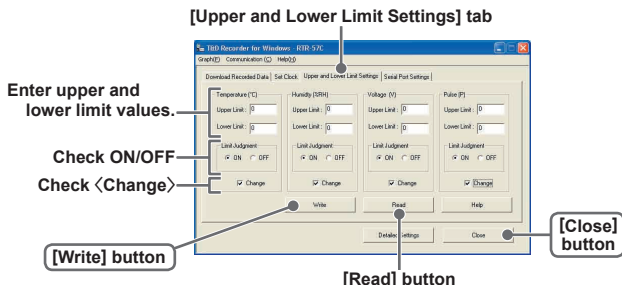


RTR-57C Upper and Lower Limits

RTR-57C Upper and Lower Limits can be set from your computer.

Setting is directly possible in RTR-57C Main Units version 2 or higher.
The version can be confirmed in [Help]-[RTR-57C Version Info].
See the Help Menu in T&D Recorder for Windows for details.

1. In the main window, click the icon RTR-57C.
2. Click the [Upper and Lower Limit Settings] tab, and check the <Change> box.



3. After entering the upper and lower limit values, check <ON> and by clicking the [Write] button, the information will be transmitted.

ON: Judges whether recorded data is within the set range when RTR-57C has downloaded the recorded data.

OFF: Judgment isn't carried out even if upper and lower limits have been set.

4. Click [Close] button to complete the setting.

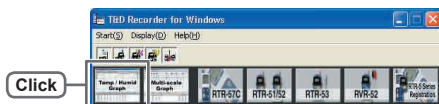
■ [Read] Button

If you wish to view the current settings, click the [Read] button.

Temperature/Humidity Graph

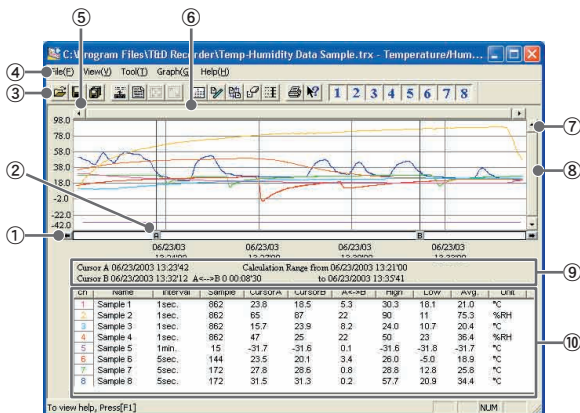
■ How to Open

Open the Graph display by clicking the icon [Temp/Humid Graph] in the Main Window.



- In the Main Window or in the Settings/Communication Display of RTR-57C, RTR-51/52, or RTR-53, select the [Temp/Humid Graph] from the [Start] menu to open the graph.
- If you have clicked [Display the graph after downloading recorded data], the graph will automatically open.

■ Display Names and Functions



① A and B Cursor Movement Buttons

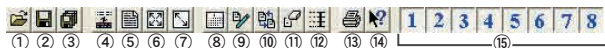
By clicking the arrow buttons, you can simultaneously move the A/B cursors.

② A and B Cursor Buttons

Click and drag the A or B button to move the cursor to the left or right.

③ Toolbar

Buttons appear for frequently used commands.



- | | | |
|------------------------------|-----------------------------|------------------------|
| ① Open File | ⑧ Set High, Low, Avg. | ⑬ Print |
| ② Overwrite Data | Calculation Range | ⑭ Help |
| ③ Save Data as... | ⑨ Edit Recording Conditions | ⑮ Hide / View Channels |
| ④ Change Data Display Colors | ⑩ Re-order Channels | |
| ⑤ Data Display ON/OFF | ⑪ Erase Selected | |
| ⑥ Return to Original Size | Channels Data | |
| ⑦ Step-by-Step to Original | ⑫ Vertical Axis Settings | |

④ Menu Bar

Click on the desired menu in the Menu Bar to set or display each function from which you can choose from an array of commands.

⑤ Button for Moving Horizontal Axis

The time axis moves by clicking these arrow buttons.

⑥ Horizontal Gauge Bar

By dragging the gauge you can move left and right to the data you want to be displayed.

⑦ Button for Moving Vertical Axis

The vertical axis moves up or down by clicking these arrow buttons.

⑧ Vertical Gauge Bar

By dragging the gauge you can move up and down to the data you want to be displayed.

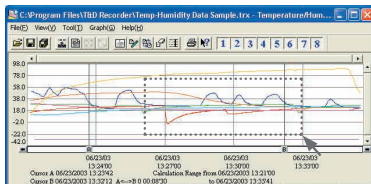
⑨ A and B Cursor Position Information

⑩ Channel Info List Display

Displays data information for Channels 1 to 8.

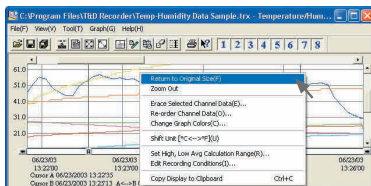
● Zoom in Using the Mouse

With the left button drag the mouse to outline the area you want to zoom in on.



● Menu Display Using the Mouse

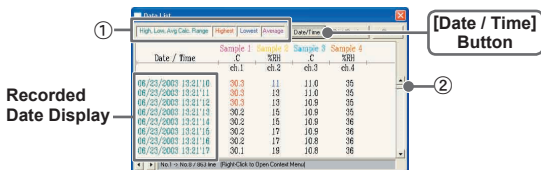
By right clicking on the graph, the Menu will be displayed.



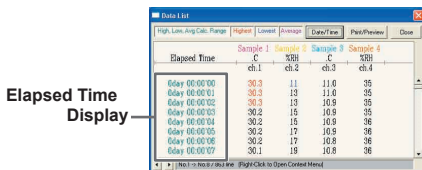
■ Data List Display

● [Date / Time] Button

By clicking this button, you can shift the display between the recorded date and amount of elapsed time since recording started.

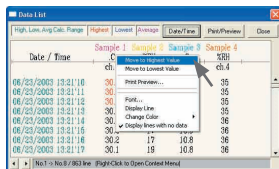


- ① This is a list of the data that was displayed in graph form.
The highest value is in RED, lowest is in BLUE, and the average is in PINK.
- ② Scroll Bar: By dragging it up and down you can move to the data you want.



● Menu Display Using the Mouse

By right clicking on the list, the Menu will be displayed.



Editing the Graph

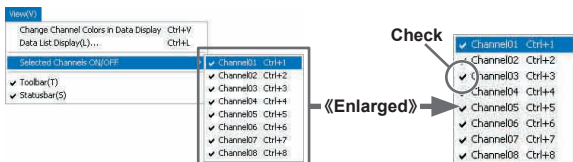
■ Changing the Graph Display

● Changing graph display colors: From the [View] Menu

You can change the letters used in the data list display for each channel between monochrome and channel color

● Selected Channels ON/OFF: From the [View] Menu

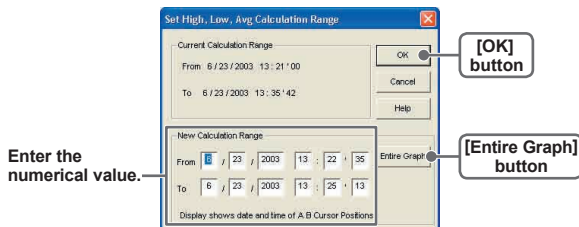
1. The channel numbers are displayed in the pull down menu of [Selected Channels ON/OFF].
2. Check the channel numbers you wish to display.



※ By clicking a Channel Number in the Toolbar, you can carry out the same operation.

● Set High, Low, Average Calculation Range: From the [Tools] Menu

1. Set the calculation range in [Set High, Low, Avg. Calculation Range] box.



● [Entire Graph] Button

To make the Calculation Range that of the Entire Graph, click the "Entire Graph" button. The dates and times in the [Set High, Low, Avg. Calculation Range] box will be displayed as those of the entire graph.

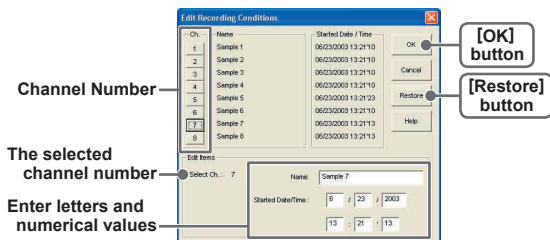
● Set by using the AB Cursors

In the Graph Display, open the [Set High, Low, Average Calculation Range] box adjusting the AB cursors to the desired start and end positions. The dates and times of those cursors will be displayed automatically.

2. By clicking the [OK] button, the high, low, average calculation range of each channel data will be changed. On the graph display, the calculation range that you have set will be displayed.

● Edit Recording Conditions: From the [Tools] Menu

1. By clicking the [Ch.] button you wish to change, the information for that number will be displayed in the "Edit Items".



- Name: Up to 32 letters can be entered.
 - Starting Date/Time: The month, day, year, hour, minute and second can be changed.
2. By clicking the [OK] button after changing, the setting will be completed.
 - If you wish to continue to change other channels, repeat the process as in 1.

※ The [Restore] button is effective only during the setting, and cannot return to the condition it was after the [OK] button has been clicked.

● Re-order Channel Data: From the [Tools] Menu

There are two ways for re-ordering.

- Move by dragging the channel number
- Move by selecting the channel number

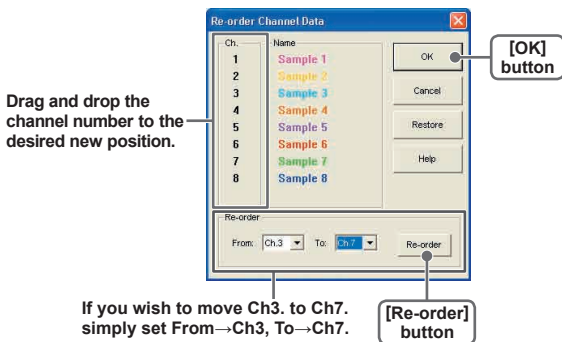
【Move by dragging the channel number】

Click on the channel of data you wish to move and drag and drop it to the desired new channel position.

【Move by selecting the channel number】

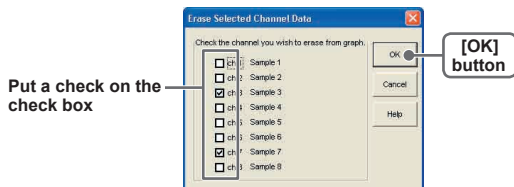
1. Enter in From: __, the Channel number you wish to move from, and enter the Channel number to which you want to move in To: __.
2. By clicking the [Re-order] button, the movement will be completed.

※ The [Restore] button is effective only during the setting, and cannot return to the condition it was by clicking the [OK] button.



● Erase Selected Channel Data: From the [Tools] Menu

1. Put a check on the channel number you wish to erase.
2. By clicking on the [OK] button, the deletion will be completed.

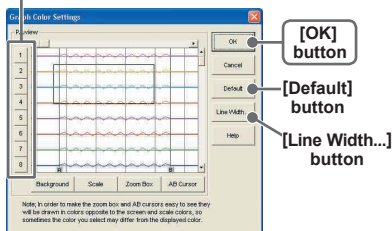


● Shift Unit (°C / °F) : From the [Tools] Menu

By clicking on [Shift Unit(°C / °F)], you can automatically change the temperature unit scale in the graph display and in the channel info list.

● Change Graph Colors: From the [Tools] Menu

[Channel No.] button



《Color Sample》

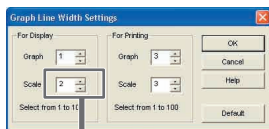
1. Click the channel number of which you wish to change the color.
2. By clicking each button, color samples will be displayed. Choose the color you want and click the [OK] button.

3. After confirming the color, by clicking the [OK] button the change will be completed.

※ By clicking the [Return to Default] button, you will return to the color settings when the software was opened.

【Graph Line Width Settings】

Change the width of the data lines and the scale lines.



《Enlargement》



- Every time you click on ▲, the numerical value gets larger,
- And every time you click on ▼, the numerical value gets smaller.

● Copy Display to Clipboard: From the [Tools] Menu

By clicking [Copy Display to Clipboard], you can copy the currently displayed window to the clipboard and make use of the graph pasting in other software.

■ Graph From the [Graph] Menu

● Return to Original Size

Return from zooming in on one part of data

● Zoom In / Zoom Out

Zooms in or out one step at a time

● Move Cursor Right / Left

Simultaneously move the AB Cursors to the right or left.

● Move Graph Right / Left

Move the Graph Display to the right or left.

● Move Graph Up / Down

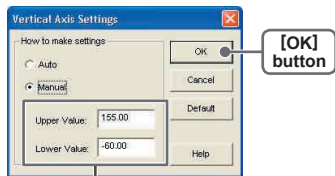
Move the Graph Display up or down.

● Vertical Axis Settings (AUTO in Default Settings)

Set the vertical axis scale (temperature)

AUTO: The vertical axis will automatically be changed according to the values of the data.

MANUAL: You can set the upper and lower values of the vertical axis scale.



Enter the range of the vertical axis scale.

Multi-scale Graph

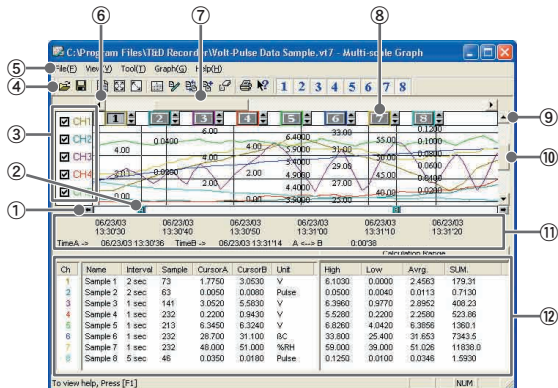
How to Open

Open the Multi-scale Graph by clicking the [Multi-scale Graph] icon in the Main Window.



- In the Main Window or in the Settings/Communication Display of RTR-57C, or RVR-52, select [Multi-scale Graph] from the [Start] menu to open the graph.
- If you have clicked [Display the graph after downloading recorded data], the graph will automatically open.

Display Names and Functions



① A and B Cursor Movement Buttons

By clicking the arrow buttons, you can simultaneously move the A/B cursors.

② A and B Cursor Buttons

Click and drag the A or B button to move the cursor to the left or right.

③ The Vertical Axis Display ON/OFF

Shift the vertical axis scale display ON/OFF.

④ Toolbar

Buttons appear for frequently used commands.



- | | | |
|----------------------------|---|------------------------|
| ① Open File | ⑥ Set High, Low, Avg. Calculation Range | ⑪ Print Preview |
| ② Overwrite Data | ⑦ Edit Recording Conditions | ⑫ Help |
| ③ Data List Display | ⑧ Re-order Channels | ⑬ Hide / View Channels |
| ④ Return to Original Size | ⑨ Merge Channel Data | |
| ⑤ Step by Step to Original | ⑩ Erase Selected Channel Data | |

⑤ Menu Bar

Click on the desired menu in the Menu Bar to set or display each function from which you can choose from an array of commands.

⑥ Button for Moving Horizontal Axis

The time axis moves by clicking these arrow buttons.

⑦ Horizontal Gauge Bar

By dragging the gauge you can move left and right to the data you want to be displayed.

⑧ Vertical Axis of Each Channel

The vertical axis scale is displayed for each channel. By clicking ▲▼, the axis can be scrolled for each channel.

⑨ Button for Moving Vertical Axis

The vertical axis moves up or down by clicking these arrow buttons.

⑩ Vertical Gauge Bar

By dragging the gauge you can move up and down to the data you want to be displayed.

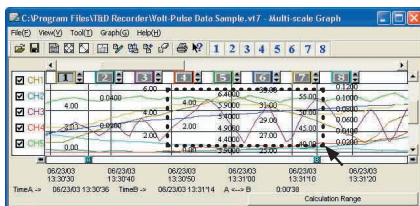
⑪ A and B Cursor Position Information

⑫ Channel Info List Display

Displays data information for Channels 1 to 8.

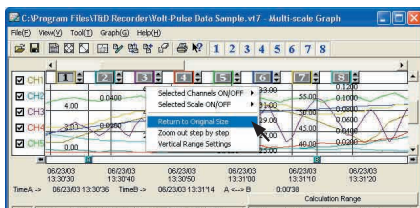
● Zoom in using the Mouse

With the left button drag the mouse to outline the area you want to zoom in on.



● Menu Display using the Mouse

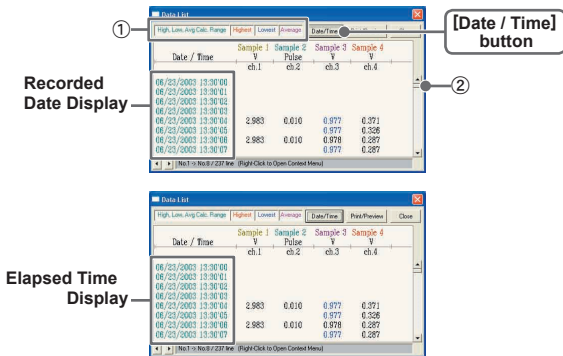
By right clicking on the graph, the Menu will be displayed.



■ Data List Display

● [Date / Time] Button

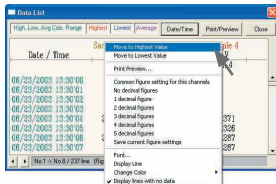
By clicking this button, you can shift the display between the recorded date and amount of elapsed time since recording started.



- ① This is a list of the data that was displayed in graph form.
The highest value is in RED, lowest is in BLUE, and the average is in PINK.
- ② Scroll Bar: By dragging it up and down you can move to the data you want.

● Menu Display Using the Mouse

By right clicking on the list, the Menu will be displayed.

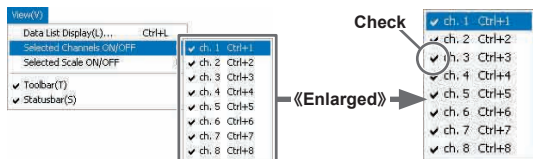


Editing the Graph

■ Changing the Graph Display

● Selected Channels ON/OFF: From the [View] Menu

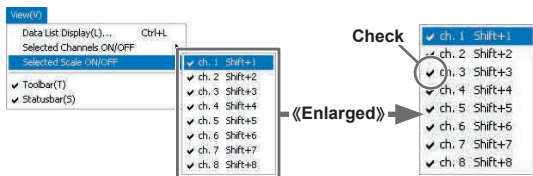
1. The channel numbers are displayed in the pull down menu of [Selected Channels ON/OFF].
2. Check the channel numbers you wish to display.



※ By clicking a Channel Number in the Toolbar, you can carry out the same operation.

● Scale Display ON/OFF: From the [View] Menu

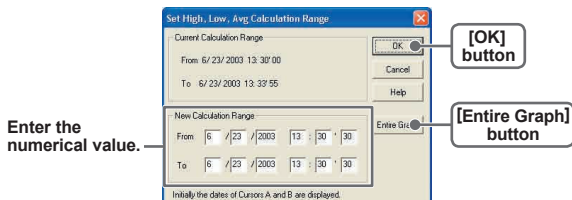
1. The channel numbers are displayed in the pull down menu of [Selected Scale ON/OFF].
2. Put a check next to the channel number(s) you wish to be displayed.



※ You can also hide or view channel scales by checking or mchecking the channel number to the left of the graph.

● **Set High, Low, Average Calculation Range: From the [Tools] Menu**

1. Set the calculation range in [Set High, Low, Avg. Calculation Range] box.



● **[Entire Graph] Button**

To make the Calculation Range that of the Entire Graph, click the "Entire Graph" button. The dates and times in the [Set High, Low, Avg. Calculation Range] box will be displayed as those of the entire graph.

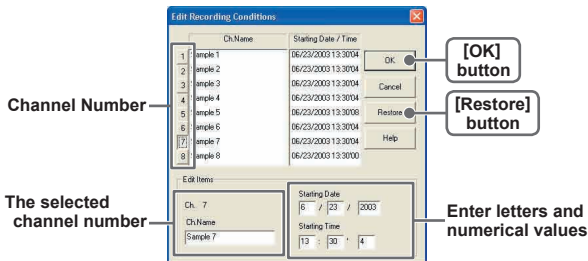
● **Set by using the AB Cursors**

In the Graph Display, open the [Set High, Low, Average Calculation Range] box adjusting the AB cursors to the desired start and end positions. The dates and times of those cursors will be displayed automatically.

2. By clicking the [OK] button, the high, low, average calculation range of each channel data will be changed. On the graph display, the calculation range that you have set will be displayed.

● Edit Recording Conditions: From the [Tools] Menu

1. By clicking the [Ch.] button you wish to change, the information for that number will be displayed in the "Edit Items".



- Name: Up to 32 letters can be entered.
- Starting Date/Time: The month, day, year, hour, minute and second can be changed.

2. By clicking the [OK] button after changing, the setting will be completed.

- If you wish to continue to change other channels, repeat the process as in 1.

※ The [Restore] button is effective only during the setting, and cannot return to the condition it was after the [OK] button has been clicked.

● Re-order Channel Data: From the [Tools] Menu

There are two ways for re-ordering.

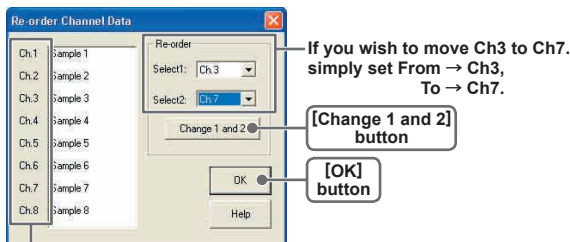
- Move by dragging the channel number
- Move by selecting the channel number

[Move by dragging the channel number]

Click on the channel of data you wish to move and drag and drop it to the desired new channel position.

[Move by selecting the channel number]

1. Enter in From: __, the Channel number you wish to move from, and enter the Channel number to which you want to move in To: __.
2. By clicking the [Change 1 and 2] button, the movement will be completed.



Drag and drop the channel number to the desired new position.

● Merge Channel Data: From the [Tools] Menu

You can merge two different sets of data into one set of data.

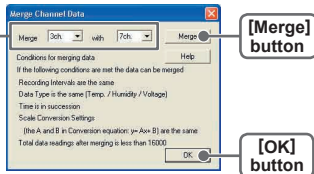
1. Click the ▼ button, and select the channels you wish to merge.

The following kinds of data cannot be merged:

- Recording intervals are different
- Measurement times overlap (Merging is possible after adjusting the times in [Editing Recording Conditions])
- Data types are different (Merging is possible between same types of data; like temperature/humidity)

Example)

If you wish to merge Ch.3 with Ch.7



2. By clicking the [Merge] button, the merging will be completed.

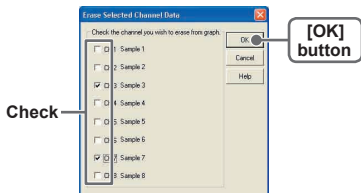
3. Click the [Close] button to finish the merging.

※ The channel number and other conditions of the merged data will become those conditions set in the channel that you selected in the second box.

● Erase Selected Channel Data: From the [Tools] Menu

1. Put a check next to the channel number you wish to delete.

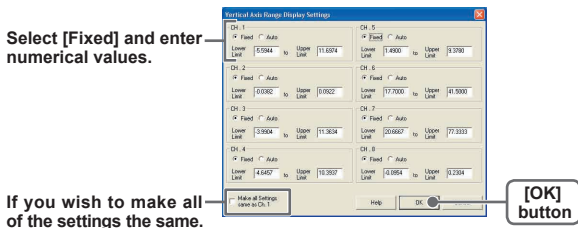
2. By clicking on the [OK] button, the deletion will be completed.



● Vertical Axis Range Display Settings: From the [Tools] Menu

You can set the upper and the lower limits of the graph's vertical axis scale for each channel.

1. Check [Fixed] of the channel you wish to set.



2. Enter upper and lower limit values.

- Set the lower limit at more than -40,000 and set the upper limit at less than 40,000.

3. By clicking the [OK] button, the setting will be completed.

※ If you have put a check on [Fixed], the lines in the graph may exceed the boundaries of the graph.

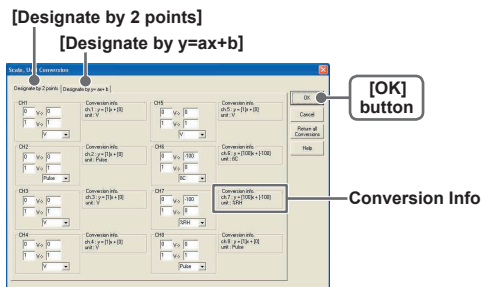
【Making all channel settings the same】

Set CH.1 [Fixed] and by putting a check on [Make all Settings the same as Ch. 1]; all channel settings will be the same as CH.1 regardless of other channel settings.

● Scale and Unit Conversion: From the [Tools] Menu

You can convert the scale and the unit of downloaded data for each channel.

1. Select from [Designate by 2 points] or [Designate by y=mx+b].



2. Set conversion formulas and units.

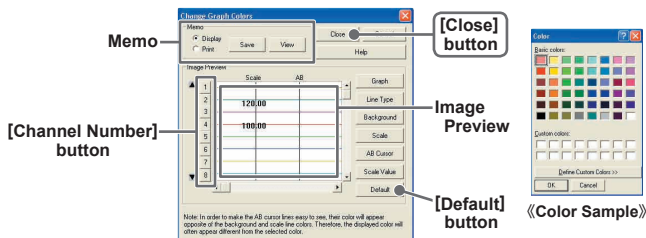
3. By clicking the [OK] button, the setting will be completed.

【Conversion Info】

Current conversion formulas and units are displayed here.

Y indicates the data after conversion, and x indicates the voltage entering from the sensor.

● Change Graph Colors: From the [Tools] Menu



1. Click the [Channel Number] button, and click the button of the item that you wish to change.

- When changing colors, click on a button to display the color samples. Choose the desired color and click the [OK] button to change the color.
- If you wish to change line width, every time you click the ▲ button, the width gets wider, and every time you click the ▼ button, the width becomes more narrow.

2. Confirm the width in the image preview and click the [Close] button to complete the change.

※ By clicking the [Return to Default] button, the color settings will return to the default settings.

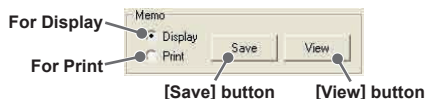
【Memo】

You can save the settings for Display and/or Print respectively.

1. Select Display or Print.

2. By clicking the [Save] button, the settings will be saved.

- By clicking the [View] button, you can see the settings that had been previously saved.



■ Graph From the [Graph] Menu

● Return to Original Size

Return from zooming in on one part of data

● Step-by-Step to Original

Return step-by-step to display an increasingly wider range of data from zooming in on one part of the data.

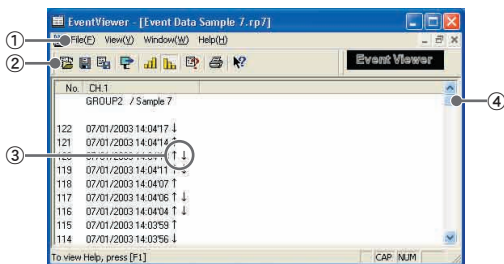
Event Viewer

Here you can manage (view data lists, print, and save as text file) recorded event data.

■ How to Open

- By selecting [Event Viewer] from the [Start] Menu in the settings/communication display of the main window or RTR-57C or RVR-52, the Event Viewer will be opened.
- If you have checked [After downloading, automatically show graph], the viewer will automatically be opened.

■ Display Names and Functions



① Menu Bar

Click on the desired menu in the Menu Bar to set or display each function from which you can choose from an array of commands.

② Toolbar

Buttons appear for frequently used commands.



- | | | |
|---------------------|-------------------------------|---------------------------|
| ① Open File | ④ Shift Display | ⑦ File Info |
| ② Save Data as... | ⑤ Display in ascending order | ⑧ Print Preview and Print |
| ③ Save as Text File | ⑥ Display in descending order | ⑨ Help |

③ ↑ · ↓ · ↑↓

↑ denotes rising pulse, ↓ denotes falling pulse, and ↑↓ denotes a simultaneously occurring rising and falling pulse.

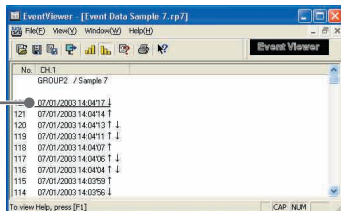
④ Scroll Bar

You can move in the graph up and down to the desired position.

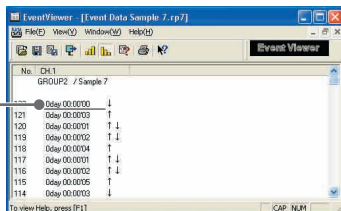
● Shift Display: From the [View] Menu or Toolbar

You can shift the display between the recorded date and the amount of elapsed time from the last recorded data.

Recorded Date
Display



Elapsed Time
Display



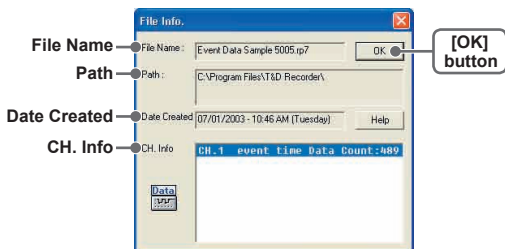
● Shift Ascending/Descending: From the [View] Menu or Toolbar

You can shift the display to view the recorded data either from the oldest to the newest or from the newest to the oldest.

File Info

View file info about data in the currently displayed data list.

1. Select [File Info] from the [View] Menu



File Name : File name of data currently in display.

Path : Location where file is saved.

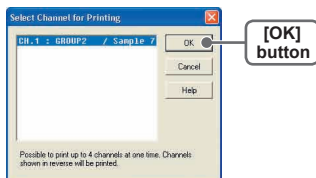
Date Created : The date and time when the data file was created.

CH. Info : Channel Number, Recording Method and Data Count.

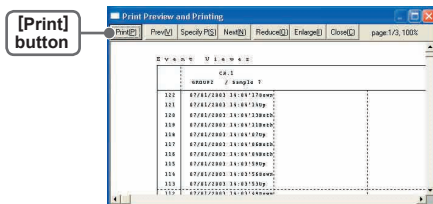
2. Click the [OK] button to return to the previous window.

Print Preview and Print

1. In the [File] Menu, select [Print Preview and Print].
2. In [Select Channel for Printing] the channel numbers and names will appear. Select the number of the channel(s) you wish to print and click [OK].
※ It is possible to choose up to 4 channels at one time.



3. The [Print Preview] will appear. After confirming it is what you wish to print, click [Print] to start printing.



[Button Functions]

- [Print]** Print box will appear and printing will begin.
- [Previous]** Preview the previous page.
- [Specify P]** Specify the page you wish to preview in the [Specify Page to be Viewed] box and a preview of that page will appear.
- [Next]** Preview the next page.
- [Reduce]** Reduce the size of the displayed page.
- [Enlarge]** Enlarge the size of the displayed page.
- [Close]** Close the Print Preview Window and return to the Main Window.

Saving a File

If you have clicked [Display the graph after downloading recorded data], and you make any changes to the data after displaying, make sure to save those changes if necessary.

■ 3 Ways to Save Files.

- **In the [File] Menu, select [Overwrite All Data]**

Will save any changes to file without changing File Name and Saving Location. The same operation can be carried out from [Save] in the Toolbar.

- **In the [File] Menu, select [Save All Data as...]**

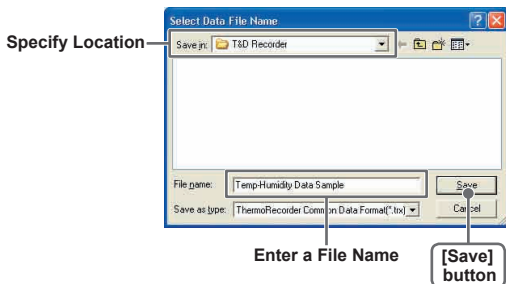
Save with a new File Name.

- **In the [File] Menu, select [Save Displayed Data]**

Save only that data in the current display. This is handy when you wish to save only the desired data.

EX: [Save All Data as...]

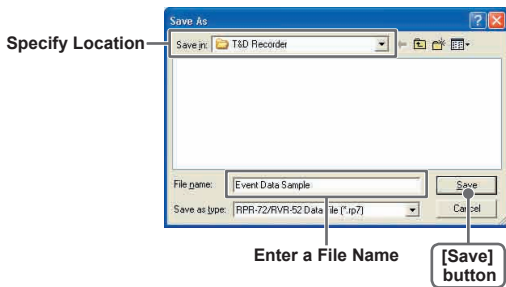
1. Select [Save All Data as...] in the [File] Menu.
2. Specify the [Location] and enter a [File Name].



3. Click [Save] to complete the saving process.

[Saving Event Viewer Data]

1. Select [Save Data as...] in the [File] Menu
2. Specify the [Location] and enter a [File Name]

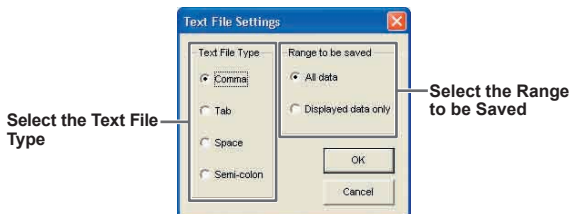


3. Click [Save] to complete the saving process.

Saving Data in Text File

By saving the recorded data as text file, you can create a file type that can be read by common spreadsheet software.

1. Select [Save in Text File] in the [File] Menu.
2. Select the [Text File Type] and [Range to be Saved], and click [OK].
 - Comma, Tab, Space, and Semi-colon are codes used by common spreadsheet software, such as Excel and Lotus, when reading Text File to divide cells.

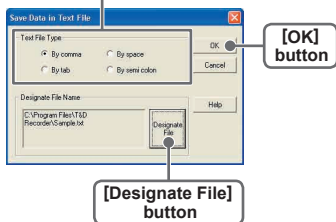


3. Designate the location to which the file should be saved and click [Save] to create and save the data as a Text File document.
 - The extension for the created file will be [.TXT].
- ※ Text File cannot be read into T&D for Windows graphs.

[When saving Event Viewer data as Text File]

1. Select [Save Data in Text File] in the [File] Menu.
2. Select the [Text File Type] and click [Designate File] and [OK].
 - Comma, Tab, Space, and Semi-colon are codes used by common spreadsheet software, such as Excel and Lotus, when reading Text File to divide cells.

Select the Text File Type



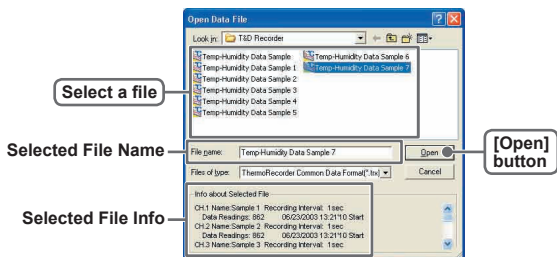
3. Designate the location to which the file should be saved by clicking [Designate File] and click [OK] to create and save the data as a Text File document.
 - The extension for the created file will be [.TXT].

※ **Text File cannot be read into T&D for Windows graphs.**

Opening a File

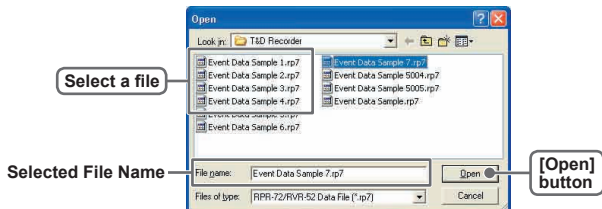
To open a previously saved file, designate the file name to open it.

1. Select [Open] in the [File] Menu
2. Select the name of the data you wish to open and click [Open] to view the data in graph form.



[Opening a File with the Event Viewer]

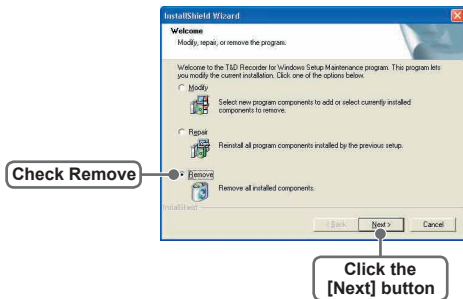
1. Open the Event Viewer from the RTR-57C or RVR-52 [Graph] Menu.
2. In the Event Viewer Window under the [File] Menu, click [Open] and a list will appear.



How to Re-install

Before re-installing the software, make sure to carry out the uninstall program first. Before you begin the uninstall program, first make sure to quit all T&D Recorder for Windows programs.

1. In the Windows Control Panel, click on [Add/Remove Programs].
2. From the list of currently installed programs, select [T&D Recorder for Windows] and click the [Add / Remove] button.
3. The [Install Shield Wizard] will appear. Check [Remove], and click [Next].



4. Follow the directions to Uninstall.
 5. To re-install, follow the directions to [Install].
- Even after uninstalling, saved data files will still remain in the folders and locations they were saved in. Also, saved Remote Unit registration info may still remain. If you wish to delete all of these data and registration files, make sure to delete all of the relevant folders after uninstalling but before re-installing.

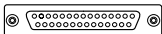
Troubleshooting

Q: I can't get the communication cable connected to the computer. What should I do?

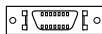
A: Please connect the communication cable provided with the Thermo Recorder into the serial port of your computer (D-SUB 9 pin male connector). If for some reason you cannot connect directly, please use an appropriate adapter (gender changer plug) as explained below.



«D-SUB 9 pin male»



«D-SUB 25 pin female»



«Half pitch 14 pin female»

- If the connector on your computer is a D-SUB 9 pin male then there is no need for an adapter.
- If the connector on your computer is a D-SUB 25 pin female then use an adapter (D-SUB 25 pin male to a D-SUB 9 pin male).
- If the connector on your computer is a Half pitch 14 pin female then use the adapter (Half pitch 14 pin male to a D-SUB 9 pin male) or a combination (Half pitch 14 pin male to D-SUB 25 pin male) and (D-SUB 25 pin female to a D-SUB 9 pin male).

Q: I can't download settings and/or data from the Thermo Recorder to my computer. What should I do?

A: Check to make sure that the power of the main unit is ON.

A: Check to make sure that the connection is proper. Communication will take place only through the serial port (RS-232C) and will not work through the printer port or any other port.

A: Check to make sure that you can control the Thermo Recorder via the software.

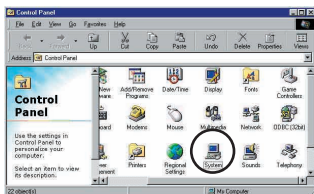
A: Make sure that the serial port has been selected correctly in the [Communication] pull down menu in the software. Please check which port you are connected to (COM1-COM8) and select appropriately.

A: If you have access to another computer, try to see if you can download using it.

- A:** If you have a computer with energy saving function settings, make sure that the serial port has not been turned off. Especially on NEC brand PC98 notebook computers the default setting maybe such.
- A:** If your computer is a DOS/V type, check to make sure that the serial port has not been rendered unusable by the BIOS setting.
- A:** If your computer is Windows 98/Me/NT/2000/XP please make sure that the serial port setting has not been made to render it unusable. With many all-in-one computers it serves as the modem jack.

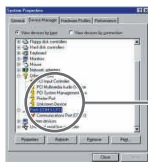
[How to check]

- ① In Windows 98, Open the [System] file in the [Control Panel] (Figure 1).



«Figure 1 Control Panel»

- ② Open the [Device Manager] file in the [System Properties] window and double click on [Port (COM&LPT)] (Figure2) to open. Check to see if [Com Port (COM1)] and/or [Com Port (COM2)] are displayed. If so, they should be usable unless they have a [!] or a [x] (Figure3) mark on them. If such a mark exists, this port is unusable. If you cannot use a communication port please contact your computer's maker.

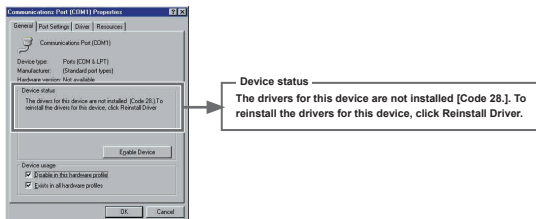


«Figure 2 [Device Manager]»

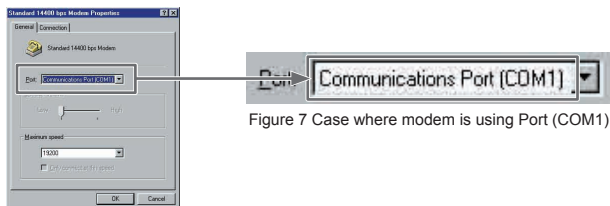


«Figure 3 [Port (COM&LPT)]
enlarged view»

- To find out more details about the port in question you can double click on [!>] to open [Properties] and a window giving details about that port will appear.



- A:** If your computer has an internal modem, make sure that the communication port is not being used by it. In some cases, even though no settings appear for the communication port, it cannot be used. Check to see which port is being used by the modem.



- A:** Sometimes communication will not work if an extension cable has been added to the communication cable, or if a switch has been added to the serial port (RS-232C).
- A:** Check to see if some other communication software is in use.
- A:** Most desktop models have two serial ports, try changing the plug to the other port and change the settings.

Q: The date and the time of the recorded data are different from the actual date and time. What should I do?

A: The Thermo Recorder takes the date and time from your computer when it is set up. Make sure that the date and time are correct on your computer.

Specifications

Compatible Devices	RTR-57C • RTR-51 • RTR-52 • RTR-53 • RVR-52
Number of Channels	8 Channel Simultaneous Display and Processing (Up to 4 RTR-53 units / Up to 8 units for RTR-51,52 and RVR-52 / Possible to process mixed data from TR-5 and TR-7 Series units)
Communication Functions (RTR-5)	Recording Start (Immediate Start / Programmed Start) • Recording Stop • Main Unit Settings (Recording Interval • Recording Method • Upper and Lower Limits • Permission to Start Recording by Wireless Communication) • Downloading of Recorded Data
Communication Functions (RVR-5)	Recording Start (Immediate Start / Programmed Start) • Recording Stop • Main Unit Settings (Recording Interval • Recording Method • Upper and Lower Limits • Voltage Measurement Method (Instantaneous Value / Average Value) • Pulse Measurement Method (Rising Lo→Hi, Falling Hi→Lo) • Permission to Start Recording by Wireless Communication • Downloading of Recorded Data
Communication Functions (RTR-57C)	Remote Unit, Group Settings / Contents Display • Communication Frequency Channel Settings • Collect Data Info • Data Info Display • Delete Data • Download Data • Set Clock • Upper and Lower Limit Settings

[Temp/Humidity Graph]

Graph	Temp / Humidity Graphs for Each Channel (Zoom out / in and scroll) • Change Channel Colors • Turn ON and OFF Channel Display
Data Display	Channel Name • Recording Interval • Number of Readings • Highest, Lowest and Average Reading • Unit of Measurement • AB Cursor Dates / Times and Data Readings • Calculated Difference between Cursor A and B
Others	Data List Display • Calculation Range Settings • Data Maintenance • Edit Recording Conditions • Delete Data by Channel • Re-order Data by Channel

[Multi-scale Graph]

Graph	Graphs for Each Channel (Zoom in/out and scroll with mouse or keyboard) • Vertically Scroll Graph for Each Channel • Channel Graph Color • Background Color • Customize Graph Scale Lines • Turn ON and OFF Channel Display • Move Vertical Scale to Desired Position in Graph (View / Hide Scale for Each Channel)
Data Display	Channel Name • Recording Interval • Number of Readings • Highest, Lowest and Average Reading • Unit of Measurement • AB Cursor Dates / Times and Data Readings • Calculated Difference between Cursor A and B

[Multi-scale Graph]

Others Data List Display · Change Scales · Calculation Range Settings ·
Set Display Range for Vertical Axis

[Event Viewer]

Event List Edit Recording Conditions · Delete Data by Channel · Re-order
Data by Channel · Event List Display showing Time of Event for
Each Channel (possible to scroll with mouse or keyboard) ·
Rising Signal (Lo→Hi) / Falling Signal (Hi→Lo) / Falling Signal
& Rising Signal · Hide or View Other Functions · Ascending
-Descending Order Switch.

Others Serial Port Auto Find Function

File OutPut T&D Common Data File·Text File (CSV, etc)·(Selected Range or
File for Entire Period)

Printing Graphs / Tables

Compatible OS Microsoft Windows 98 / Me / NT 4.0
Microsoft Windows 2000 / Xp

PC/CPU IBM Compatible with higher than Pentium 90MHz
Serial Port (RS232-C D-sub 9pin)

Memory More than 16 MB

Hard Disk More than 4MB of free space (Data will need more space)

Monitor VGA (640×480) more than 256 colors

■ For product information or questions contact us at:

T&D CORPORATION

5652-169 Sasaga Matsumoto, Nagano Japan 399-0033

Tel: +81-263-27-2131

Fax: +81-263-26-4281

E-mail: overseas@tandd.co.jp

Office Hours: Monday to Friday 9:00-12:00/13:00-17:00

(GMT +9:00 Tokyo Time)

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T&D Recorder for Windows User's Manual

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