, minimum critical value, do not propose using the white in order to warn the background color.

Primary button can be returned to initial selects.

Graph - graph selects and sets up



Title font / Tick font (the style of title / the style of the mark sets up)

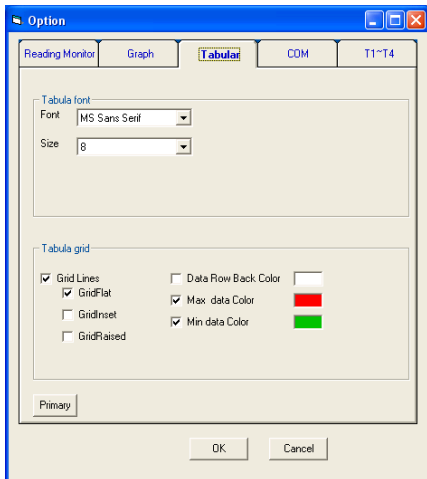
Set up style of the title, subtitle and mark and size of script.

Graph- graph window picture sets up

Set up the background color of the graph window, scale line, Hi / Low scale line, cross axle, grid color are set up, scale line size are set up. Can select to determine whether to show on the graph window picture or not.

Primary button can be returned to initial selects.

Tabular - The form selects and sets up



Tabular font (The style of the form sets up)

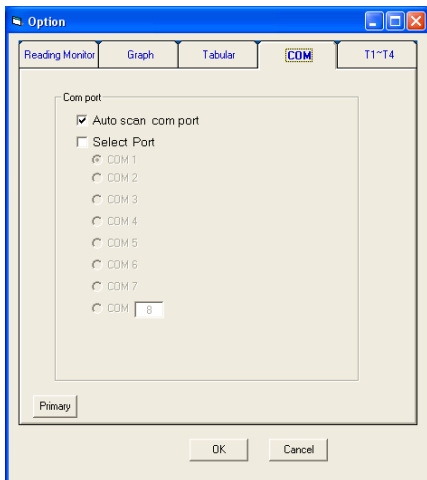
Set up the style of form and size of script.

Tabular grid (The form grid sets up)

Set up grid type, background form color and maximum, minimum value and label color.

Primary button can be returned to initial selects.

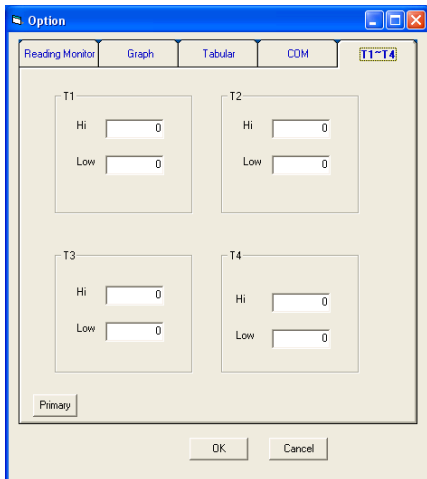
COM - The COM Port selects and sets up



Can choose to auto scan COM ports or select the COM port.

Primary button can be returned to initial selects.

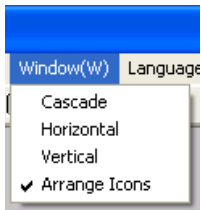
T1~T4



Can set T1, T2, T3 and T4 Hi / Low value, the range cannot exceed the thermocouple type maximum / minimum value.

Primary button can be returned to initial selects.

Window menu:



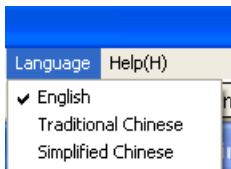
Cascade: cascade arrange.

Horizontal: horizontal arrange.

Vertical: vertical arrange.

Arrange Icons: arrange icon.

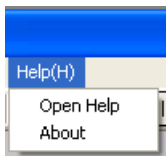
Language menu:



Can choose three language, for English, traditional Chinese and the simplified

Chinese three kinds, the default language is English.

Help menu :



Open Help  :open Help file ◦


About: The edition declares.

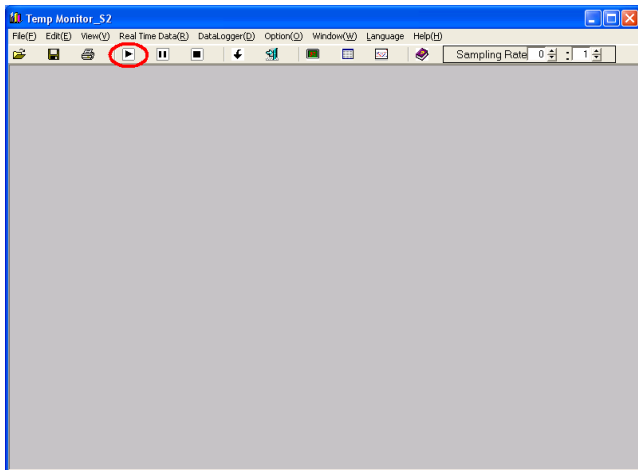
Interval of on-line record of Real Time:

Only Real Time has this function, from 00 minute and 01 second to 59 minutes and 59 seconds.

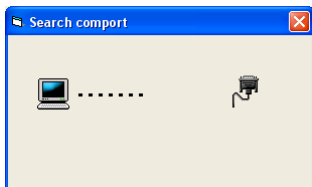
Sampling Rate	0	:	1
---------------	---	---	---

2.2 Carry out Real Time :

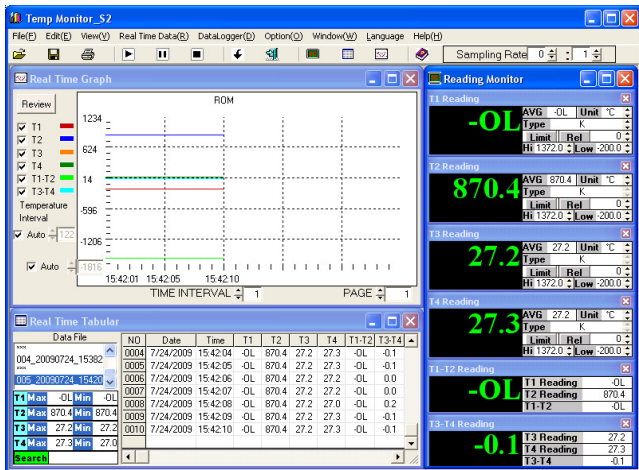
1. Start the meter pc function Click the RUN  key on the picture



2. The software on- line will have the following picture:



3.Operation picture



2.3 Brief introduction of every window function:

Reading Monitor window:

The screenshot shows a 'Reading Monitor' window with five sub-panels. Each panel displays a large green reading, a table of settings, and limit values. The panels are:

- T1 Reading:** Reading: -OL. Settings: AVG -OL, Unit °C, Type K. Limits: Limit, Rel 0. Hi 1372.0, Low -200.0.
- T2 Reading:** Reading: 870.4. Settings: AVG 870.4, Unit °C, Type K. Limits: Limit, Rel 0. Hi 1372.0, Low -200.0.
- T3 Reading:** Reading: 27.2. Settings: AVG 27.2, Unit °C, Type K. Limits: Limit, Rel 0. Hi 1372.0, Low -200.0.
- T4 Reading:** Reading: 27.3. Settings: AVG 27.2, Unit °C, Type K. Limits: Limit, Rel 0. Hi 1372.0, Low -200.0.
- T1-T2 Reading:** Reading: -OL. Settings: T1 Reading -OL, T2 Reading 870.4, T1-T2 -OL.
- T3-T4 Reading:** Reading: -0.1. Settings: T3 Reading 27.2, T4 Reading 27.3, T3-T4 -0.1.

AVG: average value.

Unit: temperature unit choose, can choose °C, °F or K.

The software default temperature unit is

°C; If must carry out °F the record,

please after carrying out RUN

readjustment Unit is °F.

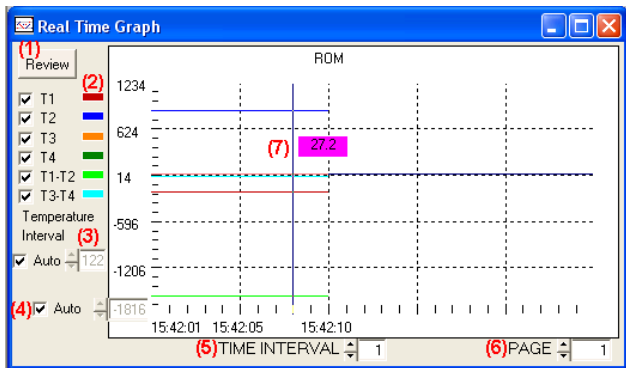
Type: thermocouple Type form is chosen; it is determined that optional Type is set up by Meter function.

Rel: The setting up value of Rel, presses the function key of Rel, the window shows Rel symbol, the showing reading is reading reduces the setting up value of Rel.

Limit & Hi / Low: The setting up

value of Hi Low, upper and lower limit are decided by Type chosen, press the function key of Limit from Type, the window shows Limit symbol, when the reading is greater than the setting up value of Hi, the window turns into sets up color of Hi, at the same time PC gives out the warnings. When the reading is smaller than the setting up value of Low, the window turns into sets up color of Low, send out the warnings of PC at the same time.

Real Time Graph window:




- (1) Graph Redraw Button.
- (2) T1, T2, T3, T4, T1-T2 and T3-T4 scale line, use check items to choose needs to display the scale line.
- (3) Temperature Interval default is auto, if user need to change the temperature interval, check the item will be canceled. Can change temperature interval from 1 to 999.
- (4) Temperature coordinates start value default is auto. If user needs to change the start value, check the item will be canceled to set.
- (5) Set up time in the interval of scale, max 59 minutes and 59 seconds, min 0 minute and 1 second.
- (6) Page: max 400 pages.
- (7) Graph that cross line can show temperature value in picture.

Tabular window :

Data File	NO	Date	Time	T1	T2	T3	T4	T1-T2	T3-T4
004_20090724_15382	0004	7/24/2009	15:42:04	-0L	870.4	27.2	27.3	-0L	-0.1
005_20090724_15420	0005	7/24/2009	15:42:05	-0L	870.4	27.2	27.3	-0L	-0.1
	0006	7/24/2009	15:42:06	-0L	870.4	27.2	27.2	-0L	0.0
	0007	7/24/2009	15:42:07	-0L	870.4	27.2	27.2	-0L	0.0
	0008	7/24/2009	15:42:08	-0L	870.4	27.2	27.0	-0L	0.2
	0009	7/24/2009	15:42:09	-0L	870.4	27.2	27.3	-0L	-0.1
	0010	7/24/2009	15:42:10	-0L	870.4	27.2	27.3	-0L	-0.1

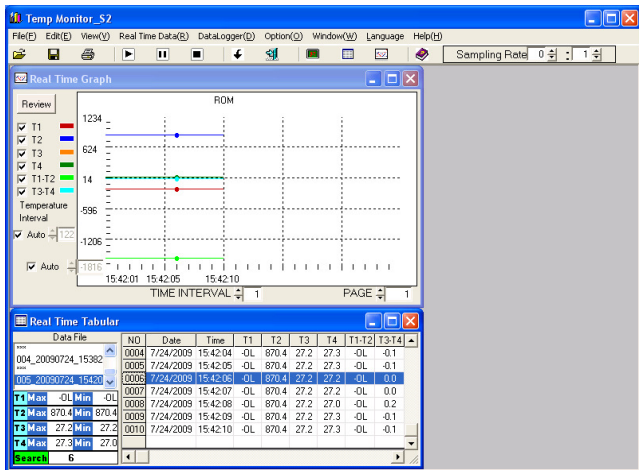
DataFile: This save files temporarily for recorded value; each file can record 9999 record data. Exceeding 9999 will change the new-recorded value file and continue to record temporarily automatically.

Notice: If data want to save please select files temporarily in DataFile to press  or “Save” of File of menu.

If want to delete a recorded file in DataFile, click the file wanted to delete, press mouse right key or choose Clear real Time of Edit of menu, will appear talk window inquire whether to delete the recorded file?

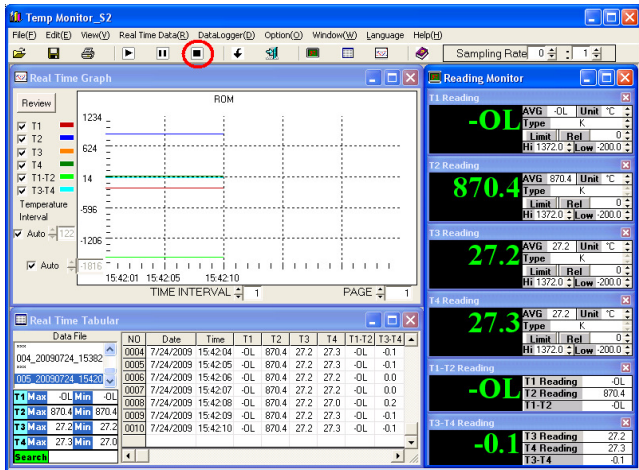
T1 / T2 / T3 / T4: T1 / T2 / T3 / T4 maximum, minimum value of recorded value, press MAX or MIN while can find the relative recorded value in recorded list.

Search: When real time record to stop, can be a search for a data (ex: the 6th data), enter in the search space of 6, use mouse left key to click the green search button. In the Graph window can be seen above curve marked by points, and in the tabular will be highlighted.




2.4 carry out DataLogger download data:

Notice: Before making the download data of DataLogger, if you used Real Time function, after please stop Real Time saving first, and then carry on DataLogger download data.

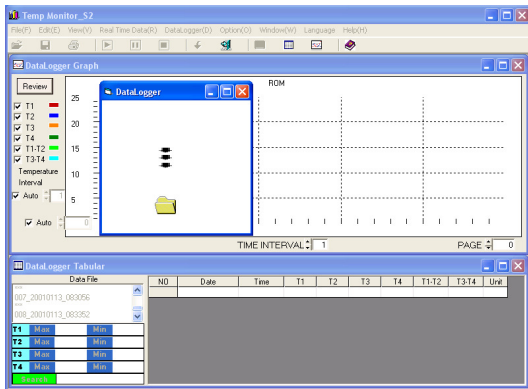


1. Start DataLogger download data:

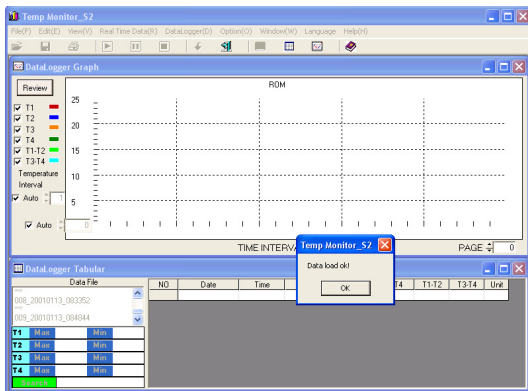
Click  of picture function keys or “ON” of DataLogger menu.

Notice: Before making the download data of DataLogger must be the abolition of the meter PC function.

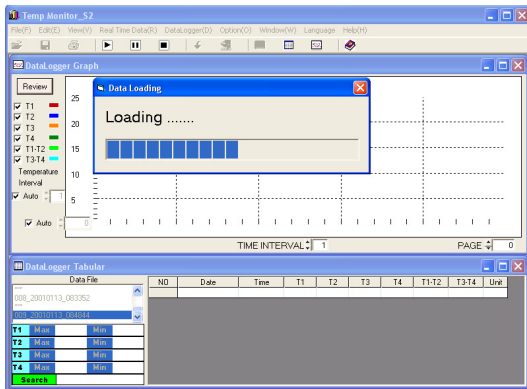
2. The picture of download data after on-line



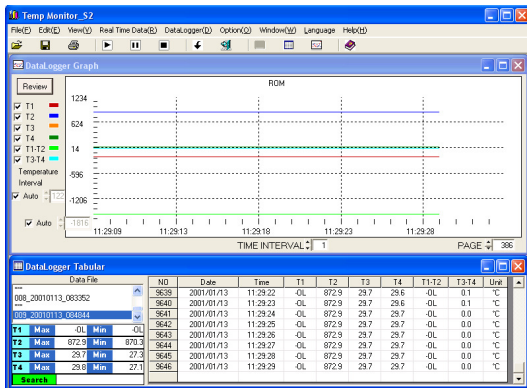
3. The download data finished picture



4. Open download data picture



5. The download data open the picture of finishing



2.5 Save files:

Notice: Before saving data, if you used Real Time function, after please stop Real Time first, and then carry on “SAVE” data.

The screenshot shows the Temp Monitor_S2 software interface. The main window displays a Real Time Graph with temperature data for T1, T2, T3, T4, T1-T2, and T3-T4. The graph shows a steady state with values around 1234, 624, 14, 596, and -1206. The Real Time Tabular window shows a table of data points with columns for NO, Date, Time, T1, T2, T3, T4, T1-T2, and T3-T4. The 'Record' button in the Real Time Tabular window is highlighted with a red circle.

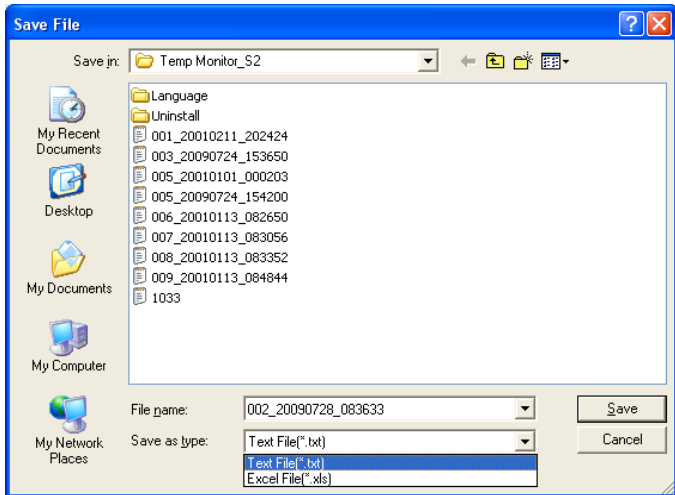
NO	Date	Time	T1	T2	T3	T4	T1-T2	T3-T4
0065	7/28/2009	08:37:36	-OL	873.7	30.6	30.3	-OL	0.3
0066	7/28/2009	08:37:37	-OL	873.7	30.6	30.3	-OL	0.3
0067	7/28/2009	08:37:38	-OL	873.7	30.6	30.3	-OL	0.3
0068	7/28/2009	08:37:39	-OL	873.7	30.6	30.3	-OL	0.3
0069	7/28/2009	08:37:40	-OL	873.7	30.6	30.3	-OL	0.3
0070	7/28/2009	08:37:41	-OL	873.7	30.5	30.4	-OL	0.1
0071	7/28/2009	08:37:42	-OL	873.7	30.5	30.4	-OL	0.1
0072	7/28/2009	08:37:43	-OL	873.7	30.5	30.3	-OL	0.2

1. Click record temporary file in DataFile then to click  or “Save” of File menu.

The screenshot shows the Temp Monitor_S2 software interface. The main window displays a Real Time Graph with temperature data for T1, T2, T3, T4, T1-T2, and T3-T4. The graph shows a steady state with values around 1234, 624, 14, 596, and -1206. The Real Time Tabular window shows a table of data points with columns for NO, Date, Time, T1, T2, T3, T4, T1-T2, and T3-T4. The 'SaveData' button in the Real Time Tabular window is highlighted with a red circle.

NO	Date	Time	T1	T2	T3	T4	T1-T2	T3-T4
001_20090728_083330	7/28/2009	08:37:38	-OL	873.7	30.6	30.3	-OL	0.3
002_20090728_083639	7/28/2009	08:37:39	-OL	873.7	30.6	30.3	-OL	0.3
003_20090728_083639	7/28/2009	08:37:40	-OL	873.7	30.6	30.3	-OL	0.3
004_20090728_083639	7/28/2009	08:37:41	-OL	873.7	30.5	30.4	-OL	0.1
005_20090728_083639	7/28/2009	08:37:42	-OL	873.7	30.5	30.4	-OL	0.1
006_20090728_083639	7/28/2009	08:37:43	-OL	873.7	30.5	30.3	-OL	0.2
007_20090728_083639	7/28/2009	08:37:44	-OL	873.7	30.5	30.3	-OL	0.2
008_20090728_083639	7/28/2009	08:37:45	-OL	873.7	30.5	30.3	-OL	0.2

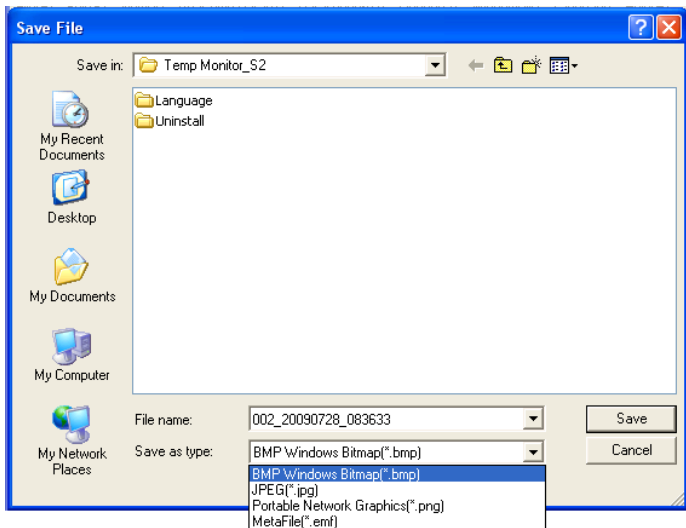
2. Choose SaveData picture



Left side functions of picture arrange with draw menu in above may select save position. The type can be revised below to change file name or type of save file, being scheduled type of saving is *.txt. If wish to change save type to *.xls, please to change by the picture.

Notice: DataLogger data are that ways save file according to this too.

3.Choose SaveBMP picture



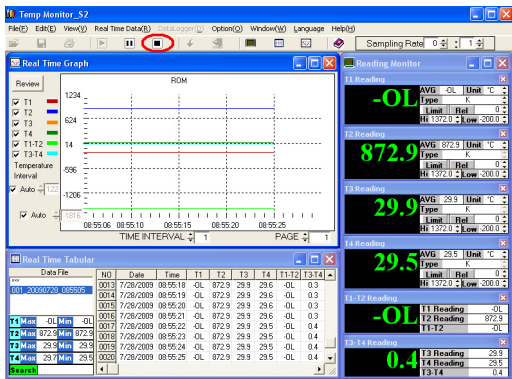
Left side functions of picture arrange with draw menu in above may select save position. The type can be revised below to change file name or type of save file, being scheduled type of saving is *.BMP. If wish to change save type to *.jpg 、*.png or *.emf, please to change by the picture.


Notice: DataLogger data are that ways save file according to this too.

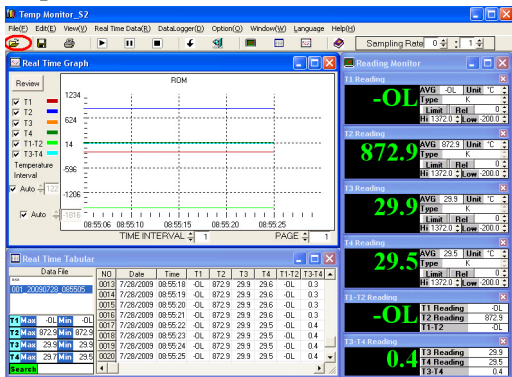
2.6 Open- open old file:

Notice: Before printing data, if you used Real Time function, after please stop

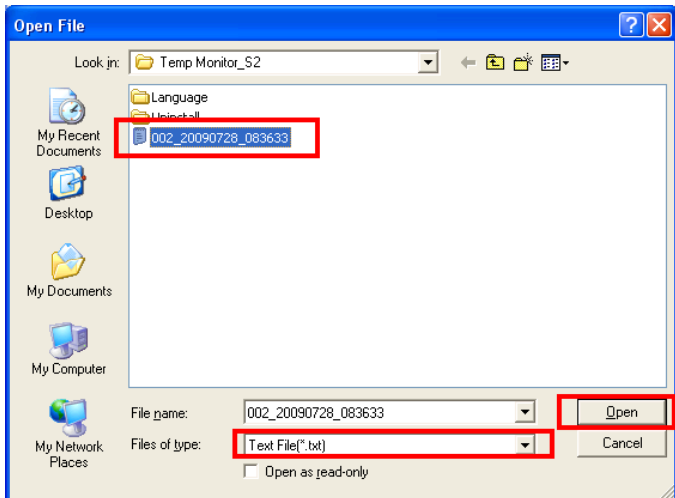
Real Time first, and then carry on OPEN -open old file.



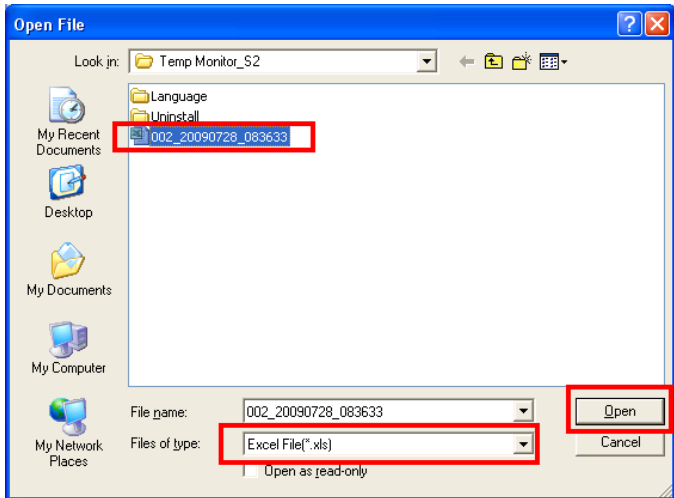
1. Click record temporary file in DataFile then to click  or “Open” of File menu.



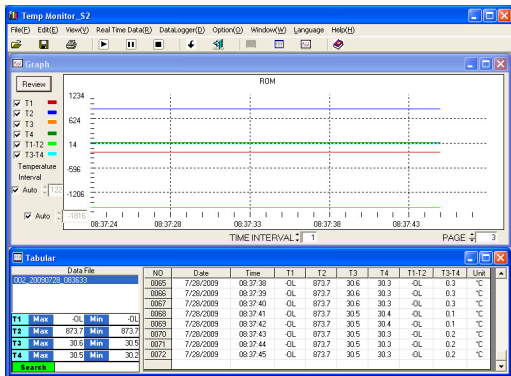
2. Choose picture of file:



Press “open” of the lower right corner after choosing the file wanted to open. If open file of type is different please open according to down picture.

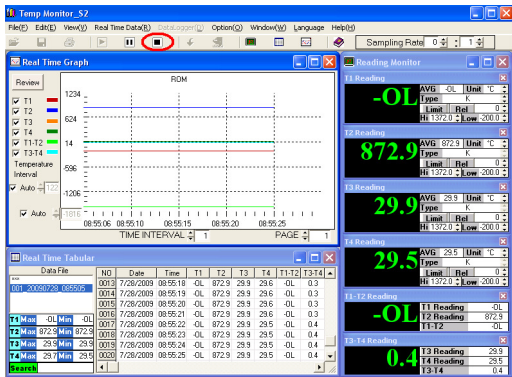


3. Open picture of finished

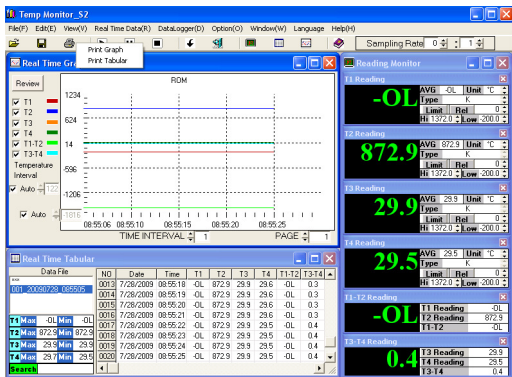


2.7 Print types the file:

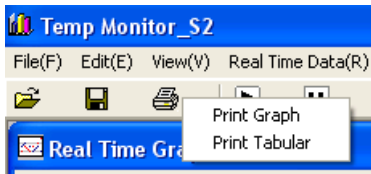
Notice: Before printing data, if you used Real Time function, after please stop Real Time first, and then Print data.



1. Click record temporary file in DataFile then to click  or "Print" of File menu.



2. Choose the print type



(1) Print Graph type picture.

This function prints in the Graph window picture at present, choose the printer window after clicking, please choose type of printer then clicking the print button that will be printed.

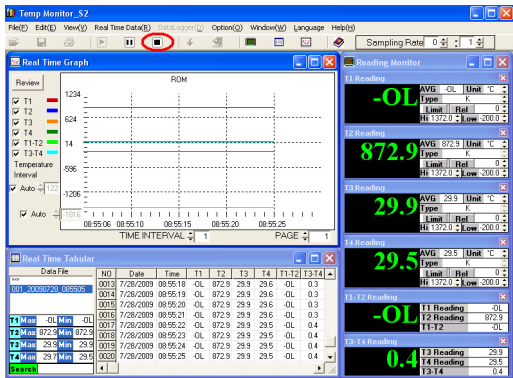
Notice: Before printing Graph window picture, please use the Graph of Option to set up the window first, make bottom into white or other light bottom. The result so as not to print is clear.

(2) Print Tabular of form content:

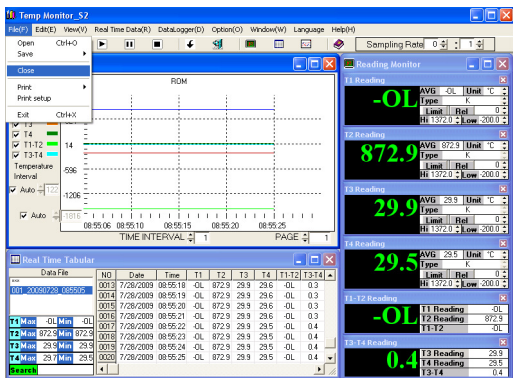
This function prints the form content at Tabular window at present, will choose the printer window after clicking, please choose type of printer then clicking the print button that will be printed.

2.8 Close the picture while carrying out:

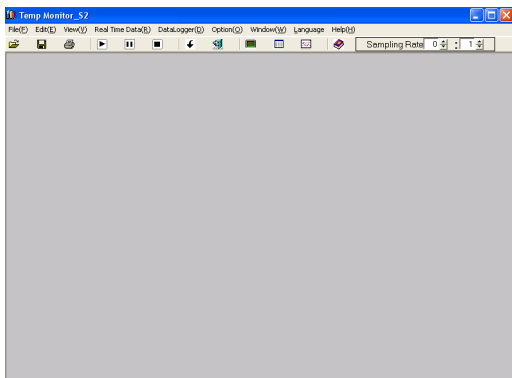
Notice: Before closing the picture while carrying out, if you used Real Time function, after please stop Real Time first, and then carry on close the picture while carrying out.



1. Click Close in menu of File.



2. Picture after carry out.



2.9 Language

Notice1: Before change the language, if you used Real Time function, after please stop Real Time first, and then change the language.

Notice2: If your operating system does not support the Chinese that there is no need to change the language.

The screenshot shows the Temp Monitor_S2 software interface. The 'Language' menu is open, and the 'Traditional Chinese' option is highlighted. The interface includes a 'Real Time Graph' showing temperature trends for T1, T2, T3, T4, T1-T2, and T3-T4. The 'Real Time Tabular' window displays a table of data points. The 'Reading Monitor' window shows various temperature readings and limits.

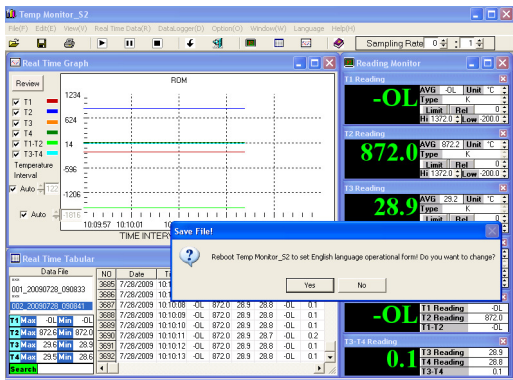
NO	Date	Time	T1	T2	T3	T4	T1-T2	T3-T4
001_20090729_098033	7/28/2009	10:10:05	-OL	872.0	28.9	28.8	-OL	0.1
3695	7/28/2009	10:10:06	-OL	872.0	28.9	28.7	-OL	0.2
3696	7/28/2009	10:10:07	-OL	872.0	28.9	28.7	-OL	0.2
3697	7/28/2009	10:10:08	-OL	872.0	28.9	28.8	-OL	0.1
3698	7/28/2009	10:10:09	-OL	872.0	28.9	28.8	-OL	0.1
3699	7/28/2009	10:10:10	-OL	872.0	28.9	28.8	-OL	0.1
3700	7/28/2009	10:10:11	-OL	872.0	28.9	28.7	-OL	0.2
3691	7/28/2009	10:10:12	-OL	872.0	28.9	28.8	-OL	0.1

1. Click Traditional Chinese in menu of File.

The screenshot shows the Temp Monitor_S2 software interface with the 'Language' menu open. The 'Traditional Chinese' option is selected. The interface displays the same data as the previous screenshot, but with the language settings updated.

NO	Date	Time	T1	T2	T3	T4	T1-T2	T3-T4
001_20090729_098033	7/28/2009	10:10:09	-OL	872.0	28.9	28.8	-OL	0.1
3695	7/28/2009	10:10:08	-OL	872.0	28.9	28.7	-OL	0.2
3696	7/28/2009	10:10:07	-OL	872.0	28.9	28.7	-OL	0.2
3697	7/28/2009	10:10:06	-OL	872.0	28.9	28.8	-OL	0.1
3698	7/28/2009	10:10:05	-OL	872.0	28.9	28.8	-OL	0.1
3699	7/28/2009	10:10:04	-OL	872.0	28.9	28.8	-OL	0.1
3700	7/28/2009	10:10:03	-OL	872.0	28.9	28.7	-OL	0.2
3691	7/28/2009	10:10:02	-OL	872.0	28.9	28.8	-OL	0.1

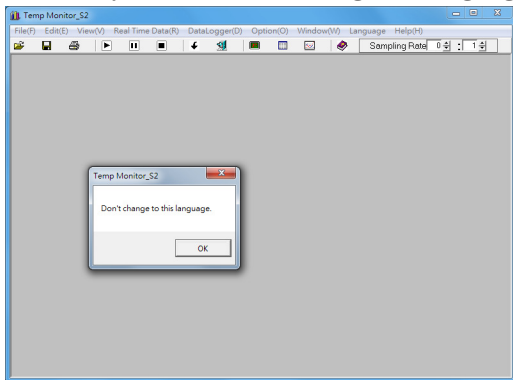
2. There are sure you want to change the language of the window, can decide to replace the language or not, if you want to change, please click “YES” button.



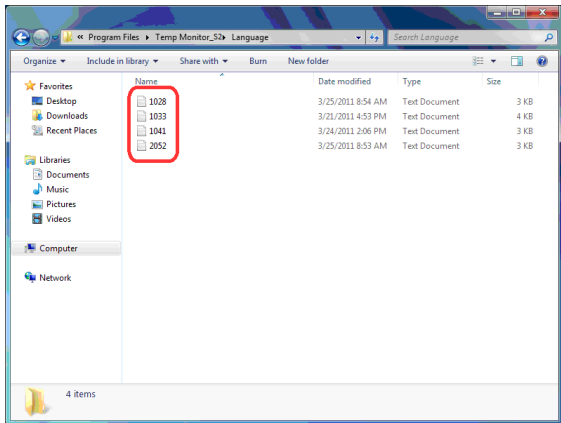
3. The end of the program will automatically return to the computer screen.

If you want to replace the back to the original language, please repeat the above action.

4. If the system could not change the language.



Please confirm the Folder “C:\Program Files\Temp Monitor_S2\Language”, check that are there 4 Language files in it.



If not, insert the CD into the CD-ROM drive (D:\ suppose D is the CD-ROM drive). Right click on the icon, click “open” to the “Language” folder, copy the four language files and paste it to “C:\Program Files\Temp Monitor_S2\ Language”.