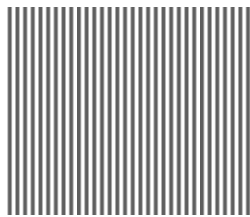**CHINO**

Data Analysis Software

ZAILA-P

Operation Manual

INSTRUCTIONS

Thank you for buying Data Analysis Software.
In order to use this software correctly and safely and to prevent trouble, please read this manual carefully.

CHINO

Condition / Clause

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3. This manual has been documented by making assurance doubly sure. However, if any question arises or if any error, an omission, or other deficiencies are found, please contact your nearest our sales office.

－Table of Contents－

1.Overview

This data analysis software is to analyze the data acquired by "Graphic Recorder with measured data protection".

1-1.Main functions and features

- The data acquired by the instrument is displayed as trend.
- A number of data files can be compiled to one and displayed as a trend.
- Maximum 128 channels can be registered. Subtraction operations etc can also be registered.
- Acquired data can be printed, PDF format (*1), saved in CSV format or text format.
- Maximum value, minimum value, average value, standard deviation and median value can be displayed numerically and as graph.
- Two cursors can be displayed in the graph.
- Maximum value, minimum value, average value, standard deviation and median value between the cursors can be displayed as numeric value and graph.
- Graph can be magnified, reduced and partially magnified.
- Message can be inserted in the graph.
- Scale axis of graph can be logarithmically displayed.
- Trend graph can be printed. It can be saved as PDF (*1), JPG or BMP.

(*1) Must have "Adobe® Acrobat® 9" or later installed.

1-2.Operation environments

< Hardware >

CPU	1GHz or above
Memory	256MB (512 MB or more is recommended)
Disk drive	CD-ROM drive: 1 drive or more (necessary during installation)
	Hard disk drive: 1 drive or more for items with free space that is 100MB or more

< Software >

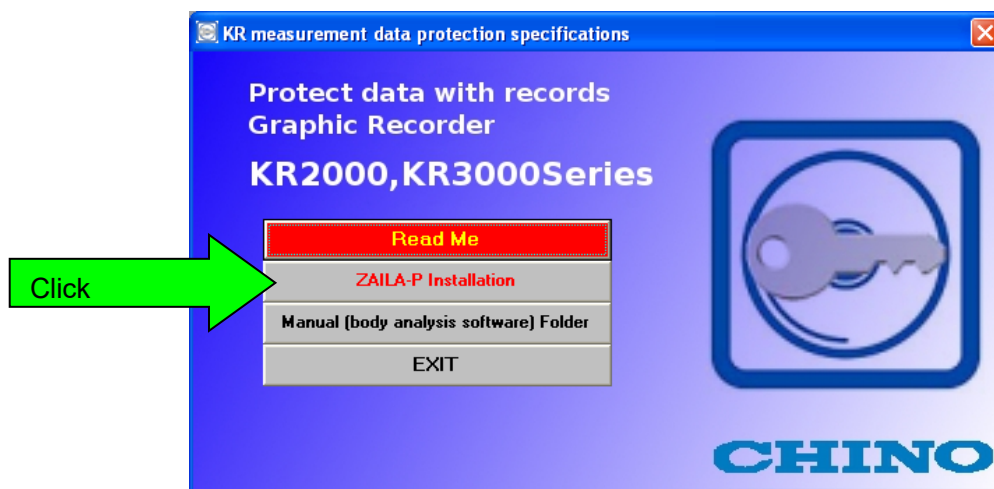*OS   Windows 10 (English)

*Internet Explorer 6.0 or later
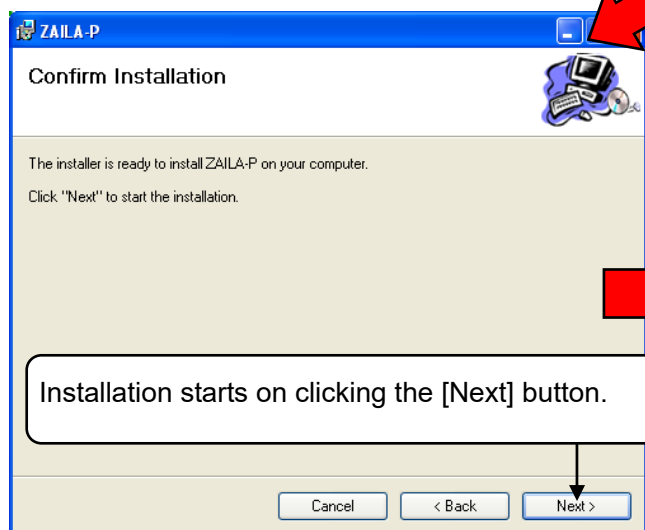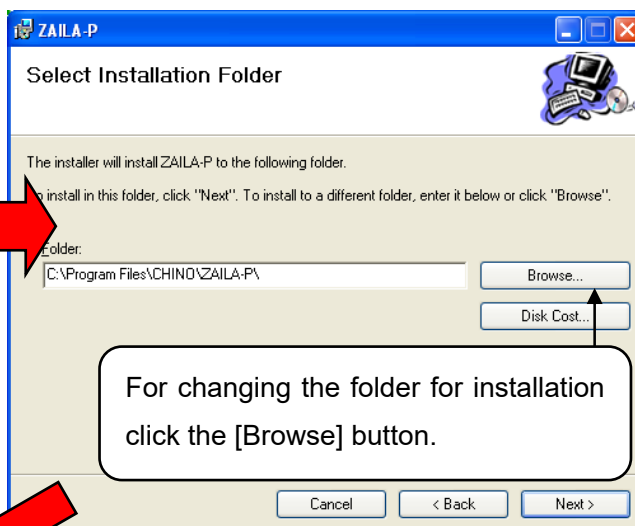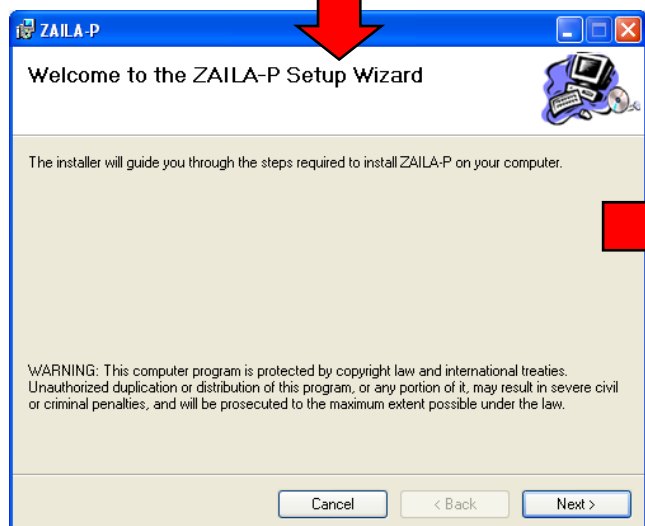
2.Installation and removal

2-1.Installation method

PC CD-ROM into the CD drive program starts when you insert the menu below.

Click "ZAILA-P Installation" button. Installation screen gets display.

KR measurement data protection specifications

Protect data with records
Graphic Recorder

KR2000,KR3000Series

Read Me

ZAILA-P Installation

Manual (body analysis software) Folder

EXIT

CHINO

Click

Do as shown in the following screens.

ZAILA-P

Welcome to the ZAILA-P Setup Wizard

The installer will guide you through the steps required to install ZAILA-P on your computer.

WARNING: This computer program is protected by copyright law and international treaties. Unauthorized duplication or distribution of this program, or any portion of it, may result in severe civil or criminal penalties, and will be prosecuted to the maximum extent possible under the law.

Cancel   < Back   Next >

ZAILA-P

Select Installation Folder

The installer will install ZAILA-P to the following folder.

To install in this folder, click "Next". To install to a different folder, enter it below or click "Browse".

Folder:

C:\Program Files\CHINO\ZAILA-P\   Browse...

Disk Cost...

For changing the folder for installation click the [Browse] button.

Cancel   < Back   Next >

ZAILA-P

Confirm Installation

The installer is ready to install ZAILA-P on your computer.

Click "Next" to start the installation.

Installation starts on clicking the [Next] button.

Cancel   < Back   Next >

ZAILA-P

Installation Complete

ZAILA-P has been successfully installed.

Click "Close" to exit.

If restarting is necessary, do as per the message in the message box.

Cancel   < Back   Close

— 3 —

2-2.Un-installation (Remove) method

Click "Control Panel" from "All Programs" from "Start" of Windows task bar.

Select "Add or Remove Programs"

Select "ZAILA-P"
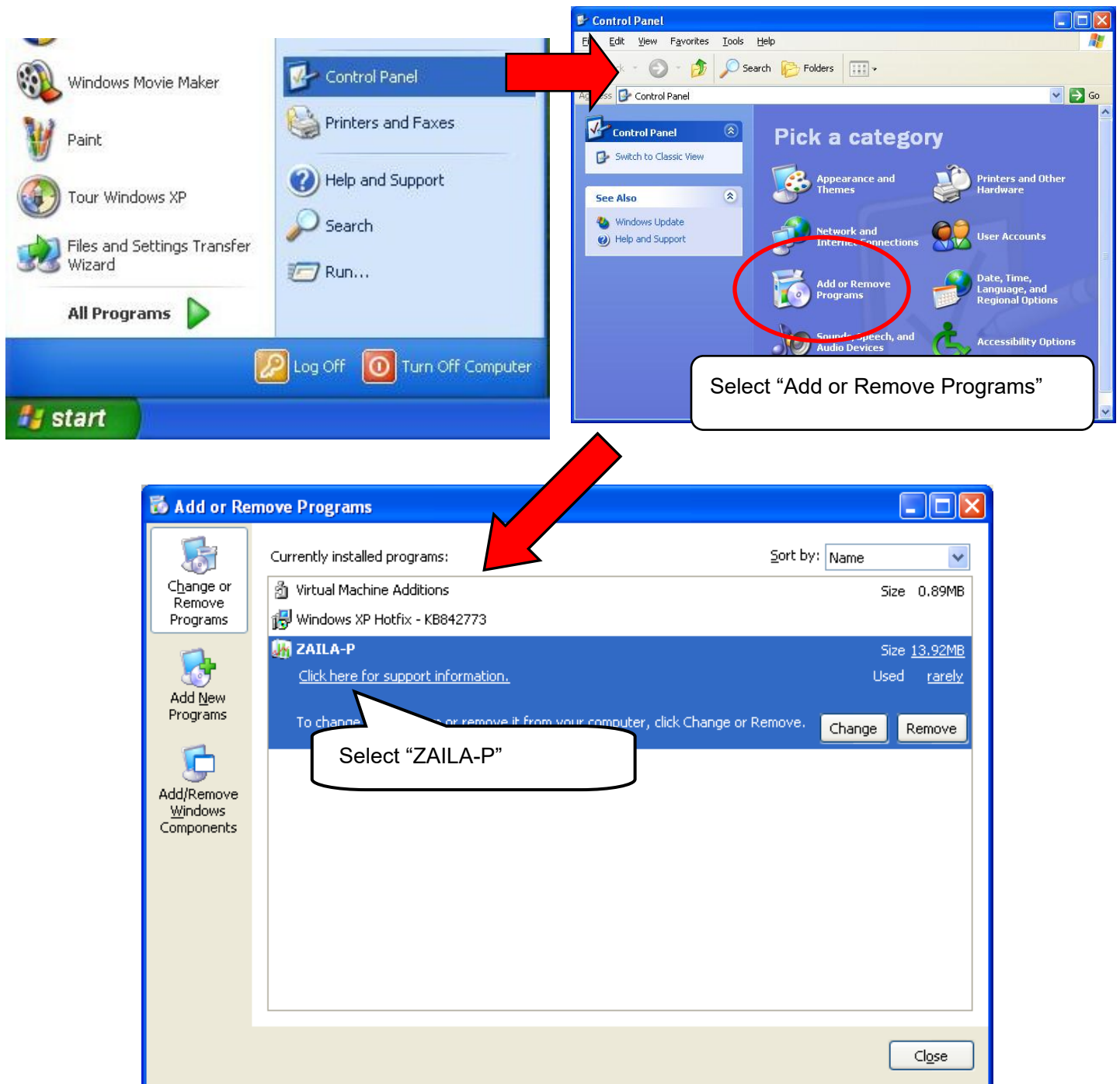
At this point, folder related to data analysis software remains.

In case of deleting all, delete the "ZAILA-P" folder from explorer etc.

3.Operation

3-1.Data analysis software block diagram

Main menu Screen that is initially displayed at the time of start up.

- **Trend graph** Trend graph is displayed. (Maximum 10 screens can be displayed.)
  - Initialization Initializes the graph.
  - File selection Selects file that is to be displayed as graph.
  - Data registration Registers the channel to be displayed.
  - Data list Displays the data list. It can be printed and converted into CSV file.
  - Data between cursors Displays the data between cursors A and B and the time difference. Displays whole data, maximum and minimum data between the cursors.
  - Bar graph Displays the data of cursor A and B as bar graph.
  - Alarm display Registers the color, shape, size etc. of point at which alarm activates.
  - Continuous replay Trend is continuously (automatically) scrolled.
  - Print screen Graph can be printed, output on clipboard or saved in a file.
  - Audit list Audit list displayed in a tabular format.
  - Alarm summary Alarm summary.
  - File property Data file displayed in a tabular format.
  - Cursor Set cursors A and B on the graph.
  - Trend line Sets the 'kind of line' color, shape etc. of trend of each channel.
  - Scale axis Display settings of scale axis proare performed.
  - Time axis Period to be displayed on 1 screen is set.
  - Title Title is displayed on the graph and axis.
  - Legend Legend is displayed on the graph.
  - Supplementary settings Back color, kind of auxiliary line, color, interval etc. can be set.
  - Magnify/reduce Graph can be moved/magnified/reduced, partially magnified and rotated.

- **Setting parameter list** Setting parameter list.
- **Audit list** Audit list displayed in a tabular format.
- **Vertical** A number of screens are arranged vertically.
- **Horizontal** A number of screens are arranged horizontally.
- **Other settings** Displays other settings.
- **Version information** Displays version information.
- **Help** Displays help file.

3-2.Startup method of data analysis software

It is started by clicking "ZAILA-P" - "Chino" - "All programs" - "Start" from Windows task bar.
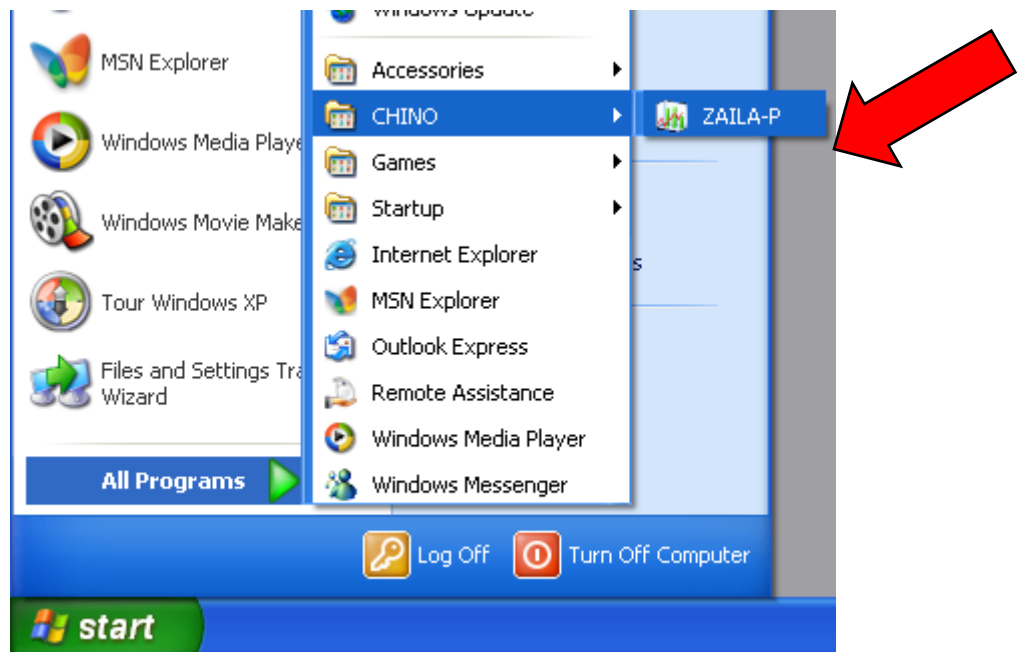
3-3.Exiting data analysis software

Click "X" on the right corner of the task bar.
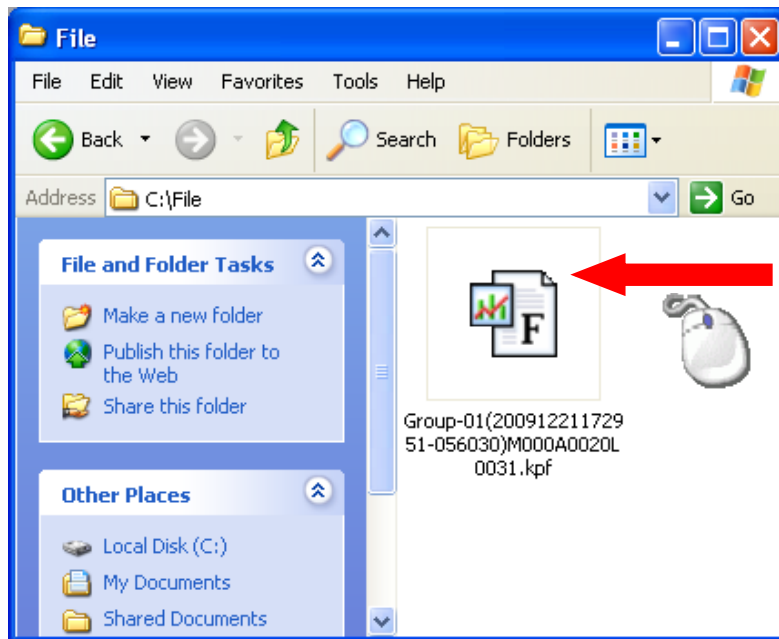
3-4.Easy to use! Operation Guide

3-4-1.Select file

File to be analyzed is selected. Following are the methods of selecting the files.

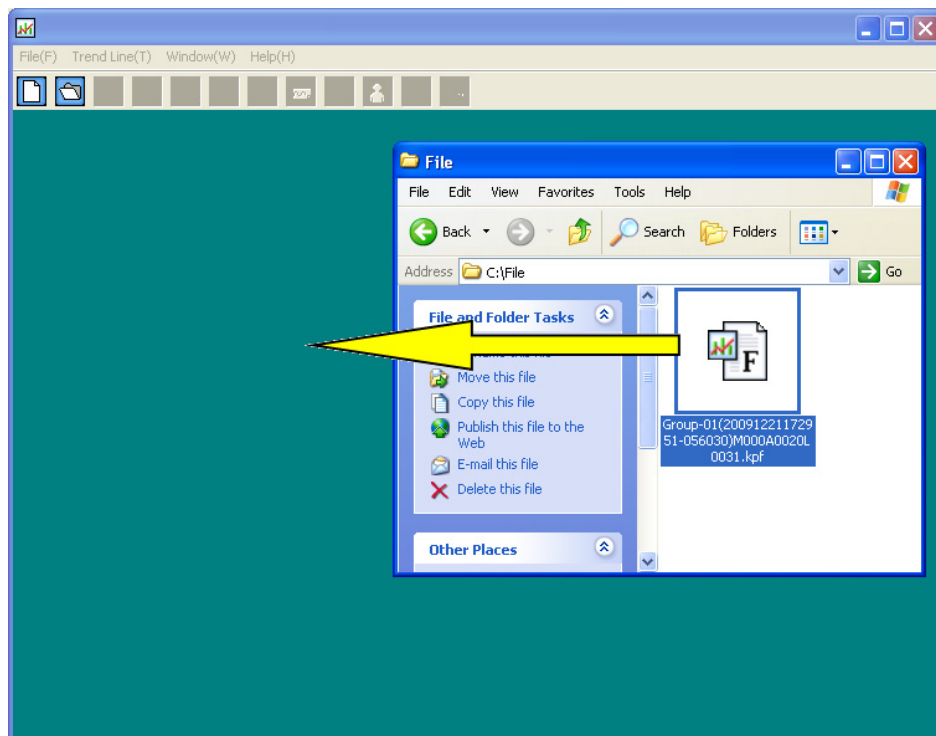(Select any one of the following methods)

(1) Double click

When data file is double clicked, analysis software starts automatically and trend graph is displayed

(2)Drag and drop

Start analysis software and when trend screen opens, drag and drop the file.

(3)File selection

Start analysis software and when trend screen opens, click "File selection" icon.

Select the file when "File selection" screen opens.
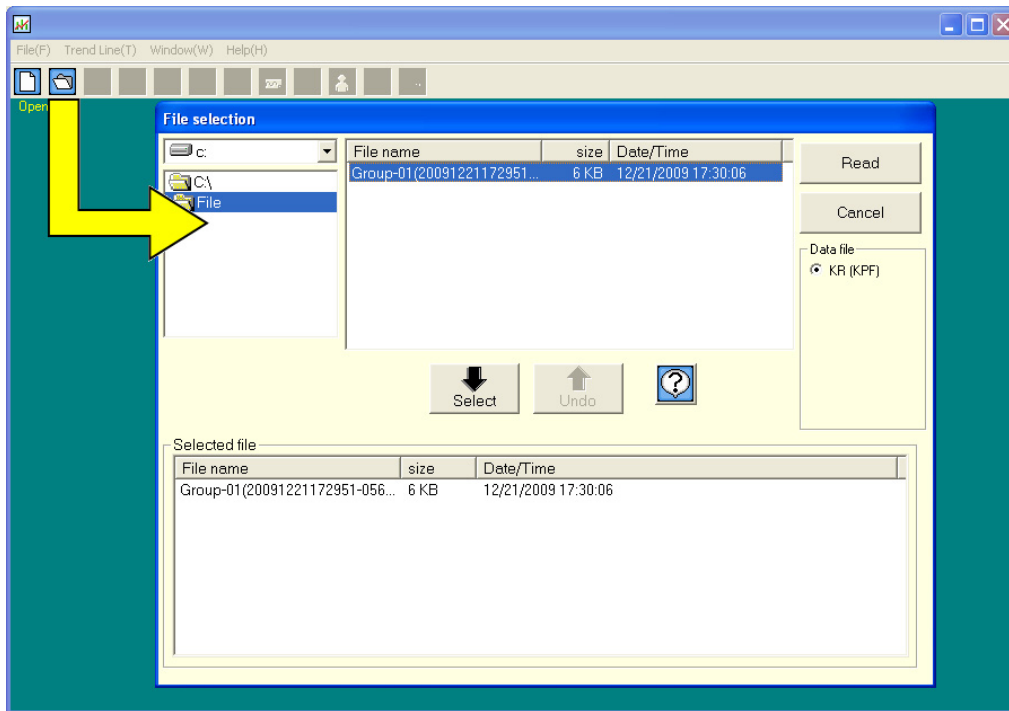
3-4-2.Trend display

If file can be selected normally, it can be displayed as trend. (Range of the all data is displayed)
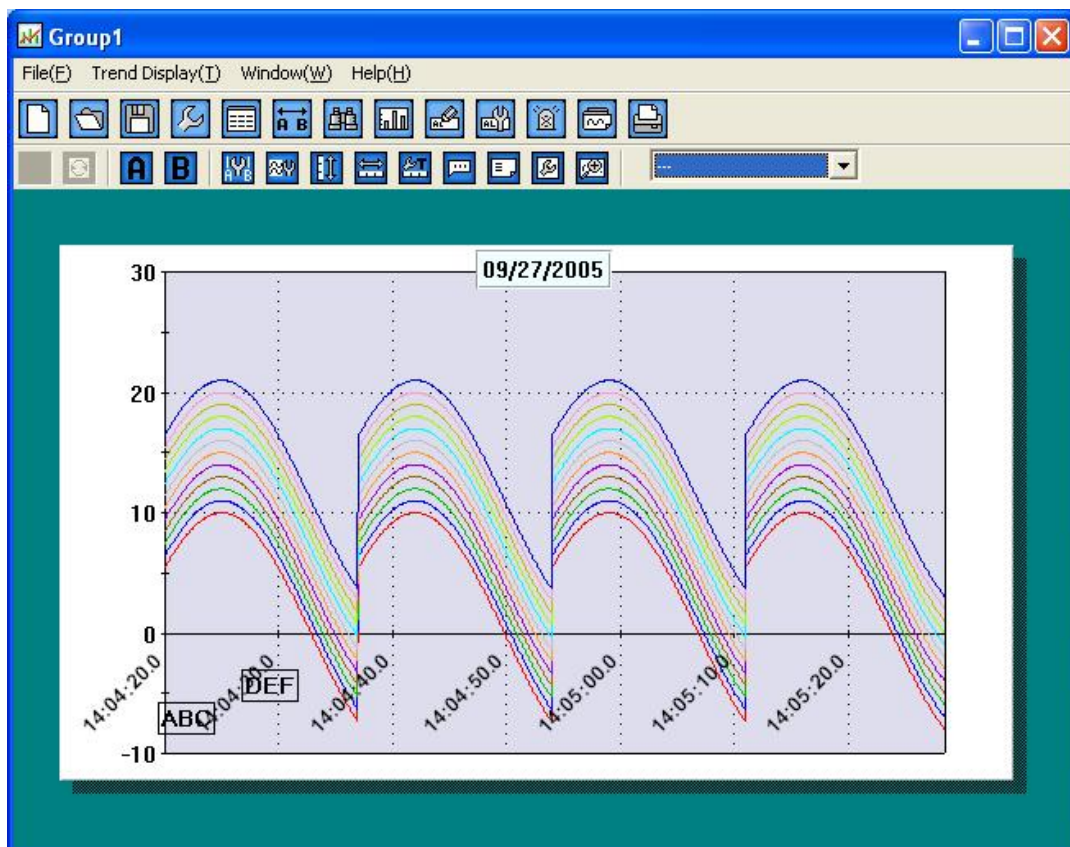
3-4-3.Changing the time axis

Time axis can be expanded and the data in that time range can be displayed on 1 screen by magnifying it. Data that is out of range can be viewed by scrolling the screen. There are 2 methods of changing the time axis.
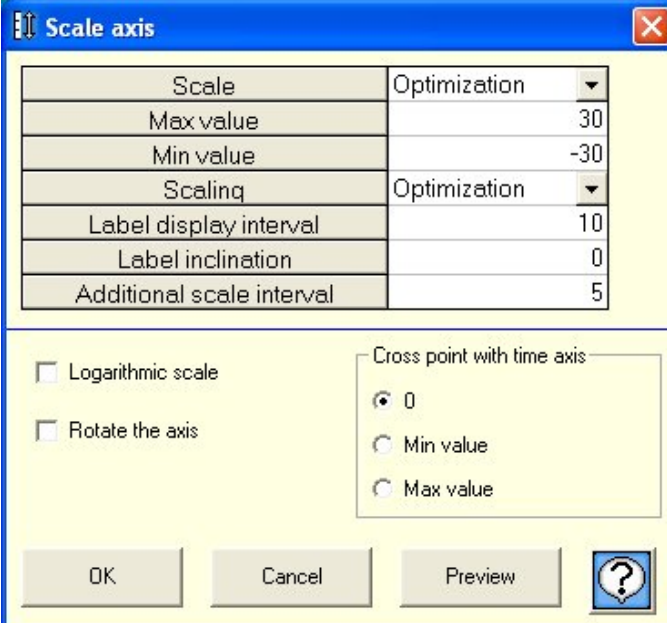
(1)Specify the range of time axis by using mouse

  Drag (move the mouse) keeping the left button of the mouse pressed (starting point is fixed) from the point that is to be magnified and release the button on the point (end point is fixed); up to which it is to be magnified. (The range in black color that is rotating is magnified)
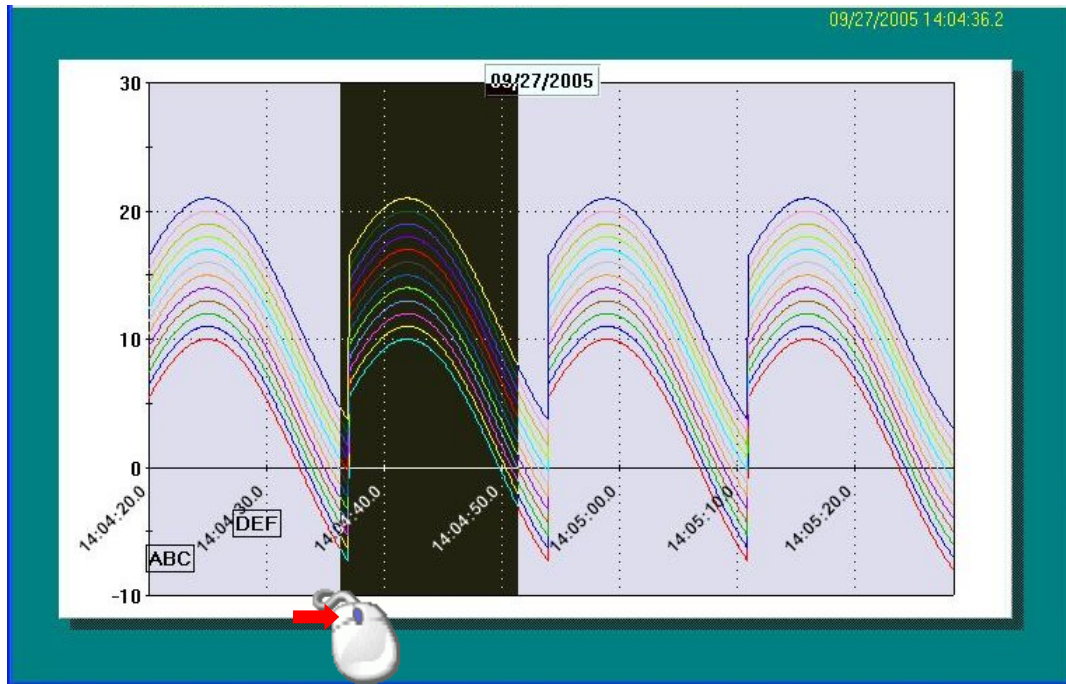
(2)Specify the range of time axis by using keyboard

  Click the time axis button on the tool bar and open the following screen.
  On clicking OK after entering the duration, if there is no mistake in the input, specified range is displayed.

3-4-4.Changing the scale axis

Scale axis can be expanded and the data in that time range can be displayed on 1 screen by magnifying it.

There are 2 methods of changing the scale axis.

(1)Specify the range of scale axis by using mouse

Drag (move the mouse) keeping the left button of the mouse pressed (starting point is fixed) from the point (end point is fixed) that is to be magnified and release the button on the point, up to which it is to be magnified. (The range in black color that is rotating is magnified)
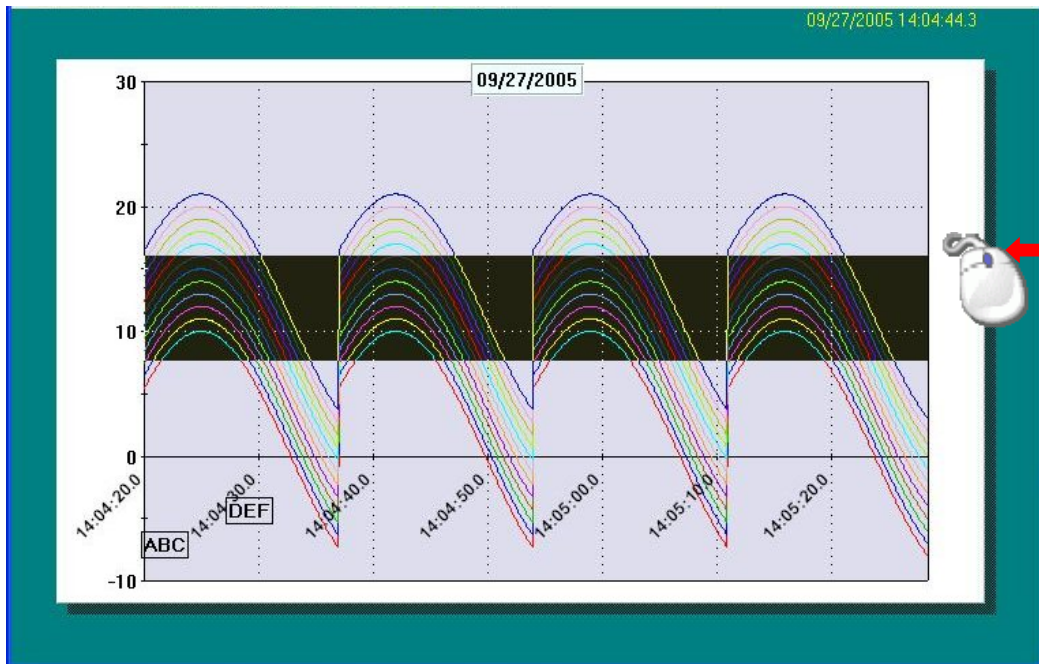
(2)Specify the range of scale axis by using keyboard

Click the scale axis button and open the following screen.

On clicking OK button after entering Max value and Minimum value, if there is no mistake in the input, specified range is displayed.

4.Main menu

It is the screen displayed immediately after starting.

	Trend screen is displayed. Up to 10 groups can be displayed.
	Setting parameter displayed in a tabular focrmat.
	Audit list displayed in a tabular format. Up to 10 groups can be displayed.
	Multiple windows are arranged vertically and displayed.
	Multiple windows are arranged horizontally and displayed.
	Other settings is displayed.
	Version information is displayed.
	Help is displayed.

5.Trend graph

It is the screen in which the acquired data is displayed as trend graph.

・ There are 3 types of trend displays viz. "horizontal trend, vertical trend and circular chart".
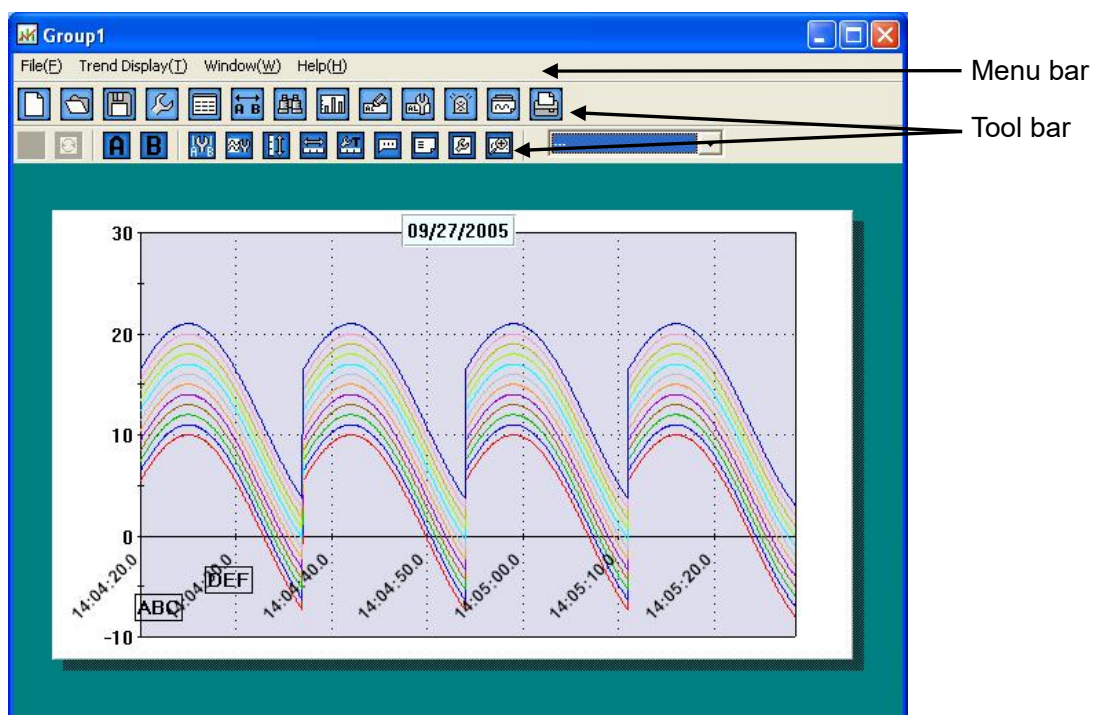Display is changed using the menu bar on the upper side of the screen.
("9. FAQ", "To change the Trend display.").

・ In case of horizontal/vertical trend, all data is displayed on 1 screen and time axis can be magnified
(Refer to Easy to use! Operation guide). Screen can be scrolled by using the scroll bar.

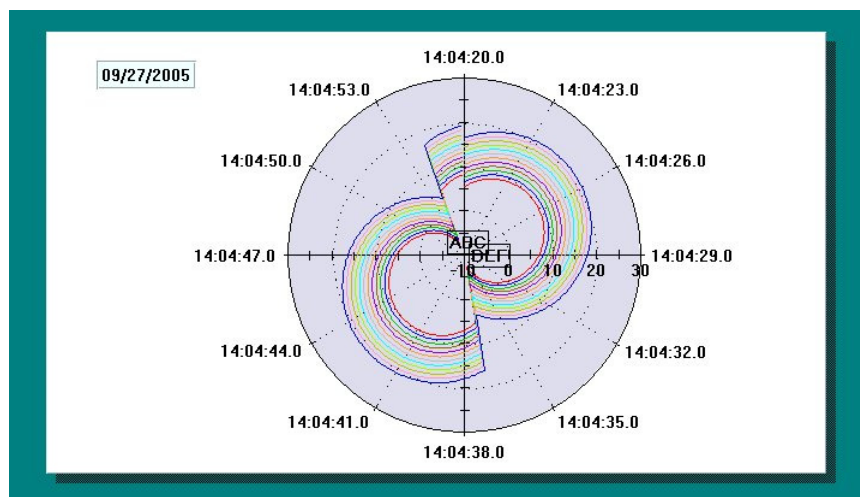・ In case of circular chart, data of 360 points (degrees) can be viewed in one lap.
Screen is updated using previous ◀◀ and next buttons ▶▶.

・ On doing various settings using the tool bar, various screens are displayed and data analysis can be
done.

<Horizontal trend>

Menu bar

Tool bar

<Circular chart>

— 12 —

Tool bar: Upper

|	
	Clears all the information (Initialization).
	File selection screen is displayed. Select the data that is to be analyzed.
	Registers the channel to be used. Subtraction operation and tag, units can also be registered.
	Data list is displayed. Data list of channel can be displayed, printed and file can be saved.
	Data of cursors A and B, and time are displayed. Time difference and data difference between cursors A and B; maximum, minimum and average value between cursors AB and all data is displayed, printed and saved.
	Displays the data of cursors A and B as bar graph. Display position, thickness and direction can be set.
	Details of the message are displayed and can be shown/hidden and moved.
	Shape, color and size of the point at which alarm activates can be set. Ignore when alarm is not displayed.
	Continuous replay is displayed and trend is continuously scrolled.
	Trend screen can be printed, output on clipboard or can be saved as a file.
	Audit List will be displayed. View the history of the equipment operation, can be printed.
	Alarm is displayed.
	File properties is displayed.

Tool bar: Below

|	
⬅	If time axis is magnified and performed, it returns to the previous step. * Not displayed in case of circular chart.
🔲	Returns time axis to default and displays 'all data' in 1 screen. * Not displayed in case of circular chart.
◀◀	Circular chart displays 360 points data in one lap. Returns to the pervious lap. * Displayed only in case of circular chart.
▶▶	Moves to the next lap. * Displayed only in case of circular chart.
🅰	If this button and then the trend screen are clicked, cursor A is set at the nearest position where it is clicked. On clicking it once again, the setting gets released, and even when trend screen is clicked, cursor is not set. (Cursor that is already set is not released.)
🅱	If this button and then the trend screen are clicked, cursor B is set at the nearest position where it is clicked. On clicking it once again, the setting gets released, and even when trend screen is clicked, cursor is not set. (Cursor that is already set is not released.)
AB	Cursor A, B can be viewed or hidden and color, line type etc. can be set.
XY	Line type, color, shape etc. of trend of each channel can be set.
I	Sets display of scale axis. Maximum/minimum value, scale display interval, logarithm display can be set. (Cannot set when multiplex scale.)
⬌	Performs settings of time axis. Period to be displayed on the screen can be entered. * Not displayed in case of circular chart.
T	Sets display of time axis. Time display interval, additional scale interval etc. can be set.
🔤	Title can be entered in the graph.
🗐	Legend display can be set.
🔧	Supplementary settings of graph are done. Back color, line type of auxiliary line, color, interval etc. can be set.
🔄	Graph can be magnified, reduced and rotated. (Cannot set when multiplex scale.)

5-1.File selection

- Select a file. (ZAILA-P handles following files.)

Extension	Description
KPF	Files created by KR2000/3000 series The file name is the "group name"_G1 (yyyymmddhhmmss-CH (3 digits) number ID (2 digits) + data format (1 digits)) + M + message count (3 digits) + A + Audit Trail count (4 digits) + L + Alarm summary count (4 digits). kpf is created in the form.

- File list is displayed on the upper side of 'File selection' screen.
- On selecting the file and clicking the select button, the selected file gets added in the file column on the lower side of the screen. If the acquisition period is same, multiple files can be selected.

Select	Selected file gets added in the file column on the lower side of the screen.
Undo	Selected file is deleted from the selected file column.
Read	Data of selected file is read.
Cancel	Cancellation is done.
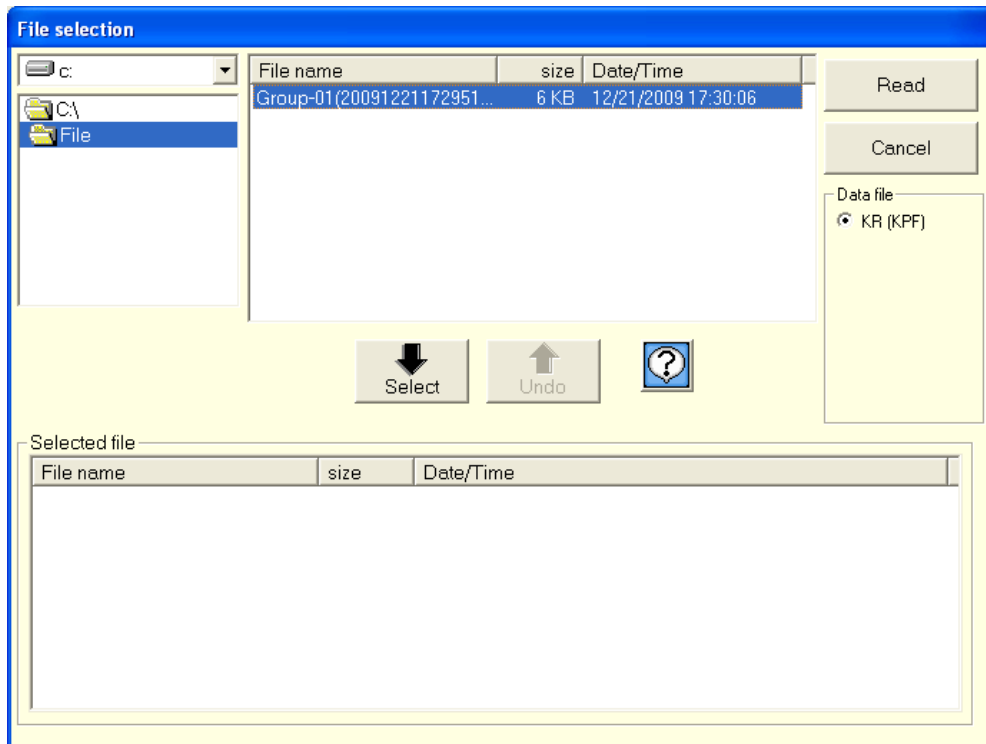
5-2.Data registration
 ・Registers the channel to be used.
 ・Subtraction operation can be registered.
 ・Tag, unit and exponential display can be registered.
 ・Registration is done automatically but in case of performing an operation registration is done
    manually.
"Operation method"
 Reference CH is registered in, A: Reference channel.
 Channel to be subtracted is registered in B.
 In case of subtracting a fixed value, input numeric value in, B: value to be subtracted.
 ・ Scale axis can be switched single mode or double mode or multiplex mode.

"Single mode"
 Data value of each channel is displayed in the same scale axis.

"Double mode"
 Data vale of each channel is displayed by scaling of the maximum/minimum scale value.
 *Cannot use logarithmic scale. *Cannot display standard deviation

"Multiplex mode"
 Display plural scales on a graph like a recorder.
 *Logarithm scale cannot be used.

CH	Show	A Ref. CH	-/+	B Sub. CH	B Subtract value	Scale Min value	Scale Max value	Scale D Pnt.	Tag	Unit	Exponent
No1	✔	No1	-	—	0	-13.80	13.80	2	No1		—
No2	✔	No2	-	—	0	-13.80	13.80	2	No2		—
No3	✔	No3	-	—	0	-13.80	13.80	2	No3		—
No4	✔	No4	-	—	0	-13.80	13.80	2	No4		—
No5	✔	No5	-	—	0	-13.80	13.80	2	No5		—
No6	✔	No6	-	—	0	-13.80	13.80	2	No6		—
No7	✔	No7	-	—	0	-13.80	13.80	2	No7		—
No8	✔	No8	-	—	0	-13.80	13.80	2	No8		—
No9	✔	No9	-	—	0	-13.80	13.80	2	No9		—
No10	✔	No10	-	—	0	-13.80	13.80	2	No10		—
No11	✔	No11	-	—	0	-13.80	13.80	2	No11		—
No12	✔	No12	-	—	0	-13.80	13.80	2	No12		—
No13	☐	—	-	—	0				CH13		—
No14	☐	—	-	—	0				CH14		—
No15	☐	—	-	—	0				CH15		—
No16	☐	—	-	—	0				CH16		—
No17	☐	—	-	—	0				CH17		—
No18	☐	—	-	—	0				CH18		—

5-3.Data list

- Data list is displayed in table format.
- The point at which alarm is activated is displayed in red.
- If the mouse is moved to that cell, details of the warning are displayed.
- Data list can be output as file.

Icon	Description
ALL	Displays all data as a list.
A B	Displays data between cursor A and B as list. Ignore when cursor A and B are not set.
(monitor)	Displays the period that is currently shown. *Not displayed in case of circular chart.
(wrench)	Print settings are done.
(printer)	Prints.
(disk)	Outputs the file. Formats like CSV and text format (Tab delimiter) can be selected.
(Excel)	Export to Excel. Auto-launch Excel, and display a graph. *Excel is necessary for display.
PDF	PDF output file. To print the "Adobe Acrobat 9" must have been installed.
(filter)	Extracted data display criteria. If you want to specify a time and extract, [**/**/**** *:**:**] Please specify in the form. Month / Day Hour: minute, please be sure to specify. Example 1. 14/10/2009 10:28:31 Example 2. 14/1 1:28
(search)	Select the row of data according to search criteria. If you want to specify a time and extract, [**/**/**** *:**:**] Please specify in the form. Month / Day Hour: minute, please be sure to specify. Example 1. 14/10/2009 10:28:31 Example 2. 14/1 1:28

5-4.Data between cursors
- Data of cursors A and B, and time are displayed. Time difference and data difference between cursors A and B; maximum, minimum, average, standard deviation, median value between cursors AB and all data is displayed as list, printed and saved.
- Cursors A and B can be moved. (As it is moved one by one, fine adjustment is possible.)
- Points in data of cursors A and B at which alarm is activated is displayed in red.
- If the data difference of cursor A and B (A-B) is minus, it is displayed in red.
- Calculation between cursors A and B is displayed on clicking 🖩
- On clicking auto calculation of menu bar to ON, the calculations are made for every change of cursor AB. *The larger the data the longer it takes for calculation.
- Operation result between all data and between cursors AB can be displayed in trend screen.

Icon	Description
[⬅A]	Move cursor A one step to the left.
[A➡]	Move cursor A one step to the right.
[⬅B]	Move cursor B one step to the left.
[B➡]	Move cursor B one step to the right.
[🖥]	In case of displaying computation calculation result of data as trend, register the color, line type etc. of trend.
[🖩]	Calculation of the computation between the cursors is made. *Ignore when cursors A and B are not set.
[🔧]	Do the print settings.
[🔍]	Print preview is displayed.
[🖨]	Prints.
[💾]	Outputs the file.

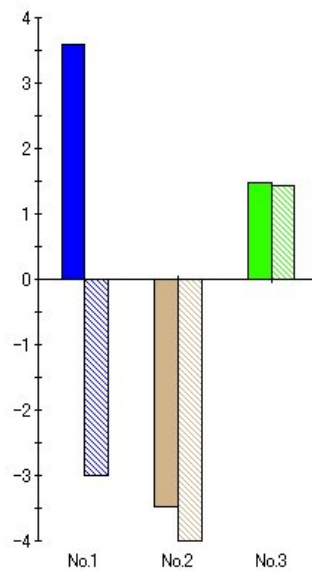|	Cursor A	Cursor B	A-B	All Data Max value	All Data Min value	All Data Average	All Data Standard deviation
Day/Time	09/27/2005 14:04:26	09/27/2005 14:04:33	0:0:6.7				
No1	9.53	-0.75	10.28	9.99	-8.04	4.366851311	5.5073504696 6
No2	10.53	0.25	10.28	10.99	-7.04	5.366851311	5.5073504696 7
No3	11.53	1.25	10.28	11.99	-6.04	6.366851311	5.5073504696 8
No4	12.53	2.25	10.28	12.99	-5.04	7.366851311	5.5073504696 9
No5	13.53	3.25	10.28	13.99	-4.04	8.366851311	5.5073504696
No6	14.53	4.25	10.28	14.99	-3.04	9.366851311	5.5073504696
No7	15.53	5.25	10.28	15.99	-2.04	10.3668513	5.5073504696
No8	16.53	6.25	10.28	16.99	-1.04	11.3668513	5.5073504696
No9	17.53	7.25	10.28	17.99	-0.04	12.3668513	5.5073504696

5-5.Bar graph

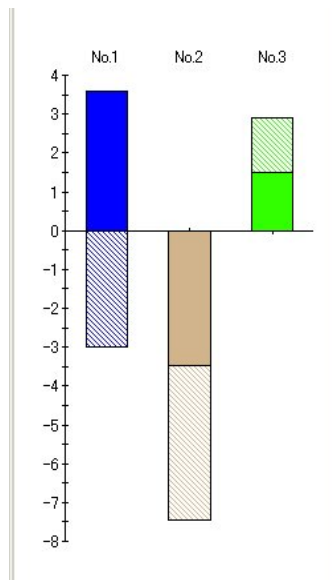Displays the data of cursors A and B as bar graph.

Graph type, display position, direction etc. can be set.

Graph	Selects between show/hide. In case of display, select the position of arrangement from one of 'above', 'below' 'left' and 'right'.
Chart type	It can be selected from bar graph, multilayer graph and Data. (Refer to figure below) Bar graph displays cursors A and B in adjacent manner.(left) In case of multilayer graph, cursors A and B are displayed as multilayered graph in 1 bar graph.(right) In case of Data, Data of cursors A and B, and time are displayed. Time difference and data difference between cursors A and B are displayed.
Direction	Direction of graph can be selected from "Horizontal direction/Vertical direction".
Overlap	Overlapping of graph can be set. *Ignore in case of multilayer graph.
Width	Width of the bar can be set.

Bar graph   Multilayer graph

5-6.Move message

Details of the message are displayed and can be shown/hidden and moved.

The selected message is displayed in red on the graph.

Show	Selection of show/hide of message. If checked, the message will be displayed.
Day/Time	The date and time of the message is displayed. It cannot be edited.
Message	Displays message. It cannot be edited.
Position	Displays the position of message. The position can be entered directly, but it can also be changed using the position adjustment arrow buttons.
Move	Adjust the position of the selected message. The displayed buttons change depending on the orientation of the graph.
Batch operation	[Show] All the display columns are checked and the messages are displayed. [Hide] All the display columns are unchecked and hide the messages.
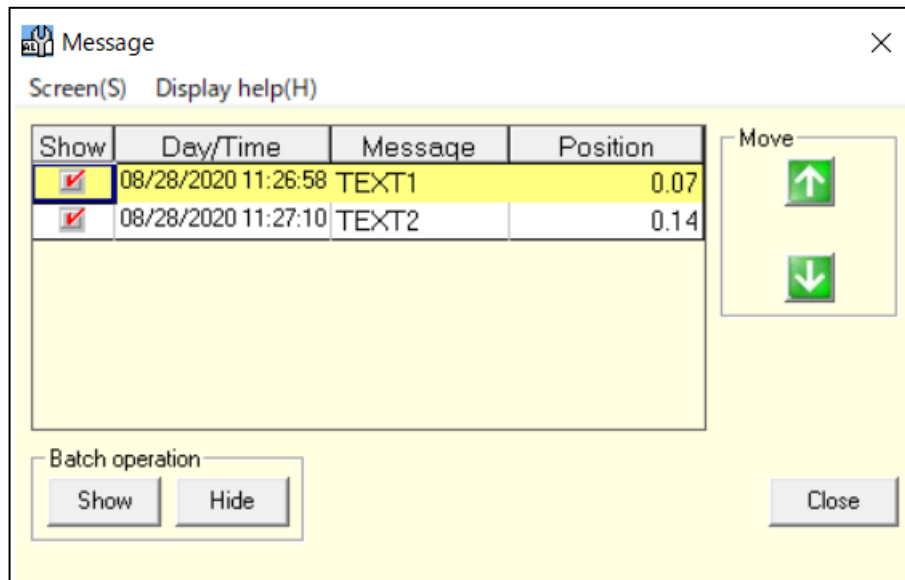
5-7.Alarm display

・Display on the trend graph, the points of every level at which warning appears.

・Shape, color, size etc. of each point at which alarm activates can be set.

・Ignore it although it is set, when alarm is not activated.

| Style	Select the style to be displayed for the point for which alarm activates. (Select from the list.)
Color	Select the color to be displayed for the point for which alarm activates. (Click and select.)
Size	Enter the size of the style. (Enter a numeric value.)
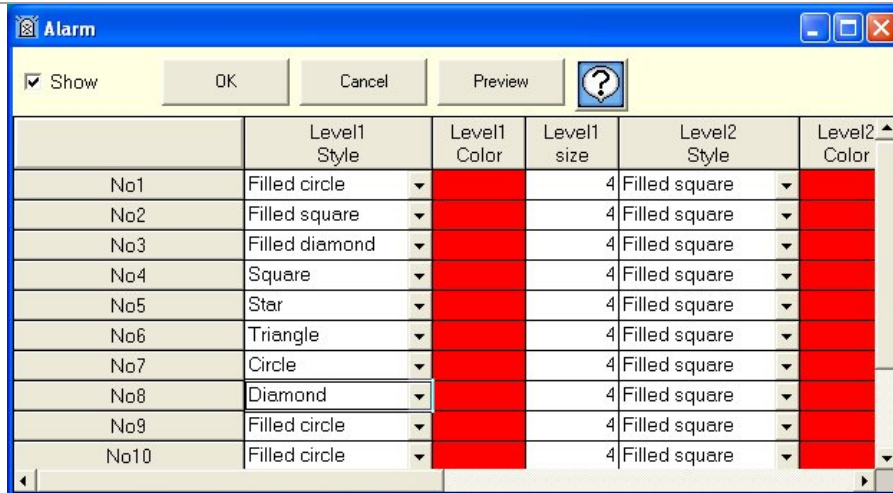
* If there are many points alarm occurs, it takes time to load.

1000 data points exceeds the   number   of alarms and then display the   following   warning   message and stops after the point of view.
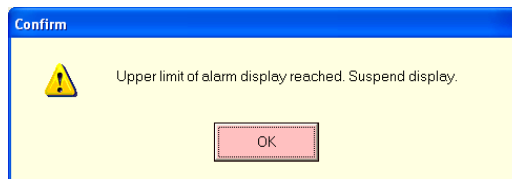
5-8.Continuous replay

Trend is continuously (automatically) scrolled. Scroll changes depending on the change in speed of scrolling and on, changing the updated data count.

● "Menu"

  When endless is selected as "Mode", if data is scrolled till the end, it returns to the beginning and starts scrolling. When endless is not selected, the scrolling stops when data is scrolled till the end.

● "Button"

 "Start" Starts scrolling

 "Stop" Pauses. Click 'Start' for restart.

 "Available" Reflects the current status in the trend graph.

● "Set"

  (1) Scrolling speed can be adjusted. The more it is moved to the right, the more the speed.

  (2) Scrolling ratio can be adjusted. The more it is moved to the right, the higher the ratio and the ratio of updating the screen in 1 scroll becomes higher.

  (3) Updated data count can be adjusted. It is the data count to be updated by scrolling once.

 (4) Screen data count can be adjusted. It is the data count to be displayed in 1 screen.

  * In case of circular chart only (1) is displayed.

  * In case of circular chart the data count displayed in 1 screen is 360 points.

5-9.Print screen

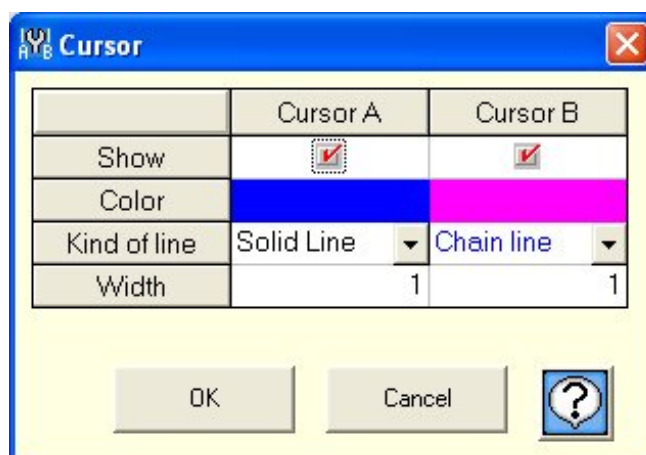Trend screen can be printed, output on clipboard or saved in a file.

		Prints.
		Outputs on clipboard. Selects one of trend graph and bar graph when both are displayed.
		Outputs to file in BMP and JPG format. Selects one of trend graph and bar graph when both are displayed.
		PDF output file. To print the "Adobe Acrobat 9" must have been installed.
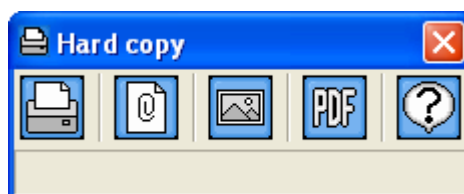
5-10.View cursors

Show/hide, color, kind of line etc. of cursor A, B can be set.

Show	Click and select show/hide.
Color	Select the color to be displayed.
Kind of line	Select 'Kind of line' to be displayed, from the list. It can be selected from "Solid line/dotted line/chain line".
Width	Enter a numeric value for line width of the cursor to be displayed. The larger the size the wider the cursor.

5-11.Trend line
Set the kind of line, color, shape etc. of trend of each channel.

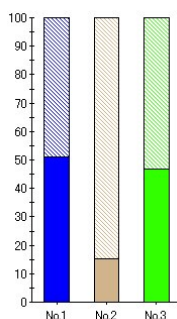|		
Chart type	Line	Displays by connecting by a line in between the data as shown in pen type recorder.
	Dot	Displays data by dots as shown in dotting recorder.
	Line + dot	Displays a combination of pen type and dotting type. Displays the data by dots and by connecting by a line in between the data.
Line color	Select the color of the line. * Ignore if dot is selected as graph type.	
Width	Enter the line width. The larger the size the thicker it is displayed. * Ignore if dot is selected as graph type.	
Kind of line	Select from the list the kind of line to be displayed. It can be selected from "Solid line/dotted line/chain line". * Ignore if dot is selected as graph type.	
Dot color	Select the color of dots. * Ignore if line is selected as graph type.	
Size	Enter the size of dot to be displayed. The larger the size the larger is the dot. * Ignore if line is selected as graph type.	
Shape	Select from the list the shape of the dot to be displayed. * Ignore if line is selected as graph type.	

| Tag	Chart type	Line color	Width	Kind of line	Dot color	size	Shape
No1	Line		1	Solid Line		7	Filled circle
No2	Dot		1	Dotted line		7	Star
No3	Line+Dot		1	Chain line		7	Filled square
No4	None		1	Dotted line		7	Square
No5	Line		1	Solid Line		7	Diamond
No6	Line		1	Solid Line		7	Circle
No7	Line		1	Solid Line		7	Triangle
No8	Line		1	Solid Line		7	None
No9	Line		1	Solid Line		7	Filled diamond
No10	Line		1	Solid Line		7	None
No11	Line		1	Solid Line		7	None
No12	Line		1	Solid Line		7	None

5-12.Set scale axis

Maximum value, minimum value, scale display interval, logarithm display etc. of scale can be displayed.

Scale	Set maximum value/minimum value of scale. "Optimization" Optimizes maximum/minimum value of scale automatically such that all the data is displayed. Normally this is used. "Manual" The value entered in maximum/minimum value of scale is reflected in scale. Use in case of magnifying and reducing.
Max value	Sets maximum value of scale. Ignore, as it is automatically adjusted in case of "Optimization".
Min value	Sets the minimum value of scale. Ignore, as it is automatically adjusted in case of "Optimization".
Scaling	Selects the interval to display the scale. Displays the value in specified interval. "Optimization" Optimizes the value to be displayed and displays it on scale axis. "Manual" Displays in scale axis, the value on label display interval.
Label display interval	Specifies the interval of displaying the value in scale axis. Ignore as it is automatically adjusted in case of "Optimization".
Label inclination	Specifies the numeric inclination of label that is displayed.(0-359°)
Additional scale interval	Specifies the interval of additional scale. Auxiliary line can be drawn in scale axis at specified interval. (Value is not displayed.) Ignore as it is automatically adjusted in case of "Optimization".
Logarithmic scale.	On keeping the check ON, logarithmic scale is displayed. * Displayed only on the single mode.
Rotate the axis.	Rotate the top and the bottom of the scale axis.
100% overlapping	All the graphs are of same height and are adjusted such that the total of cursors AB is 100%. (Displayed only when multilayer graph is selected in graph type.)
Cross point with time axis	Selects the cross point with time axis. *Not displayed in circular chart. | 0	Cross point of time axis and scale axis at 0.
Minimum value	Cross point of time axis and scale axis at minimum value.
Maximum value	Cross point of time axis and scale axis at maximum value.	

Left:100％ overlapping   Right: Multilayer (Not 100% overlapping)
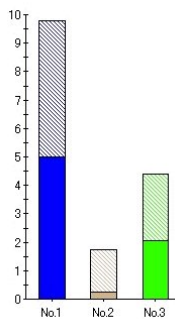
5-13.Set time axis

　　Period to be displayed in 1 screen can be entered.

　　There are 2 methods viz. 'Specify hours' method that displays the data from 'Beginning Date/Time' to a 'Specific period' in 1 screen; and 'Specify range' method that displays the data of specified period in 1 screen. Thus time axis can be changed as per the requirement.

* If the entered duration is much smaller than the acquisition cycle; and if the period is very long, an error message is displayed and duration cannot be displayed.

(Not displayed in case of circular chart.)

Specify hours	Displays in 1 screen the data from 'Beginning Date/Time' to the 'Specific period'.
Specify range	Displays in 1 screen the data of specified period.

5-14.Set time display interval

Sets time display interval, additional scale interval etc.

Time interval	"Automatic" Displays time interval which is optimum. Normally this is easy to understand. If the time axis is magnified / reduced, it is changed to the interval that is most easy to understand. "Data" Displays time in the data interval that is specified. Even when time axis is magnified / reduced, display interval does not change.
Additional scale interval	"None" Additional scale is not displayed. "Data" Displays additional scale in the data interval that is specified. If time display interval is "Automatic", it cannot be selected.
Option display	Set time display. Display font, character color and inclination can be set. If small intervals of display are overlapping, incline the characters.

5-15.Title

Displays title in graph and axis.

What the graph and axis explains becomes clear when title is inserted.

"Header/Footer" Title can be entered in header and footer of the graph.

Style	"None" Display the title without enclosing it in a frame.
	"Plane" Displays the title by enclosing it in a frame.
	"Cubic" Displays the title by enclosing it in a cubic frame.
Width	Sets the frame width. Ignore in case of "None".
Back color	Sets the back color of title.
Character color	Sets the character color of the title.

"Time axis" Title can be entered in time axis.

* It cannot be set in case of circular chart.

* Items displayed in gray cannot be changed.

| Title | Characters are entered. Font can also be set. |
| Inclination | Inclination of display characters is selected from the list. |

"Scale axis" Title can be entered in scale axis.

* It cannot be set in case of circular chart.

* Items displayed in gray cannot be changed.

| Title | Characters are entered. Font can also be set. |
| Inclination | Inclination of display characters is selected from the list. |

5-16.Legend
Legend display can be set.

Show	Selection of show/hide of Legend display.
Style	Sets the style for the Legend display.
Position	Position to be displayed of the Legend can be selected in list.
Direction	Direction of Legend can be displayed in list.
Frame	Frame enclosing the Legend can be displayed in list.
Back color	Back color of Legend can be selected.
Character	Character color of Legend can be selected.
Title	Title for Legend can be displayed.
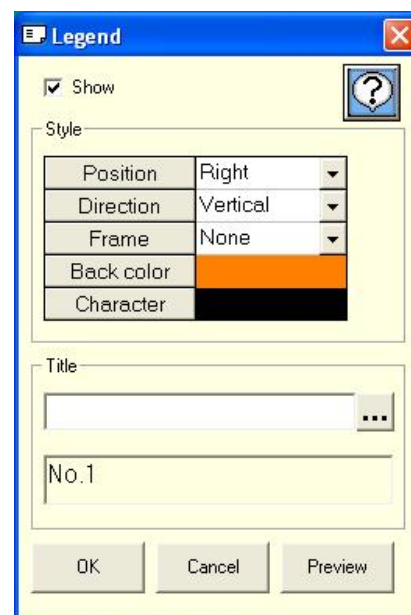
5-17.Supplementary settings
Executes the supplementary settings for graph. Back color, types of supplementary line, color and interval can be set.

<Color> Display color of graph is set.

Graph background	Back color of graph can be selected.
Graph frames	Color of graph frame can be selected.
Time axis	Color of time axis can be selected.
Scale axis	Color of scale axis can be selected.
Entire	Back color of entire can be selected.

<Wall paper> Wall paper at the background of graph can be displayed.

Wall paper	When 'Use' is selected, select the image (BMP or WMF format) to be used for the wall paper.
Position	When "Stretch" is displayed, the image gets enlarged and is displayed on the screen. When "Center" is selected, image is displayed at the center of the screen. When "Tile stile" is selected, image is displayed in tile pattern.

<Auxiliary line> Auxiliary line can be displayed in graph.
<Time axis>

Match with display	Displays the auxiliary line for the period specified in time display period.
Kind of line	Kind of line for auxiliary line can be selected.
Color	Color of the auxiliary line can be selected.
Width	Width of the auxiliary line can be selected. Larger the width larger will be its thickness.
Display period	Display period of auxiliary line can be entered. *It is disabled in case of "Match with display".
Front	Select whether to display the auxiliary line at the front of the graph.

<Scale axis>

Optimization	Displays the auxiliary line for the period specified in scale axis display period.
Kind of line	Kind of line for the auxiliary line can be selected in list.
Color	Color of auxiliary line can be selected.
Width	Width of auxiliary line can be entered. Larger the width larger will be its thickness.
Display period	Display period of the auxiliary line can be entered. It is disabled in case of "Optimization".
Front	Whether to display the auxiliary line at the front of graph.
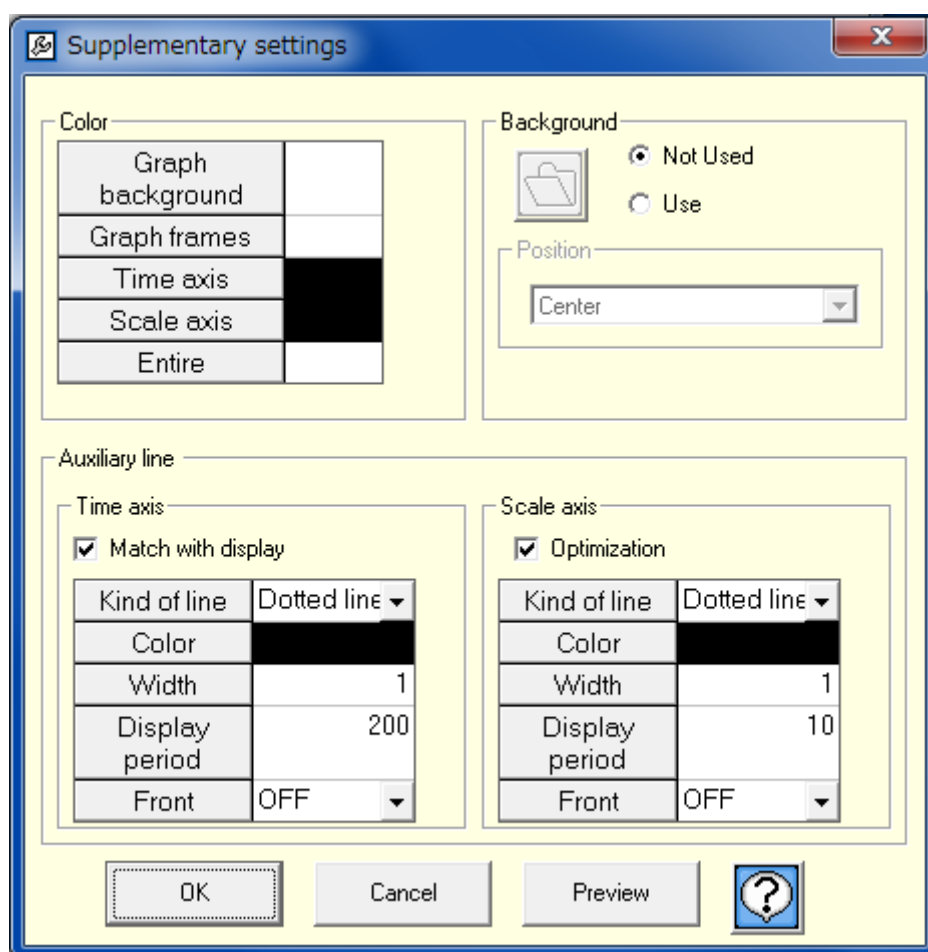
5-18.Magnify/Reduce/Rotate

  Graph can be moved/magnified/reduced/zoomed/rotated with the help of interactive operations using mouse.

Move	Graph can be moved.
Magnify/Reduce	Graph can be magnified / reduced.
Partially magnify	Graph can be magnified by specifying the range. (Frame is displayed.)
Rotation	Set the depth and on rotating the graph is displayed as 3D as though it is seen from some angle. *Cannot be selected in circular chart.

5-19.Multiplex scale axis setting

・Set multiplex scale axis.

Low limit	Enter lower limit of scale.
High limit	Enter upper limit of scale.
Division	Enter the number of divisions on scale.
Subdivision	Enter the number of subdivisions on scale.
Scale display	Select scales to be set as multiplex scale. Up to 4 items can be selected.
Save the setting (applied to next replay)	Checking here enables the setting in this screen for the next time when the file is opened.

Multiplex scale axis setting

OK   ☑ Save the setting (applied to next replay)

Scale	Low limit	High limit	Division	Subdivision	Scale display
No.1	-13.80	13.80	4	5	☑
No.2	-13.80	13.80	4	5	☑
No.3	-13.80	13.80	4	5	☑
No.4	-13.80	13.80	4	5	☑
No.5	-13.80	13.80	4	5	☐
No.6	-13.80	13.80	4	5	☐
No.7	-13.80	13.80	4	5	☐
No.8	-13.80	13.80	4	5	☐
No.9	-13.80	13.80	4	5	☐
No.10	-13.80	13.80	4	5	☐
No.11	-13.80	13.80	4	5	☐
No.12	-13.80	13.80	4	5	☐
No.13			4	5	☐
No.14			4	5	☐
No.15			4	5	☐
No.16			4	5	☐
No.17			4	5	☐
No.18			4	5	☐

5-20.Audit lsit

Audit list displayed in a tabular format.

Selected row the double click, and dialog boxes for details.

🔧	Print settings are done.
🖨	Prints.
PDF	PDF output file. To print the "Adobe Acrobat 9" must have been installed.
📋	Extracted data display criteria. If you want to specify a time and extract, [**/**/**** *:**:**] Please specify in the form. Month / Day Hour: minute, please be sure to specify. Example 1. 14/10/2009 10:28:31 Example 2. 14/1 1:28
🔍	Select the row of data according to search criteria. If you want to specify a time and extract, [**/**/**** *:**:**] Please specify in the form. Month / Day Hour: minute, please be sure to specify. Example 1. 14/10/2009 10:28:31 Example 2. 14/1 1:28

Output to PDF file

	Day/Time	Contents	Executed by
1	12/21/2009 4:50:32 PM.	Pull out CF	Administrator012345678
2	12/21/2009 5:22:31 PM.	Insert CF	Administrator012345678
3	12/21/2009 5:23:47 PM.	Logout	Administrator012345678
4	12/21/2009 5:24:04 PM.	Login eror	User-01
5	12/21/2009 5:24:24 PM.	Login eror	User-01
6	12/21/2009 5:25:01 PM.	Login	User-01
7	12/21/2009 5:25:33 PM.	Password setting	Administrator012345678
8	12/21/2009 5:25:35 PM.	Logout	User-01
9	12/21/2009 5:25:42 PM.	Login eror	Administrator012345678
10	12/21/2009 5:26:15 PM.	Login	Administrator012345678
11	12/21/2009 5:26:51 PM.	Logout	Administrator012345678
12	12/21/2009 5:26:59 PM.	Login	User-01
13	12/21/2009 5:28:24 PM.	Sign	User-01
14	12/21/2009 5:29:24 PM.	File copy (to USB)	User-01
15	12/21/2009 5:29:35 PM.	File copy (to USB)	User-01

<Details>

Audit info	
Date	12/21/2009 17:25:33.0
Contents	Password setting
Name	Administrator012345678

5-21.Alarm summary

Alarm summary displayed in a tabular format.

🔧	Print settings are done.
🖨	Prints.
PDF	PDF output file. To print the "Adobe Acrobat 9" must have been installed.
📑	Extracted data display criteria. If you want to specify a time and extract, [**/**/**** *:**:**] Please specify in the form. Month / Day Hour: minute, please be sure to specify. Example 1. 14/10/2009 10:28:31 Example 2. 14/1 1:28
🔍	Select the row of data according to search criteria. If you want to specify a time and extract, [**/**/**** *:**:**] Please specify in the form. Month / Day Hour: minute, please be sure to specify. Example 1. 14/10/2009 10:28:31 Example 2. 14/1 1:28

Alarm summary

	Occurred	Recovered	Channel	Type
1	12/21/2009 16:49:19.0	12/21/2009 16:50:53.0	CH 1	AL2 Low limit
2	12/21/2009 16:50:53.0	12/21/2009 16:51:56.0	CH 1	AL1 High limit
3	12/21/2009 16:51:56.0	12/21/2009 16:53:30.0	CH 1	AL2 Low limit
4	12/21/2009 16:53:30.0	12/21/2009 16:54:33.0	CH 1	AL1 High limit
5	12/21/2009 16:54:33.0	12/21/2009 16:56:07.0	CH 1	AL2 Low limit
6	12/21/2009 16:56:07.0	12/21/2009 16:57:10.0	CH 1	AL1 High limit
7	12/21/2009 16:57:10.0	12/21/2009 16:58:44.0	CH 1	AL2 Low limit
8	12/21/2009 16:58:44.0	12/21/2009 16:59:47.0	CH 1	AL1 High limit
9	12/21/2009 16:59:47.0	12/21/2009 17:01:21.0	CH 1	AL2 Low limit
10	12/21/2009 17:01:21.0	12/21/2009 17:02:24.0	CH 1	AL1 High limit
11	12/21/2009 17:02:24.0	12/21/2009 17:03:58.0	CH 1	AL2 Low limit
12	12/21/2009 17:03:58.0	12/21/2009 17:05:01.0	CH 1	AL1 High limit
13	12/21/2009 17:05:01.0	12/21/2009 17:06:35.0	CH 1	AL2 Low limit
14	12/21/2009 17:06:35.0	12/21/2009 17:07:38.0	CH 1	AL1 High limit
15	12/21/2009 17:07:38.0	12/21/2009 17:09:12.0	CH 1	AL2 Low limit

5-22.File property

Data file displayed in a tabular format.

Selected row the double click, and dialog boxes for details.

🖨	Prints.
PDF	PDF output file. To print the "Adobe Acrobat 9" must have been installed.

<Details>

6.Setting parameter list
Setting parameter displayed in a tabular format.

📁	File select dialog is displayed. Select the setting file.
🔍	Print preview is displayed.
🖨	Prints.

CH1Parameter

Input Kind	10V			Computation	No	arithmetic expression	
Range Min	-10.00	Range Max	10.00	Auto reset	OFF		
Min. Scales	-10.00	Max. Scales	10.00	DI reset	None		
Sensor correction	0.00	Tag		Standard time	00:00		
RJ	External	Unit	V	Interval	24:00		
Burn out	None			Instruments (Commu2)	----		
Filter level	SystemⅱSettings			CHNo.	1		

CH2Parameter

Input Kind	10V			Computation	No	arithmetic expression	
Range Min	-10.00	Range Max	10.00	Auto reset	OFF		
Min. Scales	-10.00	Max. Scales	10.00	DI reset	None		
Sensor correction	0.00	Tag		Standard time	00:00		
RJ	External	Unit	V	Interval	24:00		
Burn out	None			Instruments (Commu2)	----		
Filter level	SystemⅱSettings			CHNo.	2		

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7.Audit list
7-1.File selection
・ Select a file. (ZAILA-P handles following files.)

Extension	Description
KPA	Files created by KR2000/3000 series The file name is the audit_(yyyymmddhhmmss). kpa is created in the form.

7-2.Audit list

Audit list displayed in a tabular format.

Selected row the double click, and dialog boxes for details.

	Print settings are done.
	Prints.
	PDF output file. To print the "Adobe Acrobat 9" must have been installed.
	Extracted data display criteria. If you want to specify a time and extract, [**/**/**** *:**:**] Please specify in the form. Month / Day Hour: minute, please be sure to specify. Example 1. 14/10/2009 10:28:31 Example 2. 14/1 1:28
	Select the row of data according to search criteria. If you want to specify a time and extract, [**/**/**** *:**:**] Please specify in the form. Month / Day Hour: minute, please be sure to specify. Example 1. 14/10/2009 10:28:31 Example 2. 14/1 1:28
	File properties is displayed.

Audit list

	Day/Time	Contents	Executed by
1	12/21/2009 16:50:12	Pull out CF	Administrator012345678
2	12/21/2009 17:22:12	Insert CF	Administrator012345678
3	12/21/2009 17:23:12	Logout	Administrator012345678
4	12/21/2009 17:24:12	Login eror	User-01
5	12/21/2009 17:24:12	Login eror	User-01
6	12/21/2009 17:25:12	Login	User-01
7	12/21/2009 17:25:12	Password setting	Administrator012345678
8	12/21/2009 17:25:12	Logout	User-01
9	12/21/2009 17:25:12	Login eror	Administrator012345678
10	12/21/2009 17:26:12	Login	Administrator012345678
11	12/21/2009 17:26:12	Logout	Administrator012345678
12	12/21/2009 17:26:12	Login	User-01
13	12/21/2009 17:28:12	Sign	User-01
14	12/21/2009 17:29:12	File copy (to USB)	User-01
15	12/21/2009 17:29:12	File copy (to USB)	User-01

<Details>

Audit info

Date	12/21/2009 17:25:33.0
Contents	Password setting
Name	Administrator012345678

7-3.File property

Data file displayed in a tabular format.

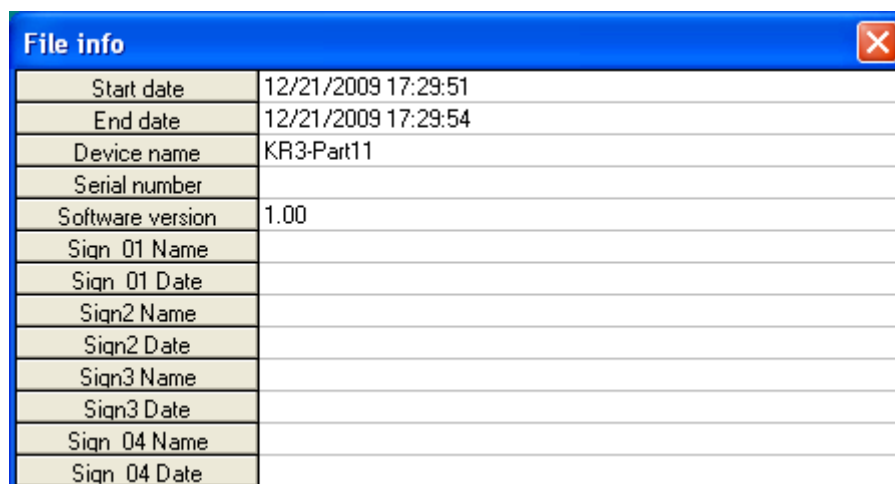Selected row the double click, and dialog boxes for details.

🖶	Prints.
PDF	PDF output file. To print the "Adobe Acrobat 9" must have been installed.

File property

	File name	Start date	End date
1	Group-01(20091221172951-056030)M000A0020L0031.kp	12/21/2009 17:29:51	12/21/2009 17:29:54

<Details>
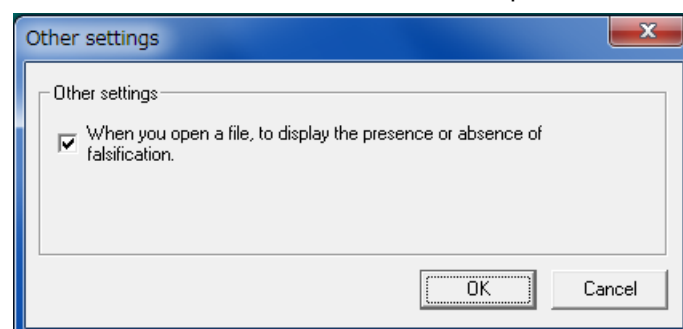
File info

Start date	12/21/2009 17:29:51
End date	12/21/2009 17:29:54
Device name	KR3-Part11
Serial number	
Software version	1.00
Sign 01 Name	
Sign 01 Date	
Sign2 Name	
Sign2 Date	
Sign3 Name	
Sign3 Date	
Sign 04 Name	
Sign 04 Date	

8.Other settings

Other settings is displayed.

Check to display the presence or absence of falsification when the file is opened.

Other settings

Other settings

☑ When you open a file, to display the presence or absence of falsification.

OK   Cancel

9.FAQ

1. Please refer to the frequently asked questions and answers listed below.

Q	Question
1	To change the time axis.
2	To maximize the graph by changing the scale.
3	To display several scale axes on one graph.
4	To change the Trend display.
5	To convert the data to CSV. (To be used in software's such as Excel etc.)
6	To display a cursor in the graph and to display the data of that point.
7	To display only 1 channel as it is difficult to understand, if a number of channels are displayed in 1 screen.
8	To enter the title on the graph.
9	To Editing restrictions wish to output PDF files.

To change the time axis.

In case of horizontal/vertical trend graph

There are 2 methods; (1) Magnification of time axis by using mouse and (2) Specify the range of time axis by using keyboard.

※ In case of circular chart, display is fixed to 360 points in one lap.

(1)Magnification of time axis by using mouse

Drag (move the mouse) keeping the left button of the mouse pressed (starting point is fixed) from the point that is to be magnified and release the button on the point (end point is fixed), up to which it is to be magnified. (The range in black color that is rotating is magnified)
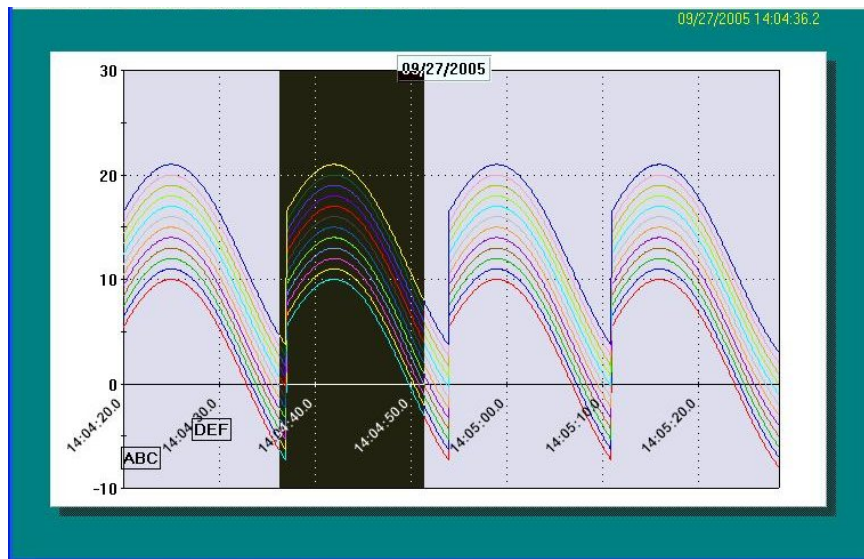
(2)Specify the range of time axis by using keyboard

Following screen is opened on clicking the time axis button on the tool bar.

After entering the time axis, when OK button is clicked, specified range is displayed, if there is no error in the input contents.

To maximize the graph by changing the scale.

In case of horizontal/vertical trend of trend graph

There are 2 methods; (1) Change of scale by using the mouse and (2) Change of scale by using the keyboard.

  *In case of circular chart, scale can be changed only by using the keyboard (2).
  *It is also possible to magnify the graph without changing the scale.
  (1)Change of scale by using mouse
  Drag (move the mouse) keeping the left button of the mouse pressed (starting point is fixed) from the point that is to be magnified and release the button on the point (end point is fixed), up to which it is to be magnified. (The range in black color that is rotating is magnified)
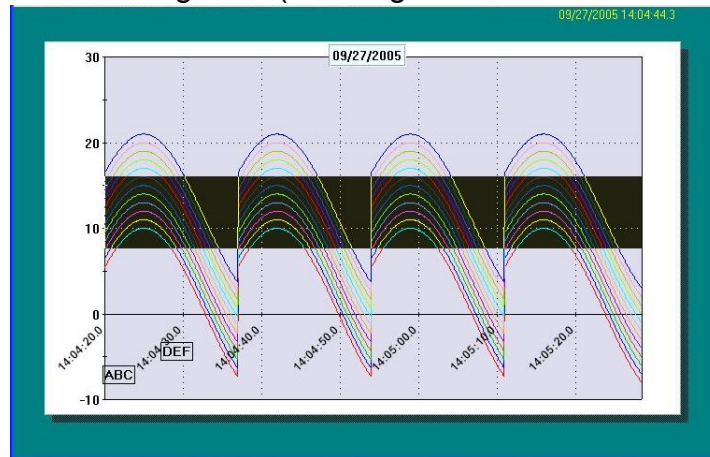
(2)Specify the range of scale by using keyboard

Click the scale axis button [II] on the tool bar and open the following screen.

After entering the maximum and minimum value of scale, when OK button is clicked, specified range is displayed, if there is no error in the input contents.

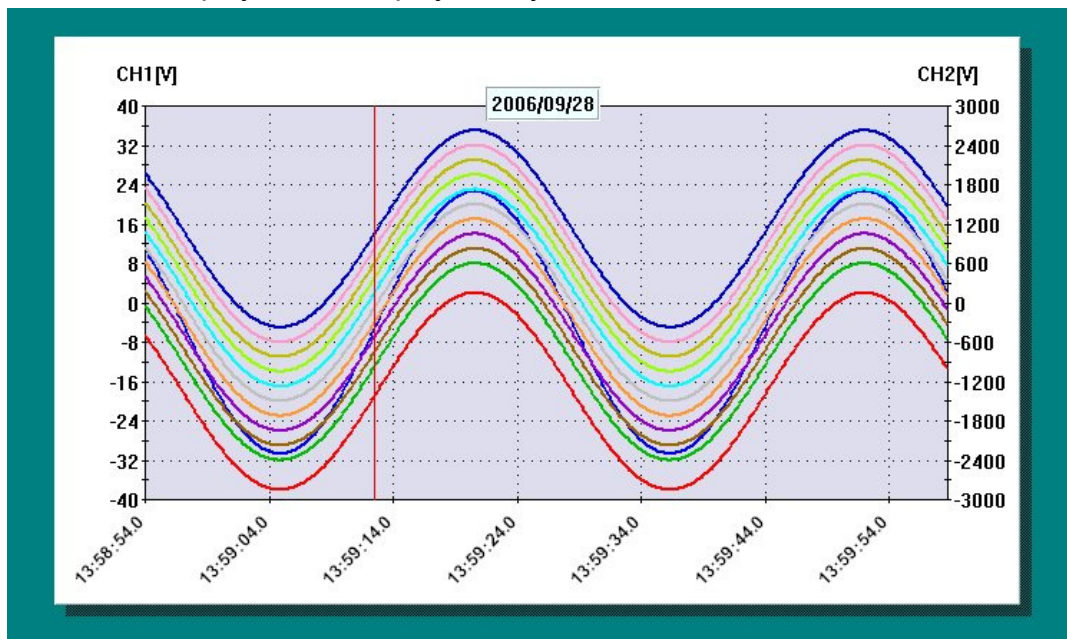To display several scale axes on one graph.

Axis scale "Double" two, "Multiplex" can be viewed in four.
"Show method of double"

Click ⟨icon⟩ of the tool bar. Switch to the [Double].

Change the scale maximum and minimum value is possible.
2 scale axes are displayed.　　*Displayed only one in circular chart.

Click ⟨icon⟩ of the tool bar when switching the display channel on scale axis.

Click and register the displaying channel (Possible to register in the left and right one by one).

"Show method of multiplex"

Click ![wrench icon] of the tool bar. Switch to the [Multiplex].

Change the scale maximum and minimum value is possible.
Displays up to four axis scales.　　*Displayed only one in circular chart.
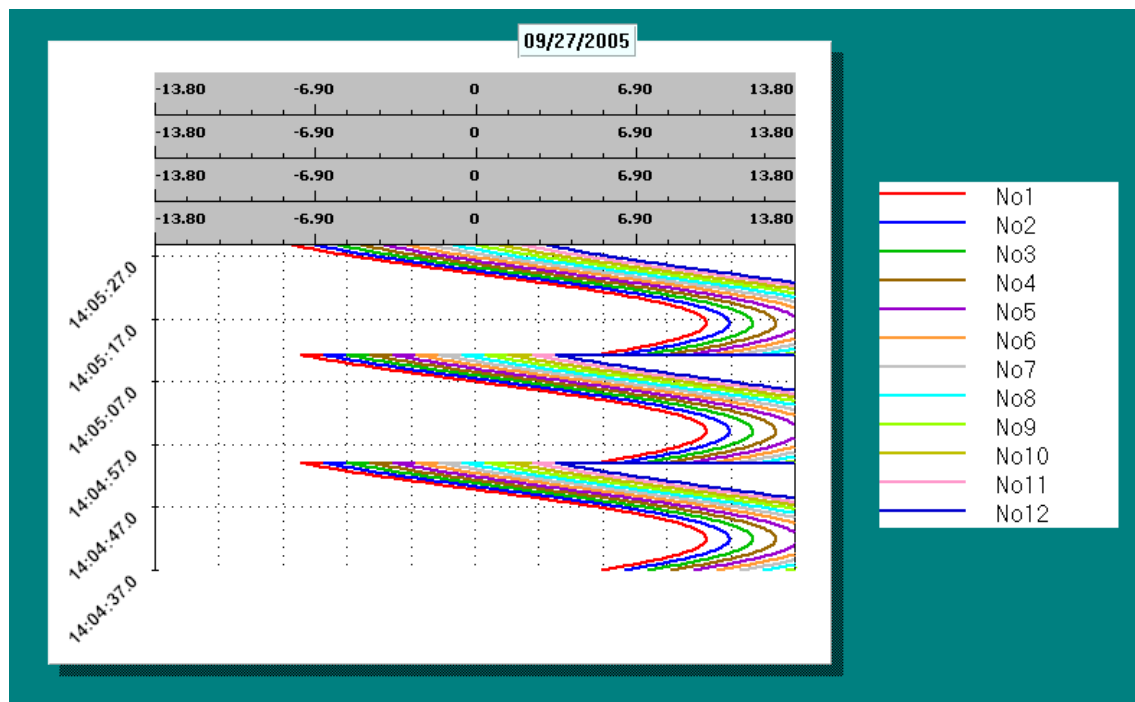
To switch the channel to display the scale axis,
Perform multi-scale axis configuration screen.

Scale	Low limit	High limit	Division	Subdivision	Scale display
No.1	-13.80	13.80	4	5	✔
No.2	-13.80	13.80	4	5	✔
No.3	-13.80	13.80	4	5	✔
No.4	-13.80	13.80	4	5	✔
No.5	-13.80	13.80	4	5	
No.6	-13.80	13.80	4	5	
No.7	-13.80	13.80	4	5	
No.8	-13.80	13.80	4	5	
No.9	-13.80	13.80	4	5	
No.10	-13.80	13.80	4	5	
No.11	-13.80	13.80	4	5	
No.12	-13.80	13.80	4	5	
No.13			4	5	
No.14			4	5	
No.15			4	5	
No.16			4	5	
No.17			4	5	
No.18			4	5	

Multiplex scale axis setting

OK　　　☑ Save the setting (applied to next replay)

Q To change the Trend.

A "Horizontal, Vertical, and Circular Chart" are the 3 types included in 'Trend'
Any of these types can be changed from the status bar.
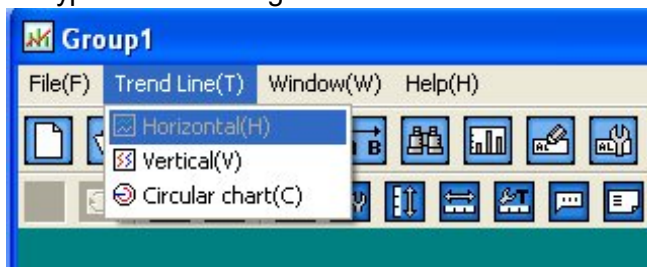
Q To convert the data to CSV (or to print the data.).

A Open data list [icon] for converting the data to CSV.

"Convert to CSV"

Data can be saved in the file on clicking the 'Floppy' icon[icon].
Data can also be converted to Text format (Tab delimiter) other than CSV format.

"Print"

Prints on clicking the 'Printer' icon[icon].

To display a cursor in the graph and to display the data of that point.

2 cursors can be displayed. Here,
These cursors are called as Cursor A and Cursor B.

Click the Cursor **A** and **B** button. If clicked on Trend screen, Cursor A and Cursor B are placed on the nearest point from the clicked position.

Detailed information of the cursor is displayed on clicking [A B] on the tool bar.
Data deviation or maximum, minimum, average value between the cursors is displayed.

	Cursor A	Cursor B	A-B	All Data Max value	All Data Min value	All Data Average	All Data Standard deviation
Day/Time	09/27/2005 14:04:24.3	09/27/2005 14:04:33.6	0:0:9.3				
No1	9.91	-1.54	11.45	9.99	-8.04	4.36685131195335	5.507350469634
No2	10.91	-0.54	11.45	10.99	-7.04	5.36685131195335	5.507350469634
No3	11.91	0.46	11.45	11.99	-6.04	6.36685131195335	5.507350469634
No4	12.91	1.46	11.45	12.99	-5.04	7.36685131195335	5.507350469634
No5	13.91	2.46	11.45	13.99	-4.04	8.36685131195335	5.507350469634
No6	14.91	3.46	11.45	14.99	-3.04	9.36685131195335	5.507350469634
No7	15.91	4.46	11.45	15.99	-2.04	10.3668513119534	5.507350469634
No8	16.91	5.46	11.45	16.99	-1.04	11.3668513119534	5.507350469634
No9	17.91	6.46	11.45	17.99	-0.04	12.3668513119534	5.507350469634
No10	18.91	7.46	11.45	18.99	0.96	13.3668513119534	5.507350469634

Moreover, Cursor A and B can be displayed in bar graph.

Click [📊] on the tool bar.

Displays the graph and on selecting the position to be displayed, bar graph is displayed.

<Bar graph>
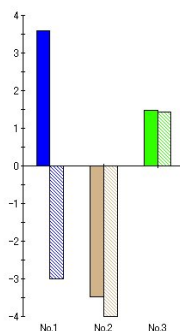In the same channel, left is the Cursor A value and right is the Cursor B value.

To display only 1 channel.
(Only 1 channel is displayed, as it is difficult to understand when multiple channels are displayed on 1 screen.)

Includes 'Method to select 1 channel' and 'Method to delete the registered channel'.
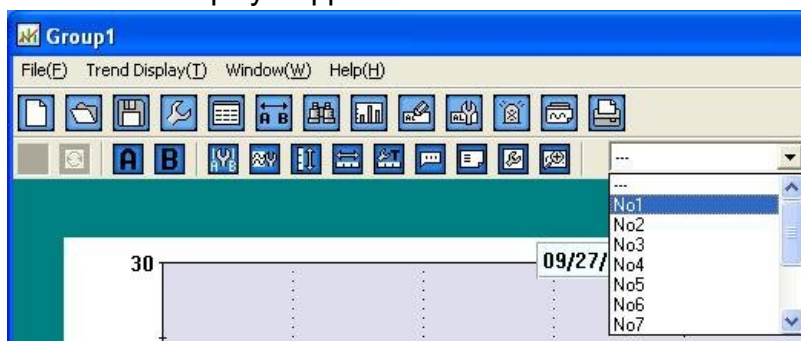
"Selection method"

Displays only the channel selected from the list as shown in the following screen.
(Scale is also automatically changed)
When there are multiple channels on 1 screen and it is difficult to view,
It can be displayed by switching over.
Returns to 'All channel' display if uppermost list "----"is selected.

"Method to delete the registered channel"

In case of multiple registrations, if only 1 channel is registered, only that channel is displayed. Only one channel is displayed on 1 screen. Multiple channels cannot be displayed by switching. Click 'Register channel' [icon] on the tool bar.

Selecting "---" (none) for Ref. CH or clearing check box in the below figure will delete a registration.
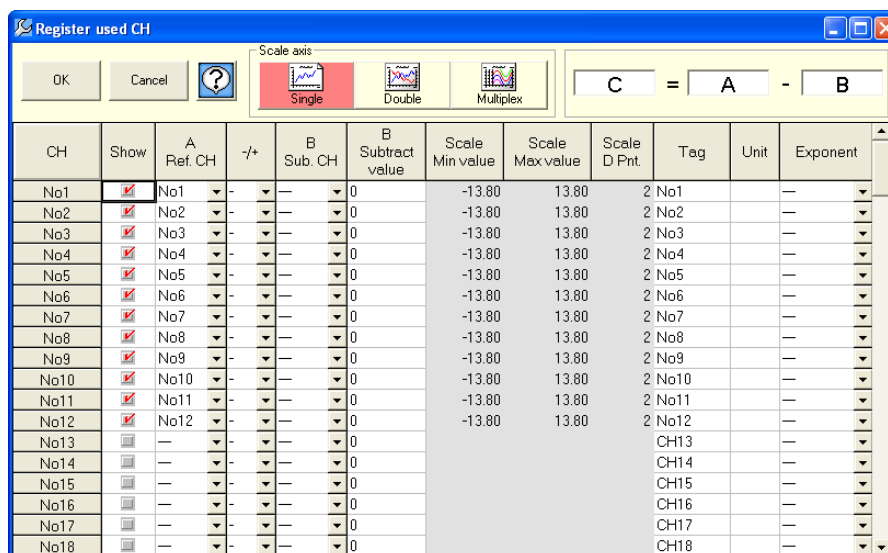
To insert the title in the graph.
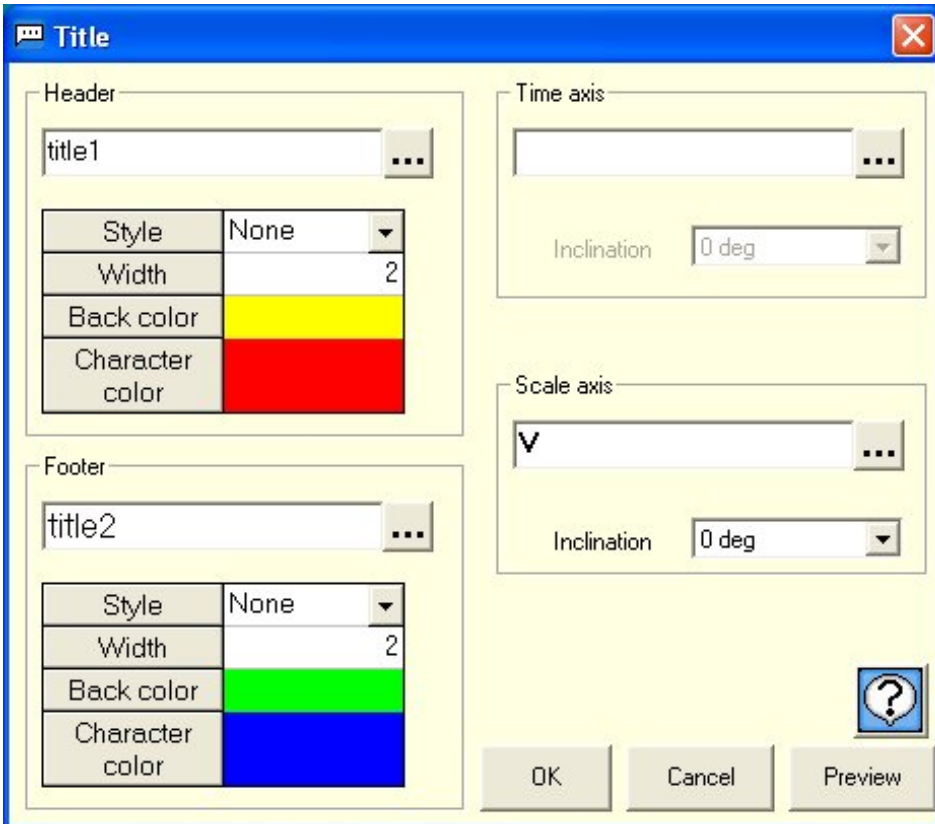

Click title on the tool bar.

Enter the title in the following screen.
Header and footer are displayed at the top and bottom of the screen.

Title can be entered even for time axis and scale axis.
(It is excluded in case of circular chart)
    * What the graph and axis explains becomes clear when title is inserted.
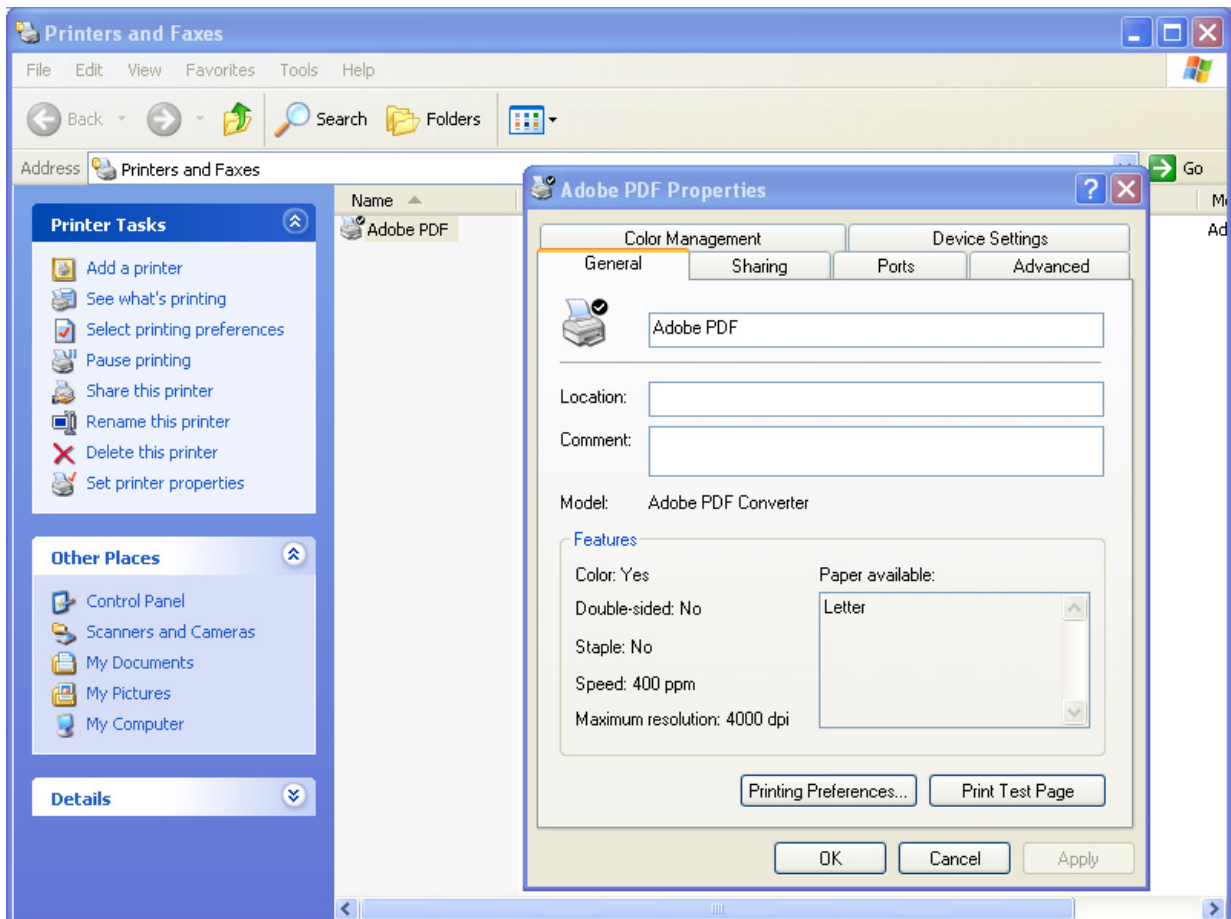
To Editing restrictions wish to output PDF files.
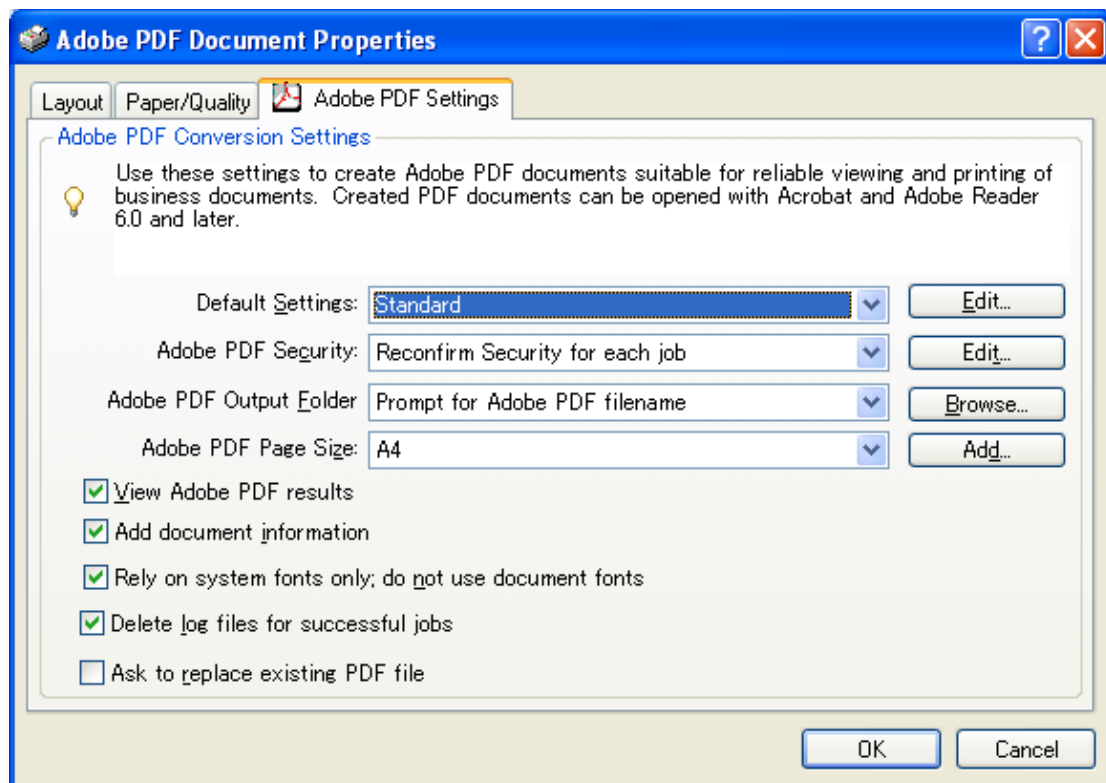
PDF by changing the settings files to create a virtual printer, you can put a limit to edit.
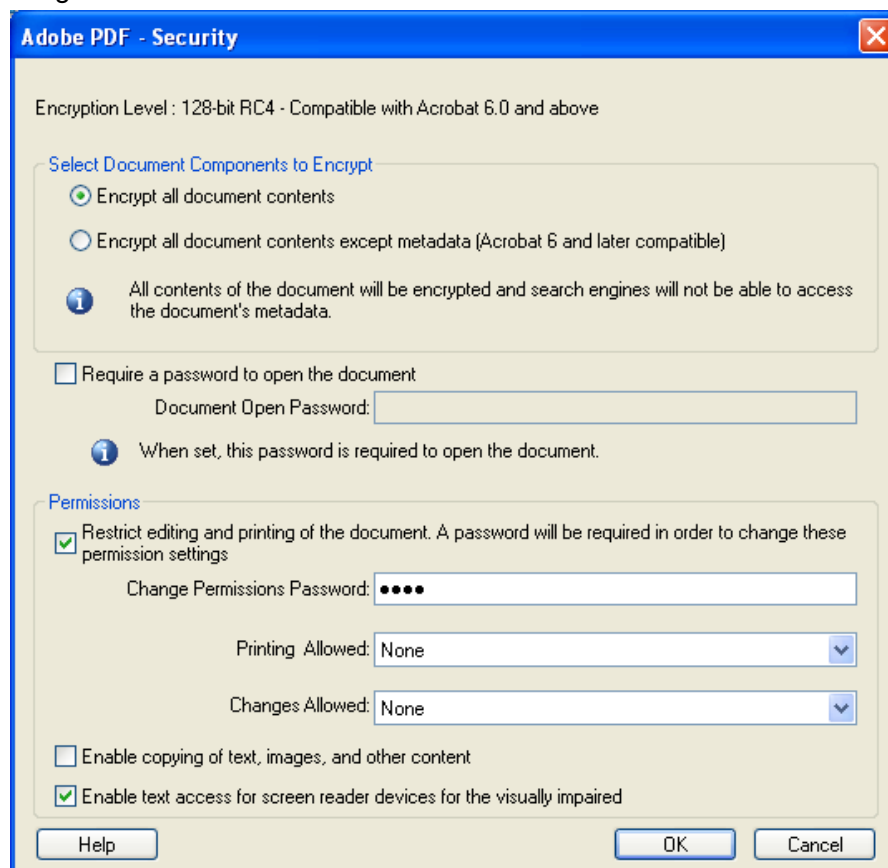
< Setting method >

1. Windows "Printers and Faxes" from the "Adobe PDF", and then right-click menu "Adobe PDF Properties" is displayed

2. Click the Settings button to print "Adobe PDF Document Properties" display, "Adobe PDF Security" to change the settings.

3. PDF output is performed to "Adobe PDF - Security" will be displayed. If you set the permissions will be subjected to editing restrictions.

CHINO