INE-333D
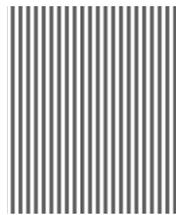
Data Acquisition Software Package

KIDS

▯▯▯INSTRUCTIONS

Thank you for your purchase of the data acquisition software KIDS.
For using this software correctly and safely, please read this instruction manual thoroughly before installing.

─────────────── **Notice** ───────────────

1. No part of this manual can be reproduced in any form without permission.
2. The contents of this manual may be altered without prior notice.
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 CHINO's sales agent.
4. CHINO is not responsible for any operation results of this software.

CHINO

ー CONTENTS ー

7. Data Replay 28

1.Outline

KIDS is a software package used to acquire data measured by CHINO's hybrid recorders, scanners, thyristor regulator and controllers.

1-1 Main functions and features

By connecting the following instruments and a personal computer via a communications interface, measured data are acquired and displayed on a computer screen. Up to 100 sets of instruments can be connected or up to 100 points of data can be managed.

MODBUS instruments ----- Data of the following instruments up to 31 sets can be acquired.

· Graphic recorder   BR series

· 180mm hybrid recorder   AH300 series

· 100mm hybrid recorder   AL3000 series

· Field scanner   SE3000 series (Range and scale can be changed.)

· Digital indicating controller   LT series

· Single phase Thyristor regulator JU series

· 3-phase thyristor regulator JW series

· Network logger KE3000 series (Range and scale can be changed.)

> **Caution:**   **Each instrument requires a communications interface (RS-232C, RS-422A or RS-485).**

Ethernet instruments ··· Data of the following instruments up to 100 sets can be acquired.

· Graphic recorder   BR series

· 180mm hybrid recorder   AH300 series

· 100mm hybrid recorder   AL3000 series

· Field scanner   SE3000 series

· Network logger   KE3000 series

> **Caution:**   **Each instrument requires an ETHERNET interface.**

MODBUS and Ethernet instruments can be mixed, and up to 100 sets of instruments can be connected.

● You can display acquired data in a table format or a trend format and can print them as a daily report.

● Acquired data can be converted into CSV format or text format.

● Data replay, Trend replay and Daily report printing can be done from data (data being stored into an FD or a memory card) acquired by graphic recorder BR.

● Data replay, Trend replay and Daily report printing can be done from data (data being stored into a memory card) acquired by network logger KE3000.

● Alarm information generated from instruments can be displayed as a list, stored in CSV format or text format, and printed.

● By using the DDE (Dynamic Data Exchange) function, you can transfer acquired data with real-time processing to other applications including Excel.

1-2 KIDS specifications

1-2-1 System Requirements

\<Hardware\>

CPU	Pentium II 300MHz or faster
Memory	At least 48MB (64MB recommended)
Disk drive	CD-ROM drive ： 1 drive or more (for installing KIDS) Hard disk drive ： 1 drive (at least 100MB of free space) or more
Communications port	● Connection with MODBUS instruments Either 1 port of the communication ports (COM1 to COM9) supported by Windows. ● Connection with Ethernet instruments LAN port (10base-T) which Windows is supporting.

\<Software\>

OS Windows98/Me

WindowsNT4.0/2000/XP Home/XP Pro

* For Windows NT4.0, Internet Explorer 4.0 or later version is required to display the Help Contents.

1-2-2 Communications specifications and number of connectable instruments

\<MODBUS\>

Interface	RS232C/RS422A/RS485 selectable RS232C --- 1 set of instrument can be connected. RS422A, RS485 --- Up to 31 sets of instruments can be connected.
Bit rate	9600bps/19200bps selectable
Protocol Character length Parity Stop 1 bit	RTU 8 bits None Fixed 1 bit

\<Ethernet\>

Port No. 1 to 65535 (Default value: 11111)

Up to 100 sets of instruments can be connected.

1-2-3 Number of loading data

Maximum 100 points of data

1-2-4 Data Acquisition Interval

1 second to 999 minutes 59 seconds

2. Installation and Uninstallation

2-1 Installing

By selecting English in the Menu window, the window shown below will appear.

Click [KIDS Installation].

Click → KIDS Installation

Read Me
KIDS Installation
KIDS Manual (PDF)
Acrobat Reader5 installation
EXIT

Follow the instructions in the windows shown below.

Select Installation Folder

The installer will install KIDS in the following folder.

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

Folder: C:\Program Files\KIDS\   Browse...

You can install the software on the following drives:

To install to a different folder, click [Browse].

Disk Cost...

Cancel   Previous   Next

Confirm Installation

The installer is ready to install KIDS on your computer.

Click "Next" to start the installation.

Click [Next] to start the installation.

Cancel   Previous   Next

Installation Complete

KIDS has been sucessfully installed.

Click "Close" to exit.

When you have a message asking you to restart your computer, follow the instructions.

Cancel   Previous   Close

2-2 Uninstalling

Click the Start button, point to Settings, and then click Control Panel.

Click

Click

Double-click Add/Remove Programs.

Add/Remove Programs Properties
Click [KIDS].

Welcome to the KIDS Setup Wizard

Select whether you want to repair or remove KIDS.

C Repair KIDS

C Remove KIDS

Select [Remove KIDS], and then click [Finish].

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.

In deleting all, please delete the folder of "KIDS" by Explorer etc.

※Please do not delete, when you uninstall by upgrade.

3. Operation

3-1 KIDS block diagram

<Data acquisition>

Setup window

- EXIT --- You can exit the program.
- Data Configuration
  - Instrument Registration --- You can register instruments that you want to connect and communications interfaces.
  - Data Settings --- You can customize data names and formats in the program. (up to 100 points)
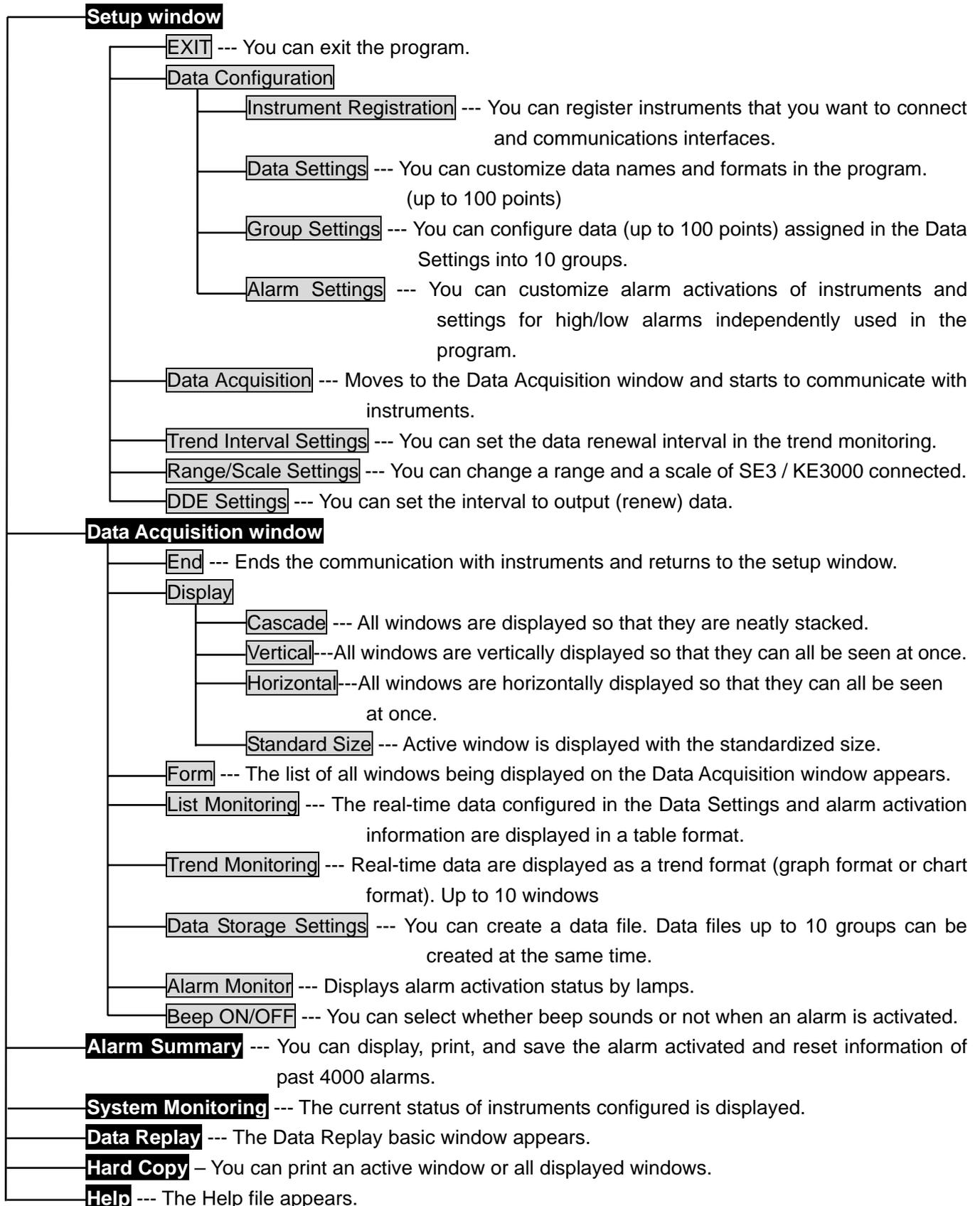 - Group Settings --- You can configure data (up to 100 points) assigned in the Data Settings into 10 groups.
  - Alarm Settings --- You can customize alarm activations of instruments and settings for high/low alarms independently used in the program.
- Data Acquisition --- Moves to the Data Acquisition window and starts to communicate with instruments.
- Trend Interval Settings --- You can set the data renewal interval in the trend monitoring.
- Range/Scale Settings --- You can change a range and a scale of SE3 / KE3000 connected.
- DDE Settings --- You can set the interval to output (renew) data.

Data Acquisition window

- End --- Ends the communication with instruments and returns to the setup window.
- Display
  - Cascade --- All windows are displayed so that they are neatly stacked.
  - Vertical ---All windows are vertically displayed so that they can all be seen at once.
  - Horizontal ---All windows are horizontally displayed so that they can all be seen at once.
  - Standard Size --- Active window is displayed with the standardized size.
- Form --- The list of all windows being displayed on the Data Acquisition window appears.
- List Monitoring --- The real-time data configured in the Data Settings and alarm activation information are displayed in a table format.
- Trend Monitoring --- Real-time data are displayed as a trend format (graph format or chart format). Up to 10 windows
- Data Storage Settings --- You can create a data file. Data files up to 10 groups can be created at the same time.
- Alarm Monitor --- Displays alarm activation status by lamps.
- Beep ON/OFF --- You can select whether beep sounds or not when an alarm is activated.

Alarm Summary --- You can display, print, and save the alarm activated and reset information of past 4000 alarms.

System Monitoring --- The current status of instruments configured is displayed.

Data Replay --- The Data Replay basic window appears.

Hard Copy – You can print an active window or all displayed windows.

Help --- The Help file appears.

<Data replay>

EXIT --- You can exit the program.

Display

Cascade --- All windows are displayed so that they are neatly stacked.

Vertical--- All windows are vertically displayed so that they can all be seen at once.

Horizontal --- All windows are horizontally displayed so that they can all be seen at once.

Standard Size --- Active window is displayed with the standardized size.

Form --- The list of all windows being displayed on the Data Replay basic window appears.

You can select a window to make active.

Historical Data Monitoring

File Selection --- You can select files to be displayed in the Historical Data Monitoring.

Multiple files can be selected.

Display Period Settings --- You can specify a display period within data acquisition period.

Data Selection --- You can select historical data to be displayed or not.

Print Settings --- You can print data in the display period specified.

Historical Trend Monitoring --- You can display historical data in a trend format (graph

format or chart format). Up to 10 groups can be displayed.

File Conversion --- You can convert a data file into a text or CSV format file.

Daily Report Printing --- You can create a daily report from a data file.

BR Data Conversion --- You can create a data file, an alarm file, a message file or a daily report file

for data stored in a floppy disk or a memory card installed in the BR.

KE3 File Conversion --- You can create a data file for data stored in a memory card installed in the

KE3000.

Hard Copy --- You can print an active window or all displayed windows.

Help --- The Help file appears.

3-2 Starting up

To start the program, click [Start] button, point to [Programs], point to [CHINO], and then click [KIDS].
To start [Data Replay], click [Data Replay] with the same procedure.
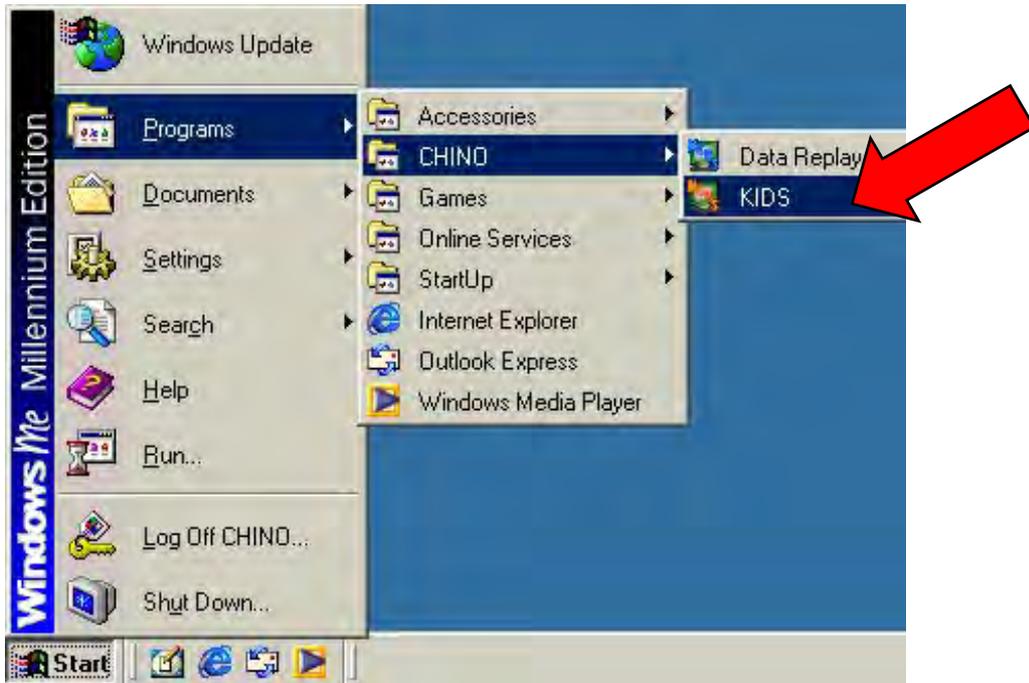
3-3 Exiting

To exit the program,

① click [EXIT] on the tool bar of the program, or
② click [X] in the right corner of the title bar.

KIDS KIDS KIDS KIDS KIDS KIDS

Easy! Operation guide

KIDS KIDS KIDS KIDS KIDS KIDS

1. **Register instruments.**
2. **Start to communicate with the instruments.**
3. **Acquire data.**
Through the above three steps, you can easily acquire data.
To display data in a graph format, proceed to 4.
4. **Display data in a graph format.**

1. Registration of instruments

Step1 Start the program, and then click [Regist].

Click [Regist].

Step2 Select a communications type between your personal computer and the instruments.

(Select from MODBUS or ETHERNET.)

Data Configuration

| Instrument Registration | Data Settings | Group Settings | Alarm Settings |

MODBUS
Interface [RS232C ▼] Bit rate [9600bps ▼] Port [COM1 ▼] Trial time [2times ▼] Wait time [1000 msec ▼]

Ethernet
Port number [11111] [Settings]

Connected units
MODBUS   0unit   Ethernet   0unit

RegistNo.	Communications	Model	Points	Inst.Address	IP.Address	Instrument T
1	▼					
2	▼					
3	▼					
4	▼					
5	▼					
6	▼					
7	▼					
8	▼					
9	▼					
10	▼					
11	▼					

< For connecting to a MODBUS instrument>
Click here, and then select **[MODBUS].**
The model column turns yellow. Click the column.

<For connecting to an ETHERNET instrument>
Click here, and then select **[Ethernet].**
The model column turns yellow. Click the column.

[Enter] [Close] [? Operation Guide]

Step3 The window shown below will appear.   Click a tab to select an instrument to be connected, select a model number, and then click [OK]. (The example shows the selection of AL3765.)
- **This window is for MODBUS instruments.**
- **The same window will appear for ETHERNET instruments.**

MODBUS

| JU/JW | KE3000 |
| AL3000 | AH3000 | BR1000 | BR5000 | BR6000 | BR7000 | SE3000 | LT230 | LT300 | LT400 | LT830 |

AL3000 (100mm Hybrid Recorder)

(①)

○ AL3765 (6 points/5 seconds)   (②)

○ AL37A5 (6 points/1 second)

○ AL374P (4 points)

① Click a tab to select an instrument to be connected.

② Select a model number.

③ Click [OK].

[O K]   [Cancel]
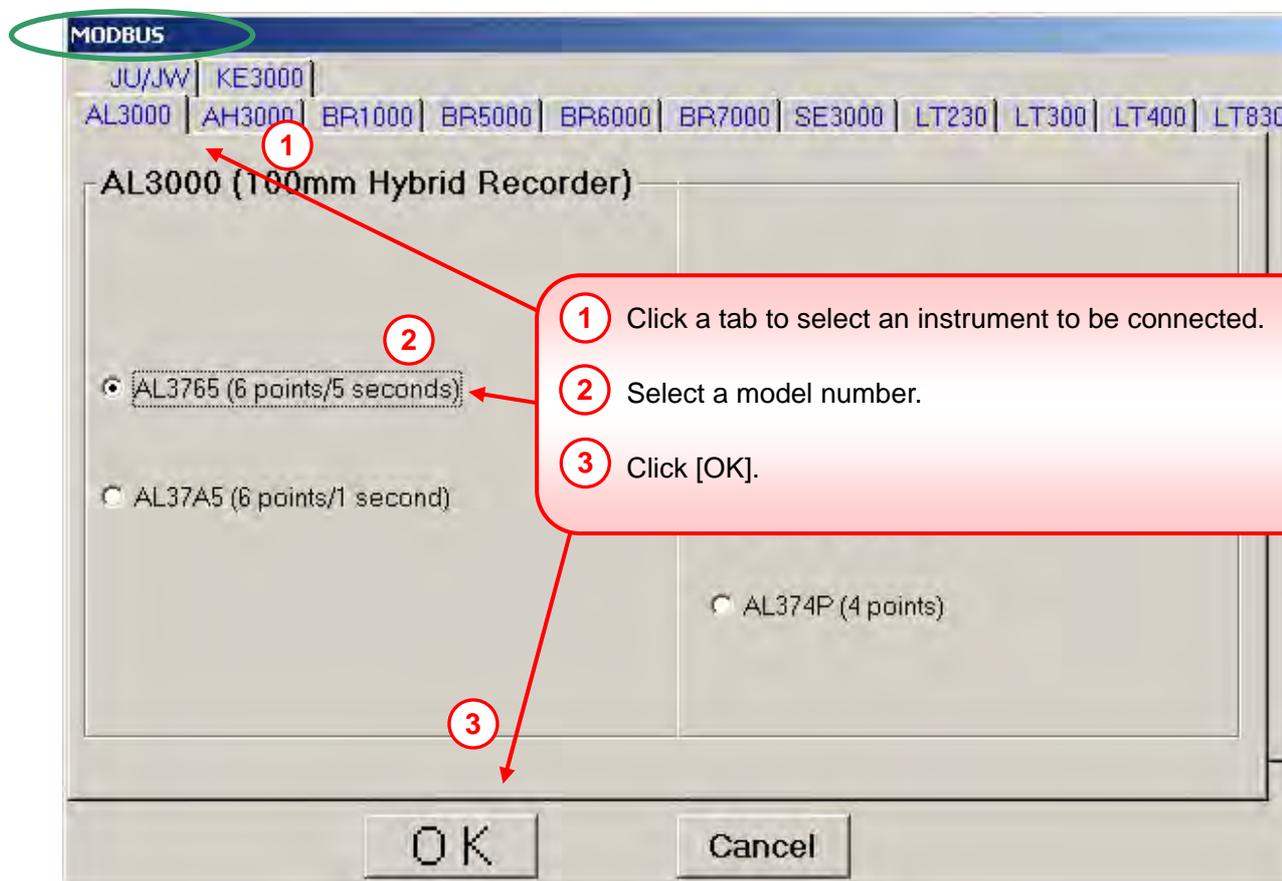
Step4 Address settings

<**MODBUS**>

Defaults: Interface RS-232C Bit Rate 9600bps
When you communicate with a different interface or a different bit rate, change the settings.

① The instrument address column turns yellow. Click it.

② The instrument address selection window will appear.

③ Click the same figure as an address of the instrument configured.
(For RS-232C, select "1" only.)

④ Click [Enter], and then click [Close].

〈Ethernet〉

① The IP address column turns yellow. Click it.

② The IP address settings window will appear.

③ Enter an IP address, and then click [Enter].

④ Click [Enter], and then click [Close].

Enter an IP address.

Enter an IP address.

192 168 3 200

Enter   Cancel

③

2. Starting communications with instruments

Click [**Log**].
Communications with the instruments starts!!
The window moves to the Data Acquisition window.

3. Data acquisition

Click this icon (floppy disk).

Data No.	Tag	Data Name	Data	Unit	Level1	Level2	Level3	Level4	Level5	Level6
1	1KE3-1		38.8							
2	1KE3-2		22.5							
3	1KE3-3		-2.2							
4	1KE3-4									
5	1KE3-5									
6	1KE3-6									
7	1KE3-7		-1.4							
8	1KE3-8		-1.2							
9	1KE3-9		-1.0							
10	1KE3-10		-0.8							
11	1KE3-11		-0.6							
12	1KE3-12		-0.4							

By clicking the icon (floppy disk), the window shown below will appear.

① Select [**One-Touch Acquisition**].

② Click [**PLAY**] to start the data acquisition.
To end the data acquisition, click [STOP].
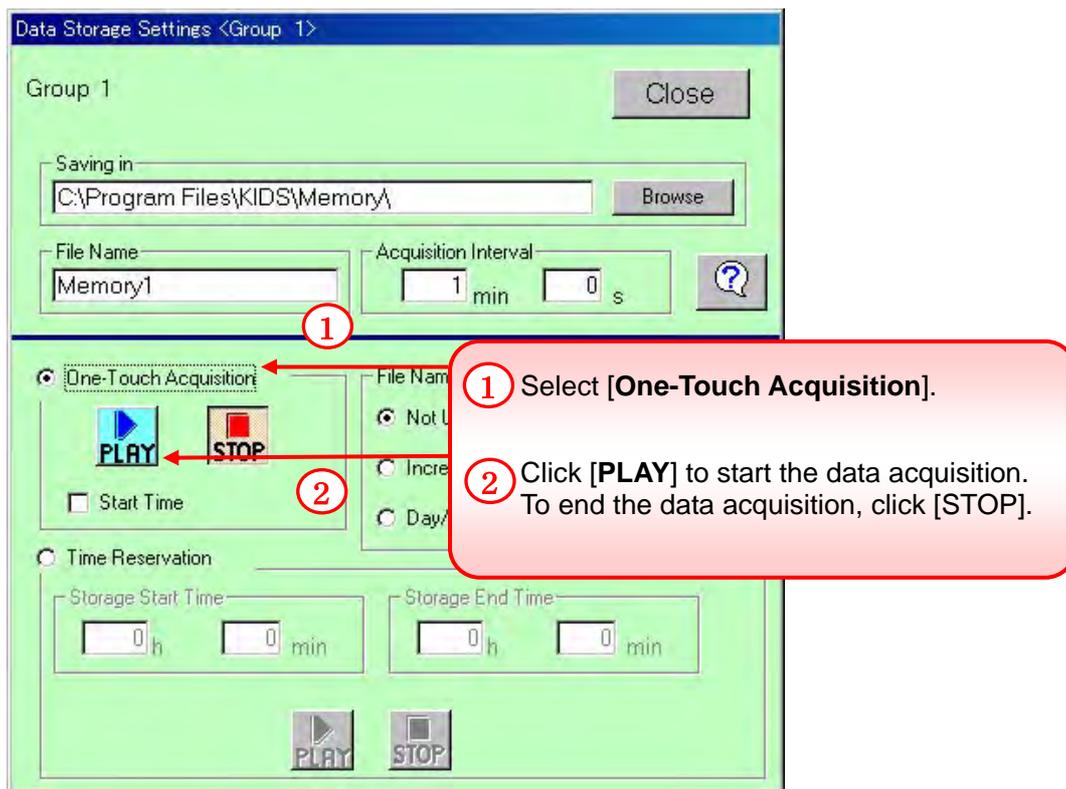
Now the data acquisition is starting.
When you want to display data in a graph format, proceed to the next procedure.

4.Displaying a graph(trend graph)

① Click [**Trend**] to appear the Trend Monitoring Selection dialog box.

② Select [**Group 1**].
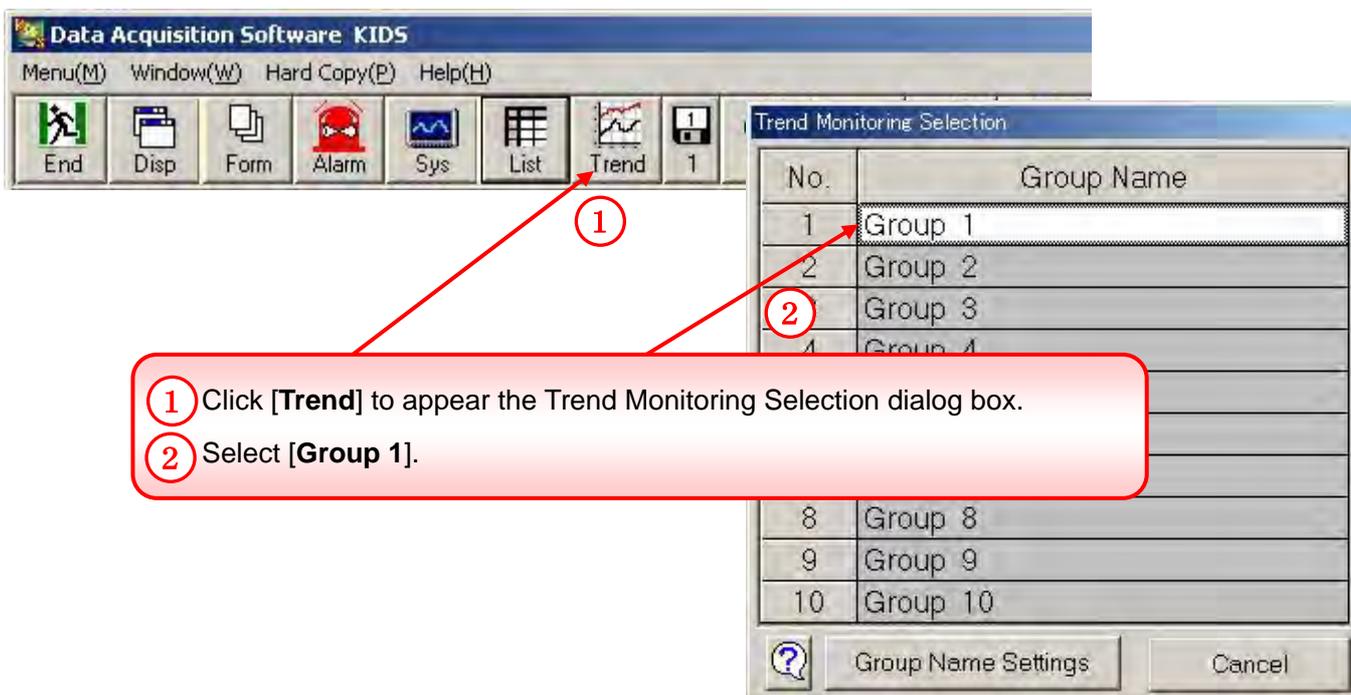
KIDS KIDS KIDS KIDS KIDS KIDS

4. Screen Operation

4-1 By starting the program, the setup window will appear first.

Tool bar

Status bar

4-2 By clicking the icons on the tool bar, you can select a function.

EXIT	Exits the program.
Regist	The Data Configuration dialog box will appear.
Log	The Data Acquisition window will appear and the communications with instruments will start.
Alarm	The Alarm Summary will appear.
Sys	The System Monitor will appear.
Trend	Sets the data renewal interval in the trend monitoring.
SE3000	SE3000 Range/Scale Settings dialog box will appear.
KE3	KE3000 Range/Scale Settings dialog box will appear.
DDE	DDE Settings will appear.
SAVE	The setting contents of KIDS are saved. (Export of a KIDS setting values)
LOAD	The setting contents of KIDS are read. (Import of a KIDS setting values)
Replay	The Data Reply basic window will appear with maximized size.
Copy	Prints an active window or all displayed windows.
Help	The Help file will appear.

5. Settings

5-1 Data Configuration

5-1-1 Instrument Registration

Set the communications between your personal computer and instruments.

Set an instrument address or an IP address not to overlap each other.

RegistNo.	Communications	Model	Points	Inst Address	IP Address	Instrument T
1	Ethernet	AL3765	6		192.168. 3.100	A-1
2	Ethernet	SE3-6P	6		192.168. 3.105	A-2
3	MODBUS	JU	13	1		B-1
4	MODBUS	KE3-12P	12	2		B-2
5	MODBUS	LT4501	3	3		C-1
6	MODBUS	LT2301	3	4		C-2
7	MODBUS	AH3760	6	5		D-1
8						
9						
10						
11						

MODBUS
Interface RS422A Bit rate 9600bps Port COM1 Trial time 2times Wait time 1000 msec

Ethernet
Port number 11111 Settings

Connected units
MODBUS 5units Ethernet 2units

Up to 20 alphanumerical characters can be entered.

Enter   Close   ? Operation Guide

5-1-2 Data Settings

Data are automatically assigned, but you can assign them manually.

<Format>
Click here to select a format.

<Unit>
Up to 6 characters

Data No.	Model	Address	Channel	Tag	Data Name	Format	Min Value	Max Value	Unit
1	AL3765	1	1	1AL3-1	Test1	####.#	0.0	1000.0	mA
2	AL3765	1	2	1AL3-2	Test2	####.#	0.0	1000.0	V
3	AL3765	1	3	1AL3-3	Test3	####.#	0.0	1000.0	mA
4	AL3765	1	4	1AL3-4	Test4	####.#	0.0	1000.0	V
5	AL3765	1				####.#	0.0	1000.0	mA
6	AL3765	1				####.#	0.0	1000.0	V
7	SE3-6P	2				####.#	0.0	1000.0	mA
						####.#	0.0	1000.0	V
						####.#	0.0	1000.0	mA
						####.#	0.0	1000.0	V
						####.#	0.0	1000.0	mA
						####.#	0.0	1000.0	V
						####.#	0.0	1000.0	mA
						####.#	0.0	1000.0	V

Copy   Paste   Delete

< Tag>
Up to 8 characters

<Data Name>
Up to 20 characters

Automatic registration
● Recorders,
   Enter the channel number of the instrument selected.
● LT series
PV (Process Variable) --- Equivalents to Channel 1.
SV (Setpoint Variable) --- Equivalents to Channel 2.
MV (Manipulated Variable) --- Equivalents to Channel 3.
● JU,JW series
Voltage --- Equivalents to Channel 1.
Current --- Equivalents to Channel 2.
Power --- Equivalents to Channel 3.

Data range managed by the program
For the automatic assignment, the minimum value is 0.0 and the maximum value is 1000.0.

5-1-3 Group Settings

・Configure Data Nos. assigned in the Data Settings into a group. (Overlapping configuration enable)
・You can configure up to 10 groups (up to 100 points/group).
・Data of each group set here are stored into memory with the settings in Data Storage Settings.

ON: All Data Nos. are checked in the group specified.
OFF: All Data Nos. are unchecked in the group selected.

Data No.	Tag	Data Name	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8	Grou
1	1AL3-1	Test1	✔	✔						✔	
2	1AL3-2	Test2	✔							✔	
3	1AL3-3	Test3	✔	✔			✔			✔	
4	1AL3-4	Test4	✔		✔					✔	
5	1AL3-5	Test5	✔				✔			✔	
6	1AL3-6	Test6	✔					✔		✔	
7	2SE3-1	Test7	✔		✔	✔			✔	✔	
8	2SE3-2	Test8	✔				✔	✔		✔	
9	2SE3-3	Test9	✔	✔	✔					✔	
10	2SE3-4	Test10	✔			✔				✔	
11	2SE3-5	Test11	✔							✔	
12	2SE3-6	Test12	✔							✔	

Enter   Close   Operation Guide

Click here to check or uncheck.

5-1-4 Alarm Settings

Configure the alarm levels 1 to 4 of instruments if their alarm activations will be reflected to the groups or not.
The levels 5 and 6 are alarm information independently used in the program.
The level 5 is a high limit value and the level 6 is a low limit value.

Data Configuration

| Instrument Registration | Data Settings | Group Settings | **Alarm Settings** |

Check all

Data No.	Tag	Data Name	Level1	Level2	Level3	Level4	Level5 High limit value	Level6 Low limit value	Un
1	1AL3-1	Test1	✔	✔	✔	✔	-200.0	-500.0	mA
2	1AL3-2	Test2	✔	✔	✔	✔	300.5	25.0	V
3	1AL3-3	Test3	✔	✔	✔	✔	90.56		mA
4	1AL3-4	Test4	✔	✔	✔	✔			V
5	1AL3-5	Test5	✔	✔	✔	✔		-30.05	mA
6	1AL3-6	Test6	✔	✔	✔	✔			V
7	2SE3-1	Test7	✔	✔	✔	✔			mA
8	2SE3-2	Test8	✔	✔	✔	✔			V
9	2SE3-3	Test9	✔	✔	✔	✔			mA
10	2SE3-4	Test10	✔	✔	✔	✔			V
11	2SE3-5	Test11	✔	✔	✔	✔			mA

Enter   Close

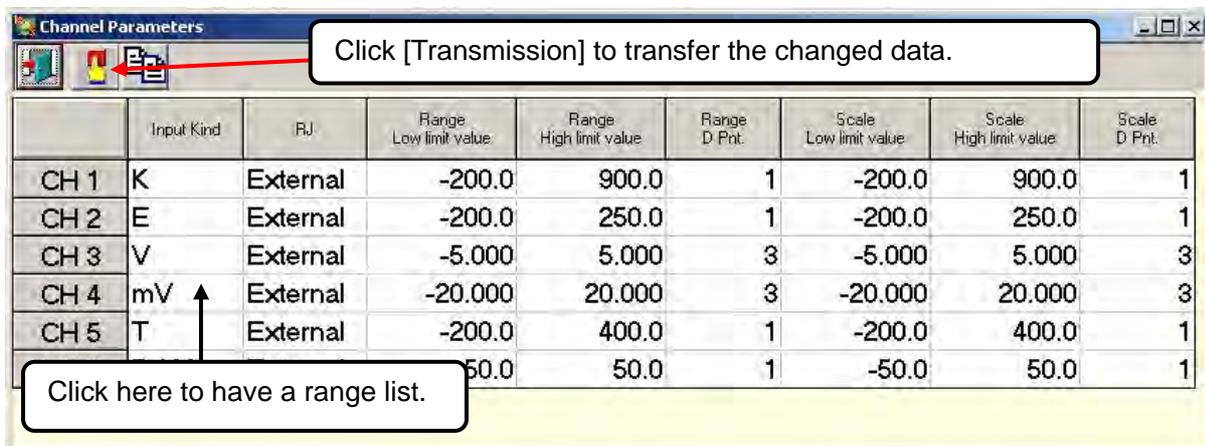When you want to use these levels of 5 and 6, enter an alarm limit value.

5-2 Trend Interval Settings

Enter a data renewal interval (from 1 second to 99 minutes 59 seconds) in the trend monitoring.
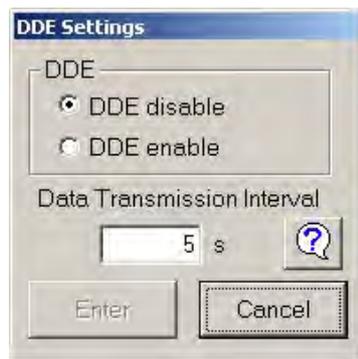(Default: 5 seconds)

5-3 SE3000/KE3000 Range/Scale Settings

You can change a range and a scale of SE3000 / KE3000 connected. (For MODBUS only)

Click [Transmission] to transfer the changed data.

Click here to have a range list.

	Input Kind	RJ	Range Low limit value	Range High limit value	Range D Pnt.	Scale Low limit value	Scale High limit value	Scale D Pnt.
CH 1	K	External	-200.0	900.0	1	-200.0	900.0	1
CH 2	E	External	-200.0	250.0	1	-200.0	250.0	1
CH 3	V	External	-5.000	5.000	3	-5.000	5.000	3
CH 4	mV	External	-20.000	20.000	3	-20.000	20.000	3
CH 5	T	External	-200.0	400.0	1	-200.0	400.0	1
			50.0	50.0	1	-50.0	50.0	1

5-4 DDE Settings

*DDE function
・A Windows function to transfer data to other applications
・By using the DDE function, you can acquire real-time data with other applications and process them.
・ The KIDS becomes a server. For acquiring data, the following definitions are required.

| Application name	KIDS
Item	DDE
Topic	DATA1 to DATA100

Example of description

Definition example to display data in Data No. 1
at a cell of Excel
=KIDS|DDE!DATA1

If a faster data transmission interval (1 second to several seconds) is set, a burden imposed on an application utilizing becomes heavy and it may cause obstruction to the operation of application. You are required not to set the interval faster than needs.

6. Data Acquisition

6-1 Data Acquisition window
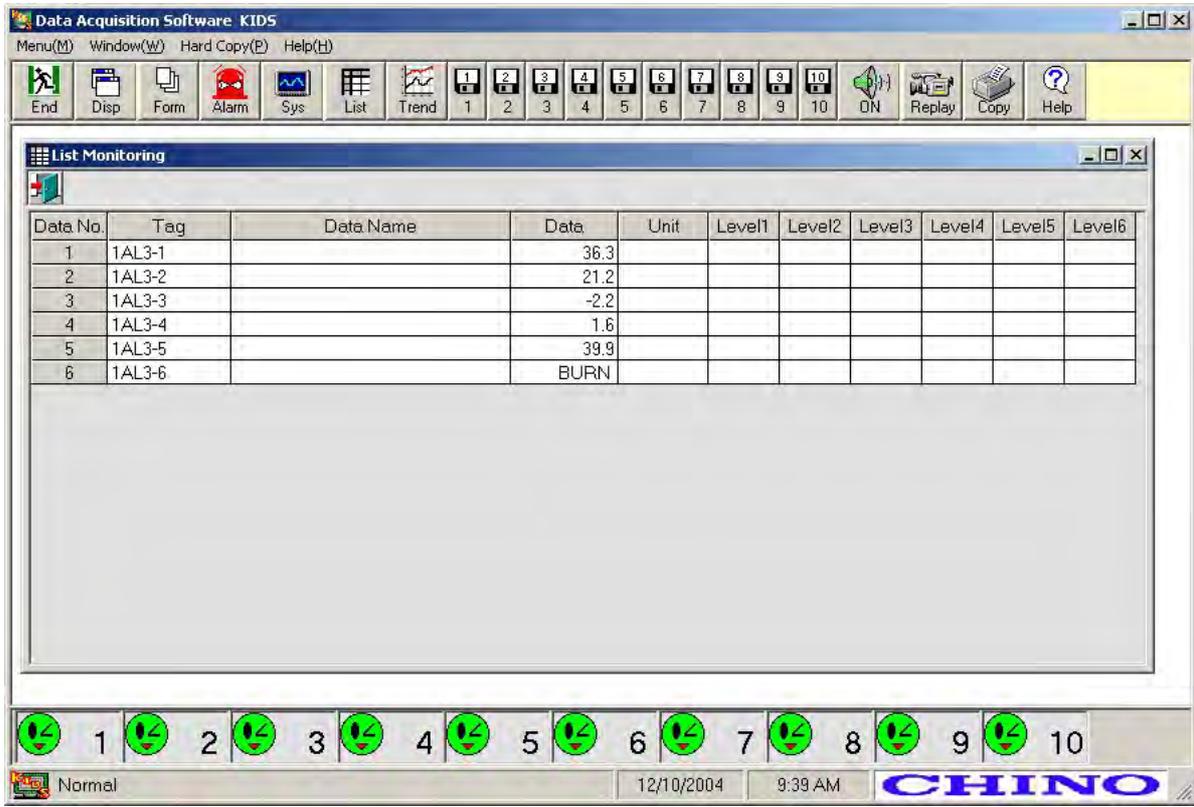
6-2 By clicking the icons on the tool bar, you can select a function.

Icon	Description
🏃	Ends the communication with instruments and the data acquisition, and moves to the setup window.
🗖	Rearranges all windows being displayed on this window.
🗗	The list of all windows being displayed on this window will appear.
⊞	The real-time data will be displayed in a table format.
📈	Displays data in a trend format. Up to 10 groups can be displayed.
💾	Data Storage Settings window (max. 10 groups) will appear. No window appears if any group is not configured. Waiting storage --- **Black** (upper) In storage--- **Green** (middle) Error --- **Red** (lower) ※Data are not stored in this error condition.
🔊	ON --- Makes a beep sound when an alarm is activated. (upper) OFF --- Does not make a beep sound. (lower)

* The other icons are the same as specified in the setup window.

6-3 List monitoring

This window displays real-time data and alarm generation information of instruments.

Level 5 to 6: Alarm information judged by the program is displayed

Data No.	Tag	Data Name	Data	Unit	Level1	Level2	Level3	Level4	Level5	Level6
1	1BR1-1	LAB 1-1	745.4	℃						
2	1BR1-2	LAB 1-2	72.3	℃				H		
3	1BR1-3	No.3	836.6	F			H			
4	1BR1-4	No.4	326.6	℃						
5	1BR1-5	LAB 1-3	72.3	mV		L				
6	1BR1-6	LAB 1-4	72.3	mV						

Level 1 to 4: Alarm information activated in instruments is displayed

6-4 System monitoring

The current status of instruments configured will be displayed.

When an alarm is being activated or communications is abnormal, the background of its instrument will blink in red.

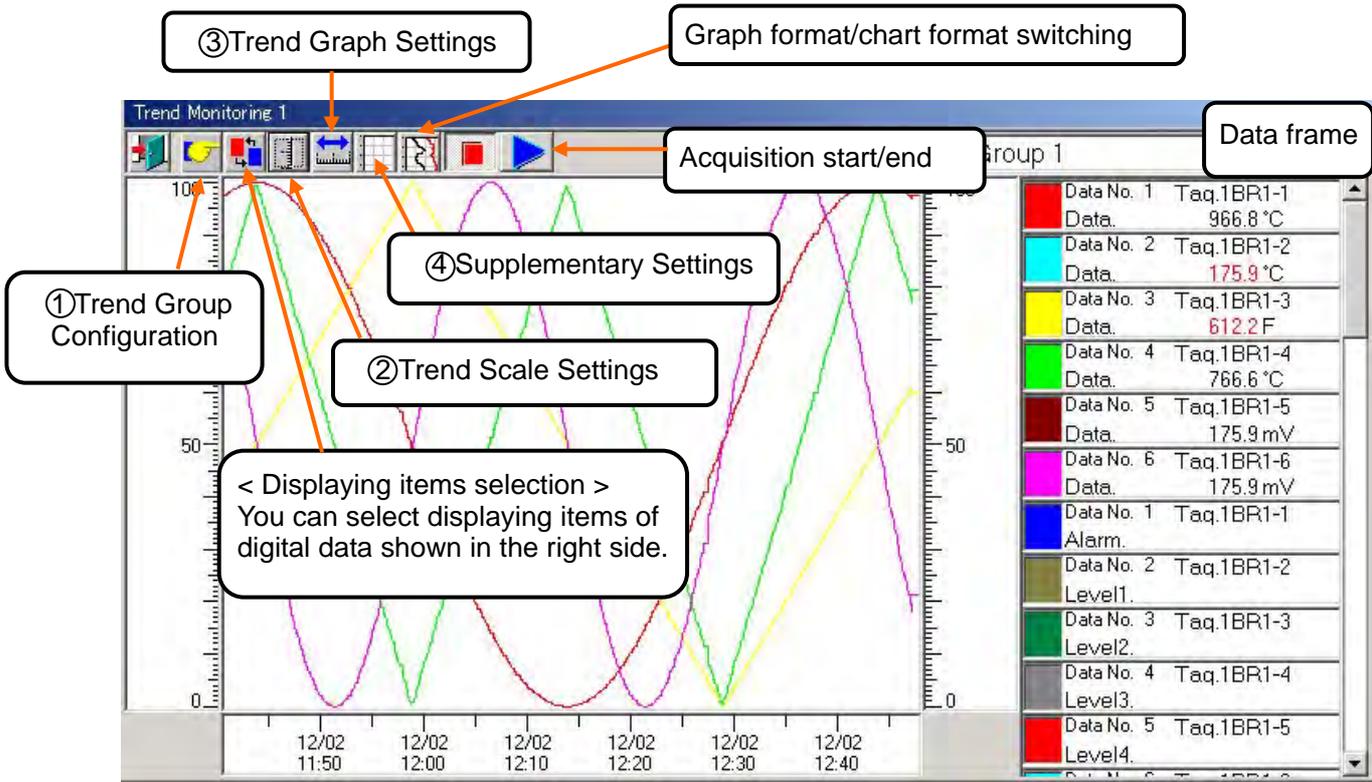| RegistNo		Status	Name	Instrument Tag
1		Normal	KE3-12P	Test1
2		Communications error!!!	LT4501	Test2
3		Normal	AH3760	Test3
4		Normal	SE3-6P	Test4

Connected units MODBUS 2units Ethernet 2units

6-5 Trend monitoring (Graph format)

Up to 10 trend monitoring windows are available.

③Trend Graph Settings

Graph format/chart format switching

Data frame

Acquisition start/end

①Trend Group Configuration

④Supplementary Settings

②Trend Scale Settings

< Displaying items selection >
You can select displaying items of digital data shown in the right side.

① **Trend Group Configuration**

You can configure data to be displayed or not in the graph being displayed.

You can select data to be displayed or not.

By entering a Data No., you can add a Data No. to display.

The minimum / maximum scale configured in the Data Settings will be displayed as an initial value.
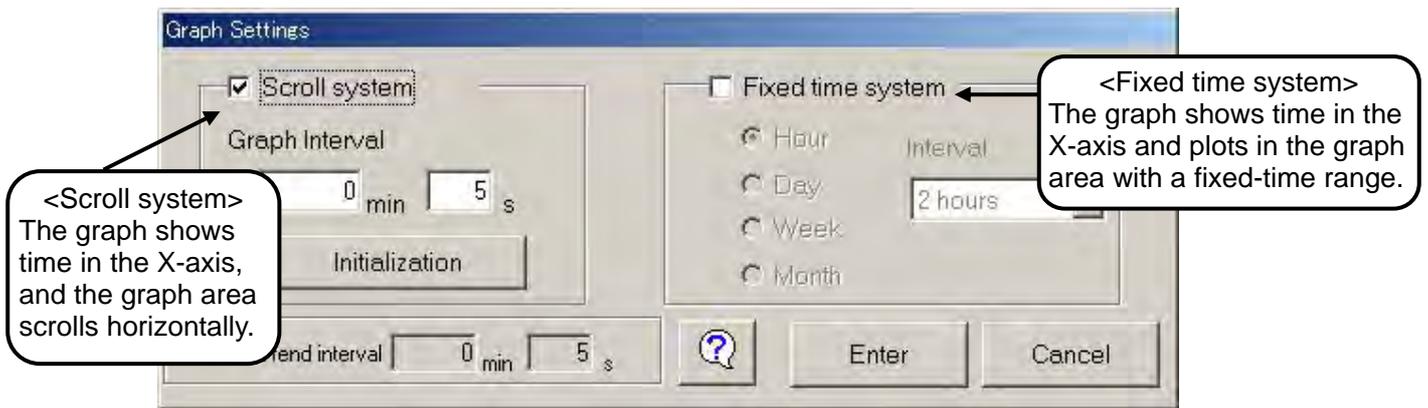
You can select a tracing color.
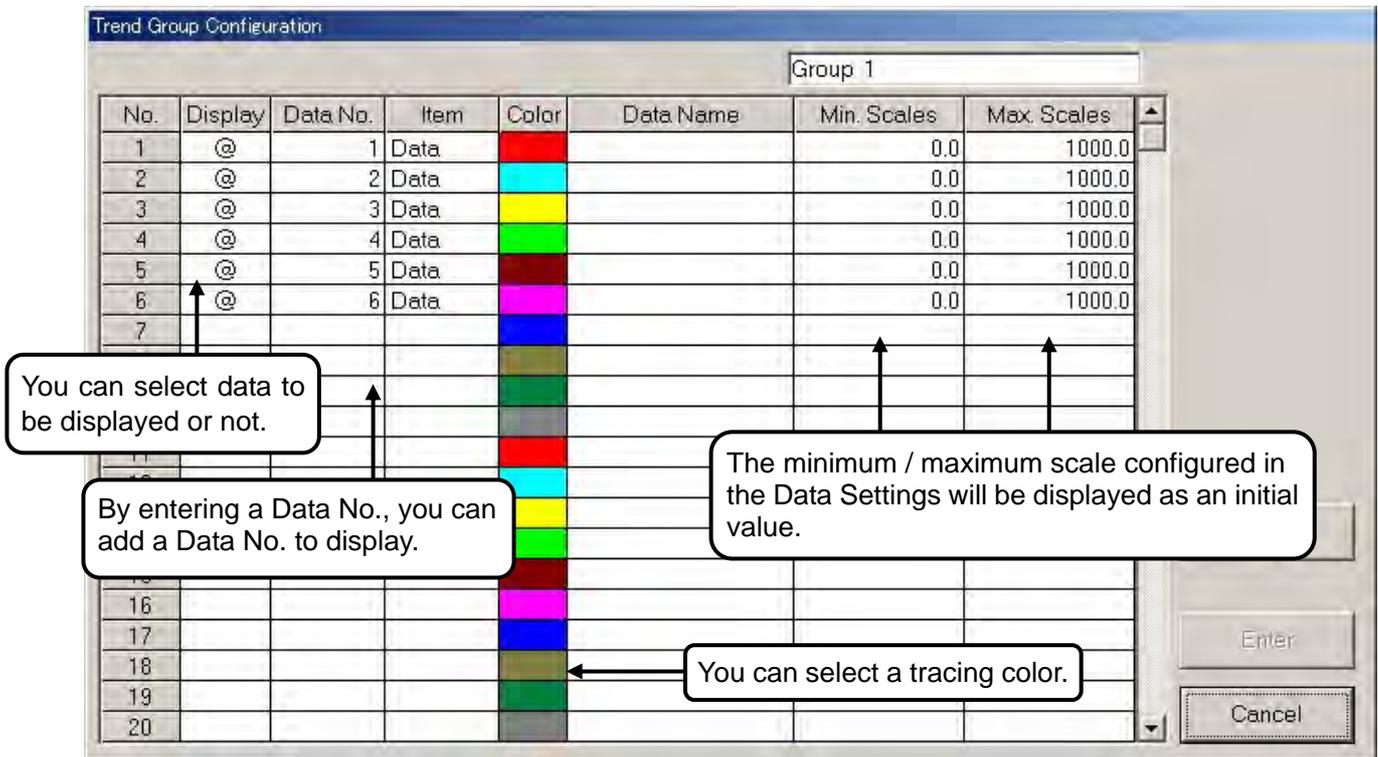
② **Trend Scale Settings**

You can independently select two scales placed in left and right sides of the graph being displayed.
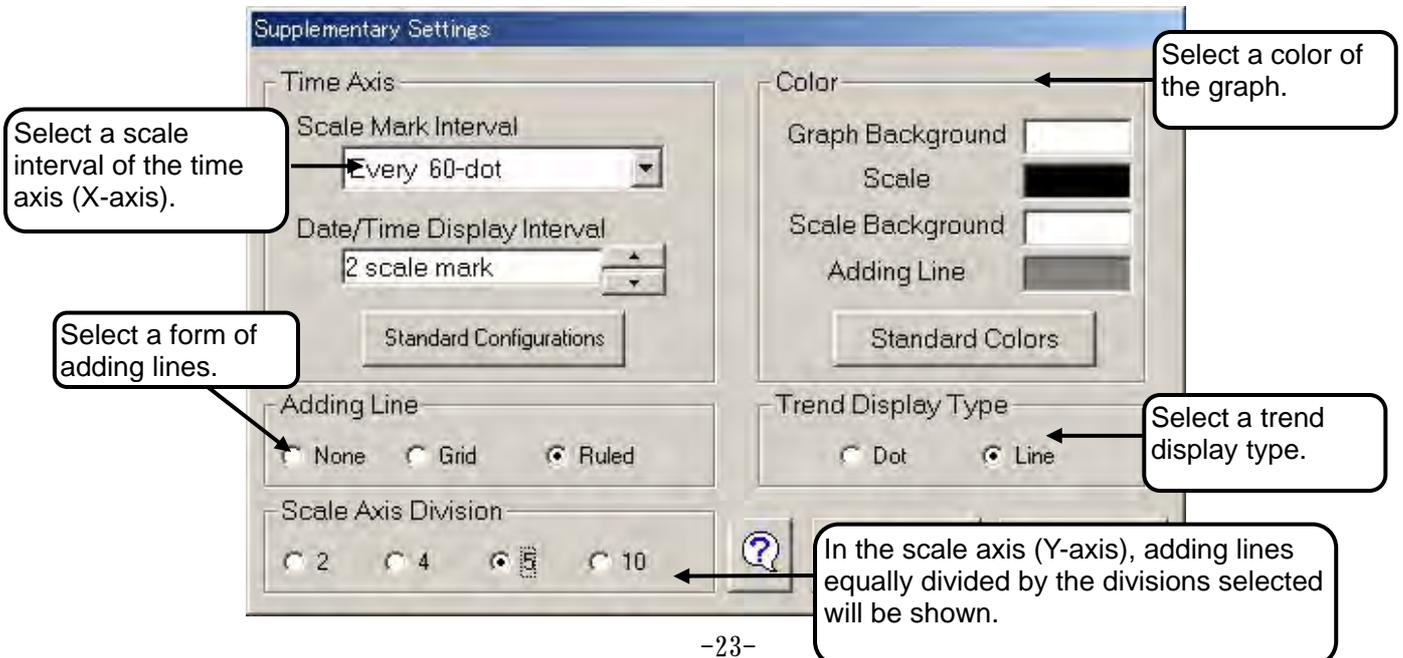
Scale Settings

Data No.	Color	Left	Right
1		@	
2			
3			
4			@
5			
6			
7			
8			
9			

(?)

Select a Data No. of which range (or scale) is used as the scale in left / right side of the graph.

0 - 100%

Enter

Cancel
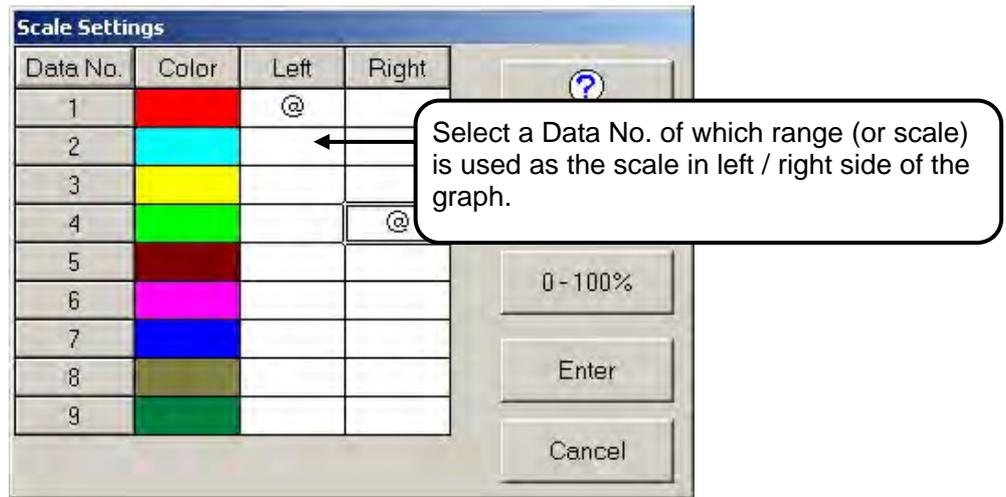
③ **Graph Settings**

You can select the scroll system or the fixed time system of the graph format.

Graph Settings

☑ Scroll system

Graph Interval

0 min   5 s

Initialization

Trend interval   0 min   5 s

<Scroll system>
The graph shows time in the X-axis, and the graph area scrolls horizontally.

☐ Fixed time system

○ Hour
○ Day
○ Week
○ Month

Interval

2 hours

<Fixed time system>
The graph shows time in the X-axis and plots in the graph area with a fixed-time range.

(?) Enter   Cancel

④ **Supplementary Settings**

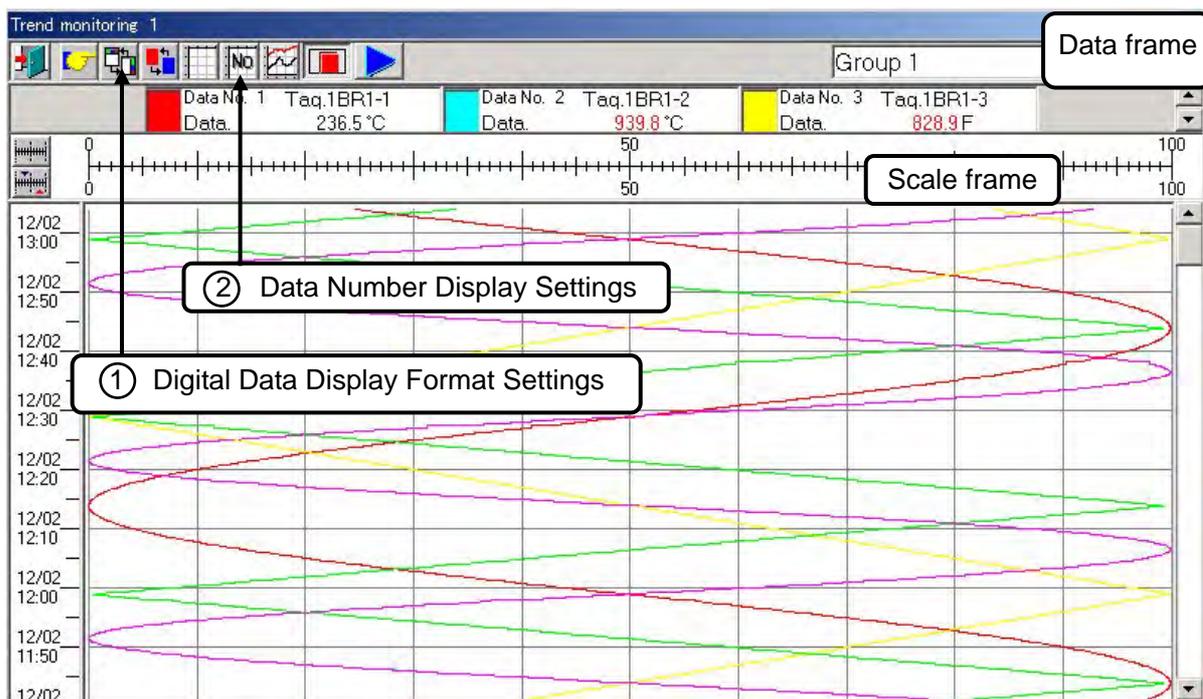You can configure adding lines and a graph background color.
※ For the fixed time system, you cannot set the parameters for the time axis.

Supplementary Settings

Time Axis

Scale Mark Interval
Every 60-dot

Date/Time Display Interval
2 scale mark

Standard Configurations

Adding Line
○ None   ○ Grid   ● Ruled

Scale Axis Division
○ 2   ○ 4   ● 5   ○ 10

Color

Graph Background
Scale
Scale Background
Adding Line

Standard Colors

Trend Display Type
○ Dot   ● Line

Select a scale interval of the time axis (X-axis).

Select a form of adding lines.

Select a color of the graph.

Select a trend display type.

In the scale axis (Y-axis), adding lines equally divided by the divisions selected will be shown.
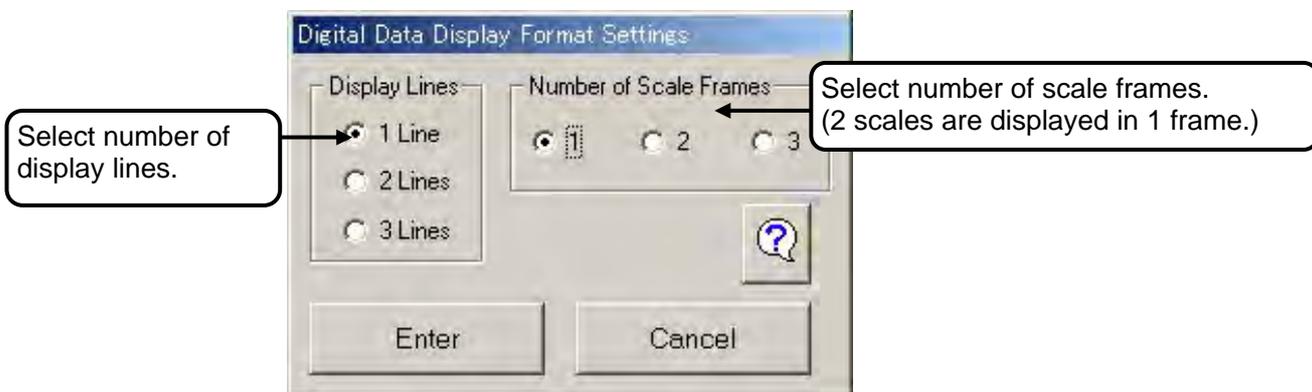
(?)

6-6 Trend monitoring (Chart Format)

Up to 10 trend monitoring windows are available.
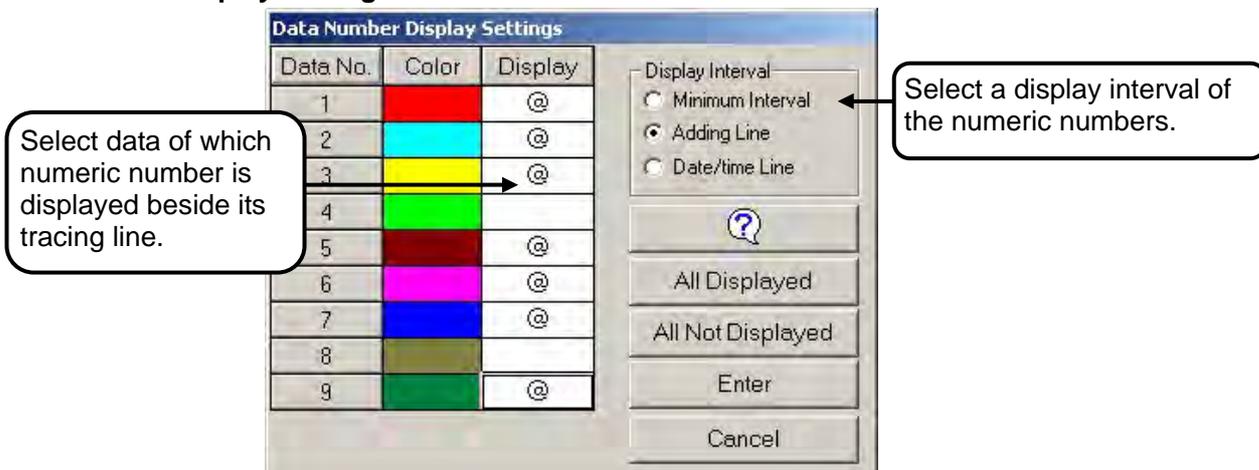

① Digital Data Display Format Settings

You can select number of lines for the digital data display position and number of scale frames.

Select number of display lines.

Select number of scale frames.
(2 scales are displayed in 1 frame.)

② Data Number Display Settings

Select data of which numeric number is displayed beside its tracing line.

Select a display interval of the numeric numbers.

6-7 Data Storage Settings

You can configure a data file saving location (a path name), a file name and an acquisition interval.

The extension of a memory file is "mbm".

Data Storage Settings <Group 1>

Type a file name.
(Up to 16 characters)

Specify a saving location of a file.

Saving in
C:\Program Files\KIDS\Memory\   Browse

File Name
Memory1

Acquisition Interval
1 min   0 s

Configure an acquisition interval.

Select [**One-Touch Acquisition**] or [**Time Reservation**].

○ One-Touch Acquisition
PLAY   STOP
☐ Start Time

File Name Auto Renewal
● Not Used   Renewal timing
○ Increment   ○ Daily
○ Day/Time   ○ Weekly
                     ○ Monthly

○ Time Reservation

Storage Start Time
0 h   0 min

Storage End Time
0 h

By clicking the **PLAY** button, the data acquisition will start. You can start at the time specified. Click the **STOP** button to end the data acquisition.

By clicking the **PLAY** button, the data acquisition will start at the start time specified and ends at the end time specified. Click the **STOP** button to cancel the data acquisition.

PLAY   STOP

File Name Auto Renewal -----A file is made automatically in every renewal timing.

Not used		File isn't made automatically.
Increment		Consecutive numbers(001 - 999) are added after file name.
Day/Time		Date is added after file name.
Renewal timing	Daily	File is renewed in every day.
	Weekly	File is renewed in every seven days.
	Monthly	File is renewed in every month.

In case of Time Reservation, Renewal timing is only a Daily.

6-8 Printing

Print Screen

Print Range

For printing of the whole screen

○ All Displayed Windows

For printing of an active window

● Active Window

Print — Printing

Set up... — Print settings

Preview — Print preview

File save — File save (BMP format)

Cancel

6-9 Alarm summary

● Alarms activated and reset (or recovering information) are displayed in a list. Starting and ending of the program are also displayed. You can enter a comment.

● When an alarm is newly activated or reset, this new alarm data will be automatically added to a new row.

● Up to 4000 rows can be displayed and, when data exceeds 4000 rows, the displayed data will be deleted from the oldest one.

● You can sequentially sort items. When you are sorting, you cannot edit a comment and a new alarm data will not be added.

Print preview

Print settings

Printing

You can store the Alarm Summary into a csv or Text format file.

You can delete rows selected by a mouse.

You can delete all rows.

You can sort data here.

Alarm summary

Sort
○ Data No ○ Tag ○ Data Name ○ Alarm Type ○ Data ○ Comment

	Time	Data No	Tag	Data Name	Alarm Type	Data	Comment
4	12/02/2002 10:53:39	5	1BR1-5	LAB 1-3	Level 2 Alarm Activate	"L"--61.8	
5	12/02/2002 10:55:42	5	1BR1-5	LAB 1-3	Level 2 Alarm Reset	206.0	
6	12/02/2002 11:03:15				KIDS End		
7	12/02/2002 11:39:57				KIDS Start		
8	12/02/2002 11:40:03	2	1BR1-2	LAB 1-2	Level 4 Alarm Activate	"H"--852.3	
9	12/02/2002 11:40:05	3	1BR1-3	No.3	Level 3 Alarm Activate	"H"--375.5	
10	12/02/2002 11:47:00	5	1BR1-5	LAB 1-3	Level 2 Alarm Activate	"L"--189.4	
11	12/02/2002 11:55:39	5	1BR1-5	LAB 1-3	Level 2 Alarm Reset	194.9	
12	12/02/2002 12:16:58	5	1BR1-5	LAB 1-3	Level 2 Alarm Activate	"L"--192.1	
13	12/02/2002 12:25:42	5	1BR1-5	LAB 1-3	Level 2 Alarm Reset	197.6	
14	12/02/2002 12:47:11	5	1BR1-5	LAB 1-3	Level 2 Alarm Activate	"L"--175.9	
15	12/02/2002 12:55:47	5	1BR1-5	LAB 1-3	Level 2 Alarm Reset	203.2	
16	12/02/2002 13:13:21				KIDS End		
17	12/02/2002 13:14:46				KIDS Start		
18	12/02/2002 13:14:52	2	1BR1-2	LAB 1-2	Level 4 Alarm Activate	"H"--409.7	
19	12/02/2002 13:14:54	3	1BR1-3	No.3	Level 3 Alarm Activate	"H"--464.4	
20	12/02/2002 13:17:03	5	1BR1-5	LAB 1-3	Level 2 Alarm Activate	"L"--192.1	
21	12/02/2002 13:21:39				KIDS End		
22	12/02/2002 13:22:16				KIDS Start		

6-10 Alarm monitor

　The alarm status of Data Nos. configured in each group will be displayed by lamps.

When an alarm of a Data No. is activated, an alarm lamp will blink and continue blinking until you confirm by clicking it.

　If no Data No. is configured in a group, the lamp for this group is not displayed.
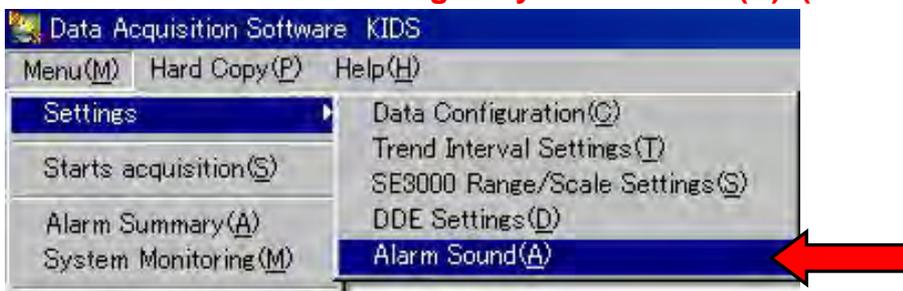

 --- [Normal] An alarm is not activated.

 --- An alarm is activated or communications is abnormal.

※Alarm sound can be changed by Alarm sound(A). (*.WAV format)


6-11 Alarm pop-up window

　You can display last 10 alarms activated in each group. (Alarms reset will not be displayed. Confirm them in the Alarm Summary.) When data exceeds 10 alarms, the displayed data will be deleted from the oldest one.
<How to display>

When a lamp is blinking, the pop-up window will appear by moving a mouse to it.

When a lamp is lit, the pop-up window will appear by clicking it.

　※Multiple pop-up windows will not appear simultaneously. Click OK button to close the pop-up window opened, and then open the pop-up window of other group.

The window will close.
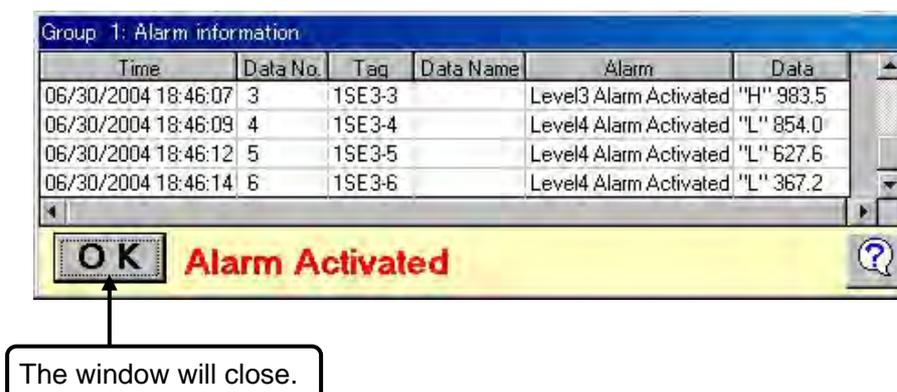
7. Data Replay

The data replay is to read acquired data, and you can manage data display in a table/trend format, data conversion, and daily report printing.

7-1 Data Replay basic window
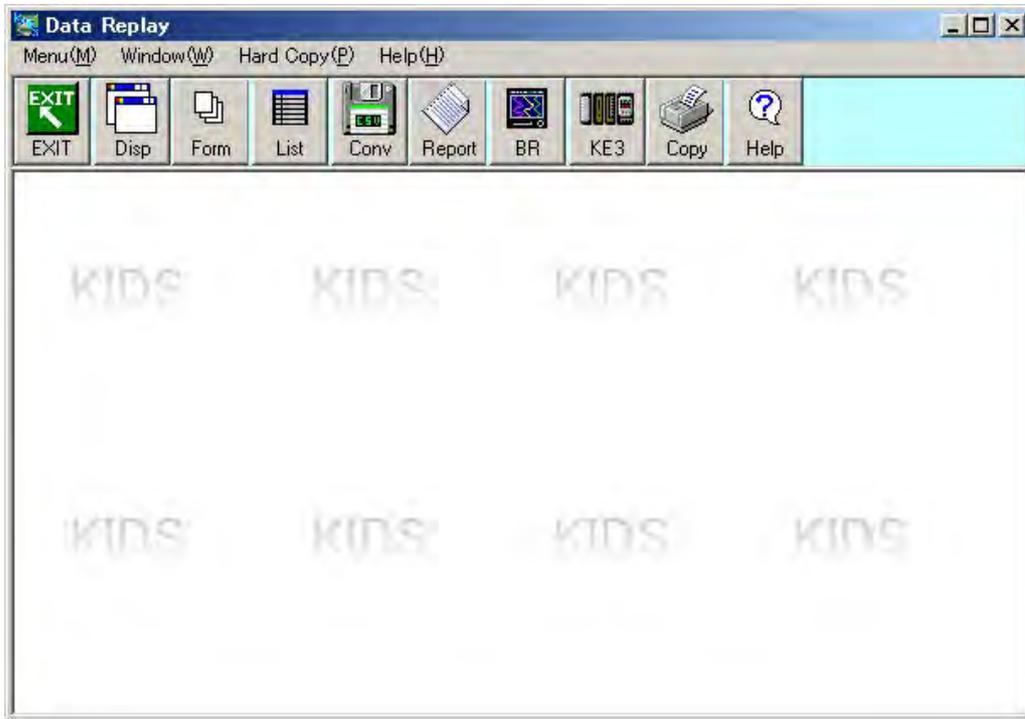
	Exits the program
	Rearranges all windows being displayed on this window.
	The list of all windows being displayed on this window will appear.
	The Historical Data Monitoring window will appear.
	The File Conversion window will appear.
	The Daily Report Printing window will appear.
	The BR Data Conversion window will appear.
	The KE3 File Conversion window will appear.
	Prints an active window or all displayed windows.
	The Help file will appear.

7-2 Display

You can rearrange all windows being displayed on this basic window.

```
Cascade
Horizontal
Vertical
Standard Size

   Enter      Cancel
```

7-3 Form

You can display all windows being displayed on this basic window as a list and select a window to make active.

```
1:Historical Data Monitoring
2:File Conversion




   Enter      Cancel
```
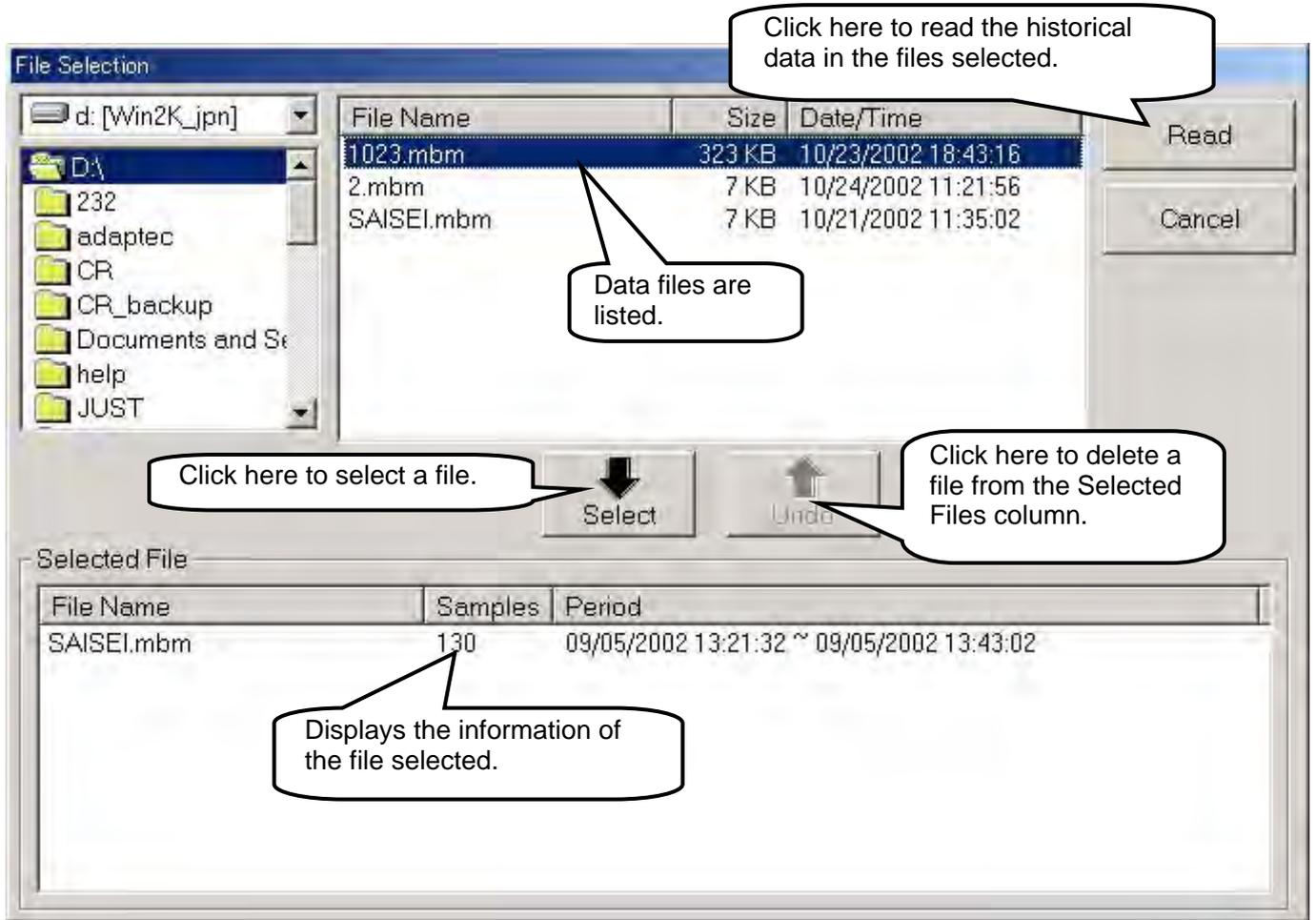
7-4 Historical Data Monitoring

You can read a file storing data acquired in the Data Acquisition, and can display the historical data stored in the file in a table format.

Historical Data Monitoring							

Memory1.mbm ▼ Data Stored 6 Display Period 12/02/2002 21:06:13 to 12/03/2002 18:22:00

	Data Time	1BR1-1	1BR1-2	1BR1-3	1BR1-4	1BR1-5	1BR1-6
1	12/02/02 21:06:13	148.9	993.5	775.5	495.5	993.5	993.5
2	12/02/02 21:07:00	119.2	999.9	747.7	551.1	999.9	999.9
3	12/02/02 21:08:00	90.4	989.7	717.7	611.1	989.7	989.7
4	12/02/02 21:09:00	61.0	955.3	682.2	682.2	955.3	955.3
5	12/02/02 21:10:00	40.4	908.5	652.2	742.2	908.5	908.5
6	12/02/02 21:11:00	21.3	834.5	616.6	813.3	834.5	834.5
7	12/02/02 21:12:00	8.5	746.9	582.2	882.2	746.9	746.9
8	12/02/02 21:13:00	1.3	644.5	546.6	953.3	644.5	644.5
9	12/02/02 21:14:00	0.0	559.2	518.8	991.1	559.2	559.2
10	12/02/02 21:15:00	3.7	451.2	484.4	922.2	451.2	451.2
11	12/02/02 21:16:00	13.6	342.1	448.9	851.1	342.1	342.1
12	12/02/02 21:17:00	29.5	241.0	413.3	780.0	241.0	241.0
13	12/02/02 21:18:00	46.1	170.6	385.5	724.4	170.6	170.6
14	12/02/02 21:19:00	71.4	97.5	351.1	655.5	97.5	97.5

	![]	Quits the historical data monitoring.
	![]	The Historical Data Monitoring window with maximized size will appear.
7-4-1	![]	The File Selection dialog box will appear.
7-4-2	![]	The Display Period Settings dialog box will appear.
7-4-3	![]	The Historical Data Selection dialog box will appear.
7-4-4	![]	The Print Settings dialog box will appear.
7-5	![]	The Historical Trend Selection dialog box will appear. Up to 10 windows are selectable. (Up to 5 windows can be displayed simultaneously.)
7- 7	![]	The File Conversion window will appear.

7-4-1 File Selection

Multiple files can be read as a sequential file. By clicking Read after files are selected, the historical data stored in the files will be read.

Click here to read the historical data in the files selected.

Data files are listed.

Click here to select a file.

Click here to delete a file from the Selected Files column.

Displays the information of the file selected.

7-4-2 Display Period Settings

The data acquired period of the file selected will be displayed.

You can specify a display period within the data acquisition period and can display only data in the display period specified.

7-4-3 Data selection

You can select historical data to be displayed or not.

● for displaying
Blank for not displaying

7-4-4 Print Settings

You can specify a print range (period) within the display period specified and can print data in the print period specified.
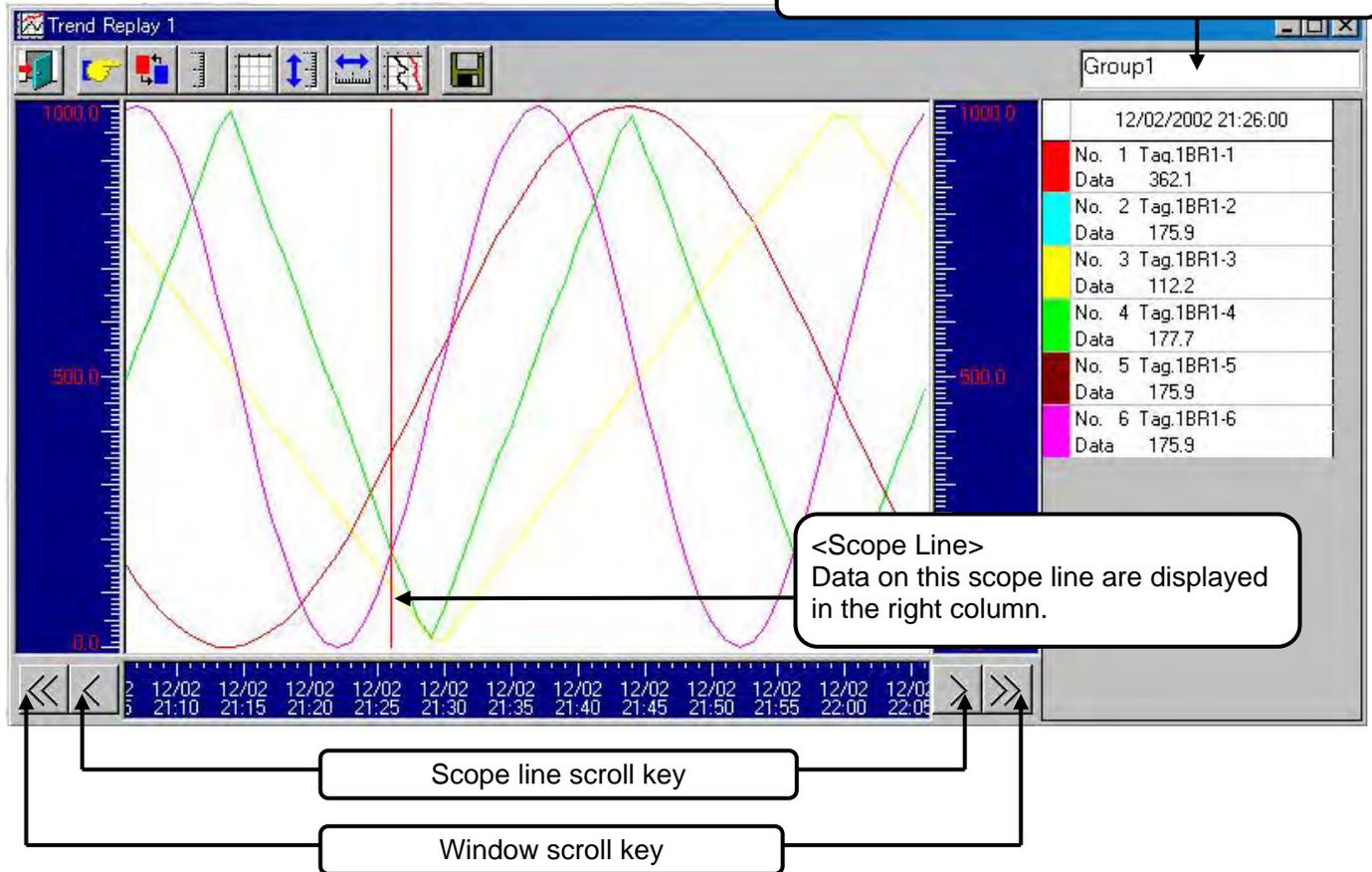
All data in the print range specified will be printed.

For data in the print range specified, you can skip data for printing.

7-5 Trend replay (Graph format)

Displays the group being displayed now.

<Scope Line>
Data on this scope line are displayed in the right column.

Scope line scroll key

Window scroll key

		Quits the historical trend monitoring.
7-5-1		The Historical Trend Group Configuration dialog box will appear. You can configure data to be displayed.
7-5-2		The Historical Data Format Settings dialog box will appear. You can configure displaying items that will be shown in the digital data display position (right side of window).
7-5-3		The Historical Trend Scale Settings dialog box will appear. You can independently select two scales placed in left and right sides of the graph.
7-5-4		The Supplementary Settings dialog box will appear. You can customize additional lines and a graph background color.
7-5-5		The Magnified Scale Settings dialog box will appear. You can display historical data with the magnified scale (Y-axis) specified.
7-5-6		The Time-Axis Format Settings dialog box will appear. You can display historical data in the period specified.
7-6		Switches from the graph format to the chart format.
7-7		The File Conversion window will appear.

7-5-1 Historical Trend Group Configuration

You can configure historical data to be displayed in the graph (or chart) being displayed.

Select if the data configured are displayed or not.

Enter a Data No. that you want to display.

You can configure a minimum scale and a maximum scale.

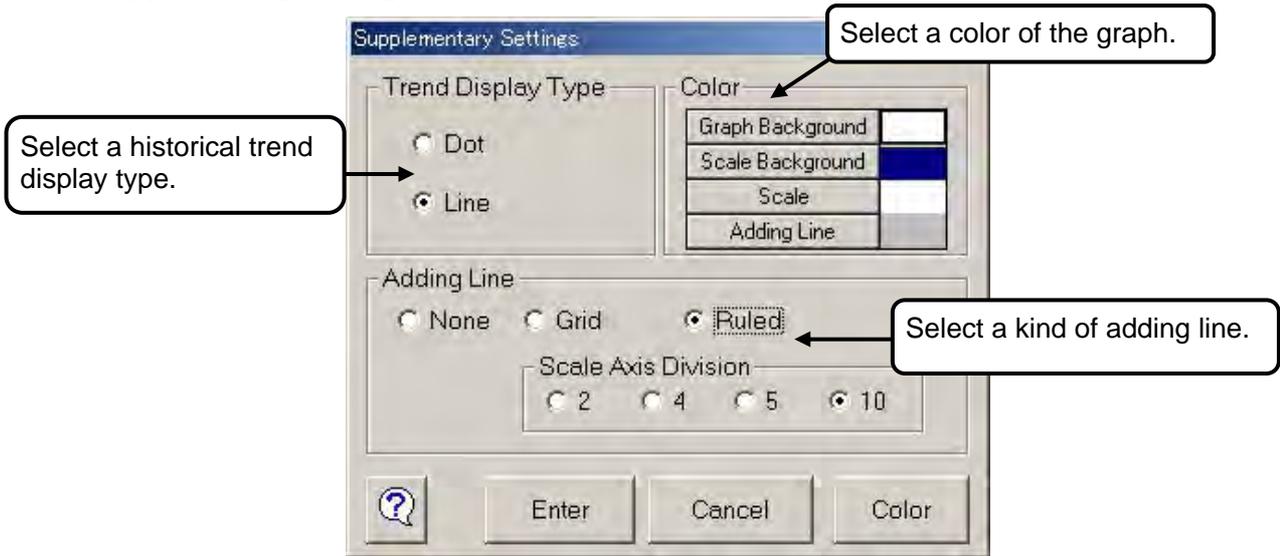Double-click here to select a tracing color.

7-5-2 Historical Data Format Settings

You can configure the historical data format in the graph being displayed.


7-5-3 Historical Trend Scale Settings

Select a Data No. of which range (or scale) is used as the scale in left / right side of the graph.

7-5-4 Supplementary Settings

Select a color of the graph.

Select a historical trend display type.

Select a kind of adding line.

7-5-5 Magnified Scale Settings
Based on the standard size of 0 to 100%, you can display historical data with the magnified scale specified.
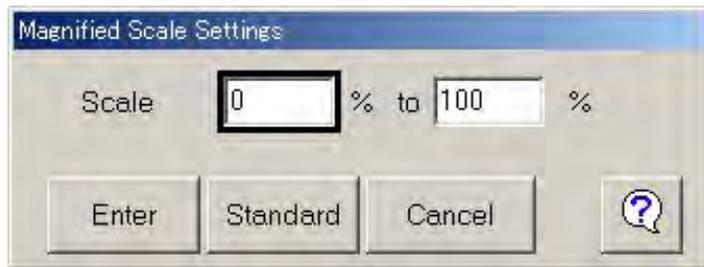
7-5-6 Time-Axis Format Settings

As a designated time-band from a designated beginning date/time becomes the time-axis, you can always read the historical data in the designated time band from the designated beginning date/time by scrolling.

As historical data in a designated period are only displayed, you can only read the historical data in the designated period regardless of a measured period.
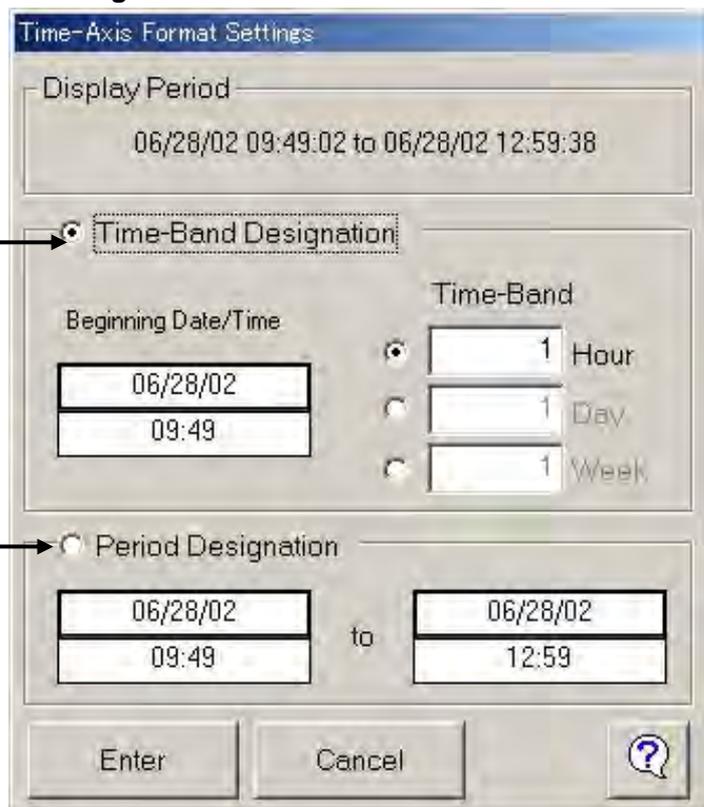
7-6 Trend replay (Chart format)

Data frame

Scale frame

7-6-2 Data Number Display Settings

7-6-1 Digital Data Display Format Settings

7-6-1 Digital Data Display Format Settings

Select the digital data display frame position.
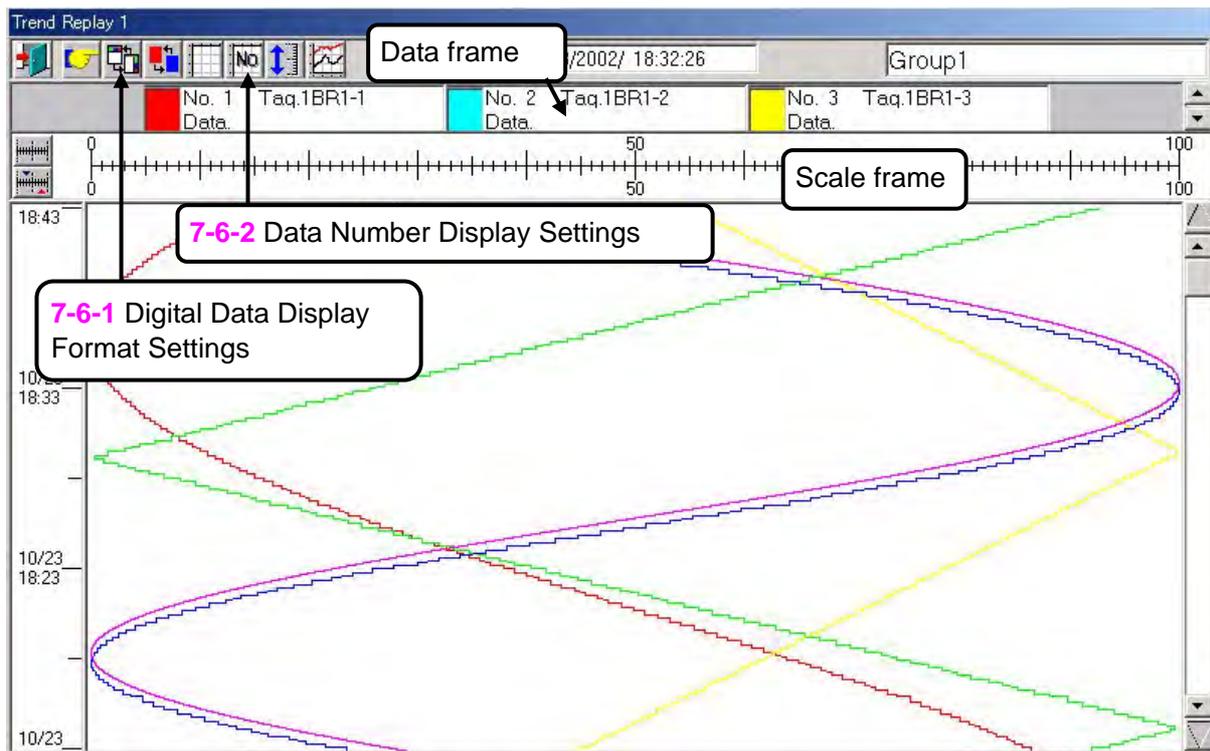
Select number of scale frames
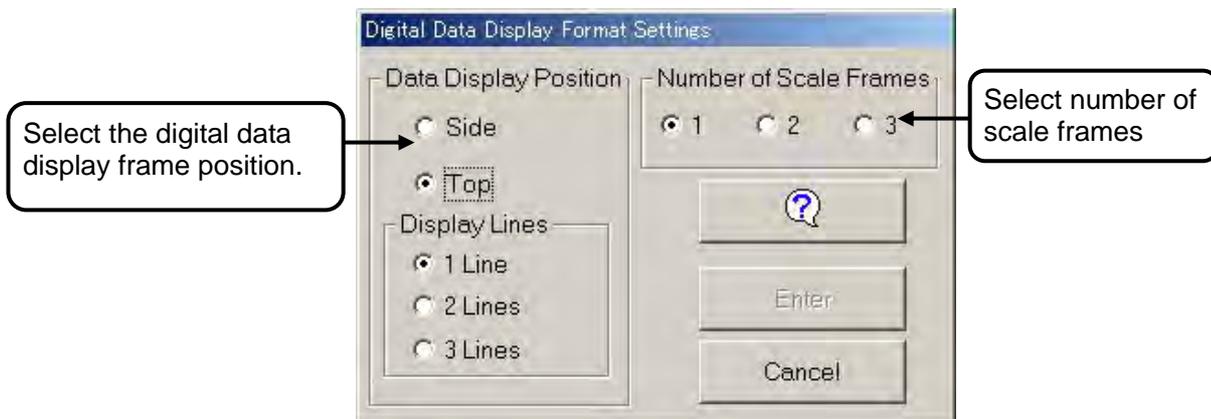
7-6-2 Data Number Display Settings

You can select data of which numeric number is displayed beside its tracing line.

Select a display interval of the numeric numbers.
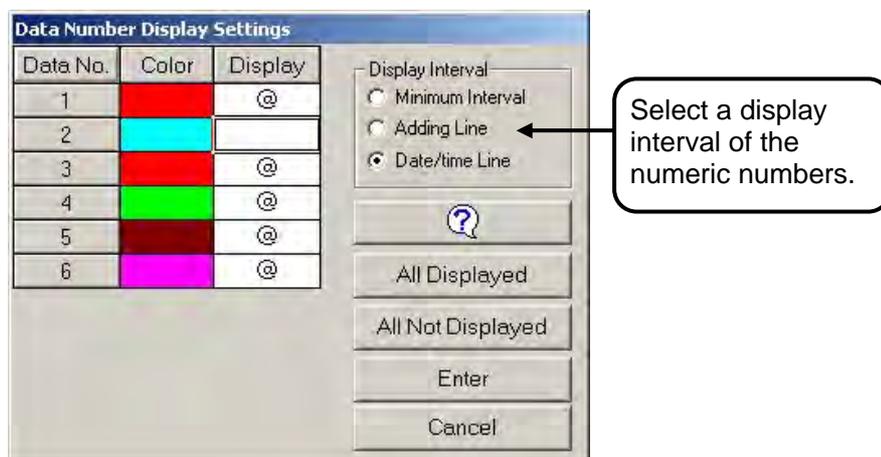
7-7 File Conversion

You can select a binary formatted file to be read.

You can select a conversion format.
In each format (CSV or Text Format), you can create 20 format configurations.

You can execute the file conversion with the format configurations pre-set.

You can configure a conversion period within the data acquisition period of the file read.

File Conversion

<Source File Information>

File Name | Memory1.mbm

Period | 09/08/2000 10:41:00 ~ 09/08/2000 12:08:00

Start | 09/08/2000 10:41:00   End | 09/08/2000 12:08:00

<Destination File Information>

Saving in | D: Ref

File Name | test

<Conversion Format Information>

- ○ Text Format   Configuration | 2: TEST1
- ● CSV Format   Conversion Data Settings
  - ○ All Data Conversion
  - ● Skipped Data Conversion   0 data skipped

7-8 Daily report printing

You can create a daily report of data acquired by the program or data converted by the BR data conversion.

Data selected as "Yes" is only printed .

Report Printing

me | SAISEI.mbm   Start | 9 / 5 /2002 13:21:32

ed Data | 12   Samples | 130   End | 9 / 5 /2002 13:43:02

ata No.	Tag	Print	Time-Signal	Max	Min	Average	
1	1	Tc MIN	Yes	Average	All	All	All
2	2	Tc MAX	Yes	Average	Time-Signal	None	All
3	3	CH2 MIN	Yes	Instantaneous	All	All	None
	4	CH2 MAX	Yes	Average	All	All	All
		CH3 MIN	Yes	Average	All	All	All
		CH3 MAX	Yes	Instantaneous	All	All	All
		CH4 MIN	Yes	Average	All	All	Time-Signal
		CH4 MAX	Yes	Instantaneous	All	All	All
		log10	Yes	Average	All	All	All
		log10	Yes	Average	All	All	All
		loge MIN	Yes	Average	All	All	All
		loge MAX	Yes	Average	All	All	All

Time-signal data
Select a data computation for printing of the time-signal data.

[Average]
Average value from 1 hour before is printed.

[Instantaneous]
Instantaneous data at each hour is printed.

[None]
Nothing is printed.

Max/Min/Average/ Total
Select data output All/Time-Signal/None.
[All]
All data acquired in the day specified are subject to compute.
[Time-Signal]
All data in the time-signal data are subject to compute.
[None]
Nothing is computed.
＜Caution＞
If too many samples exist when [All] is selected in the total column, the total value may be overflowed.

Daily Report Computation screen will appear.

Daily Report Samples

n Time | 24:00

Date | 9 / 5 /2002   Compute   Cancel

7-8-1 Daily Report Computation Screen
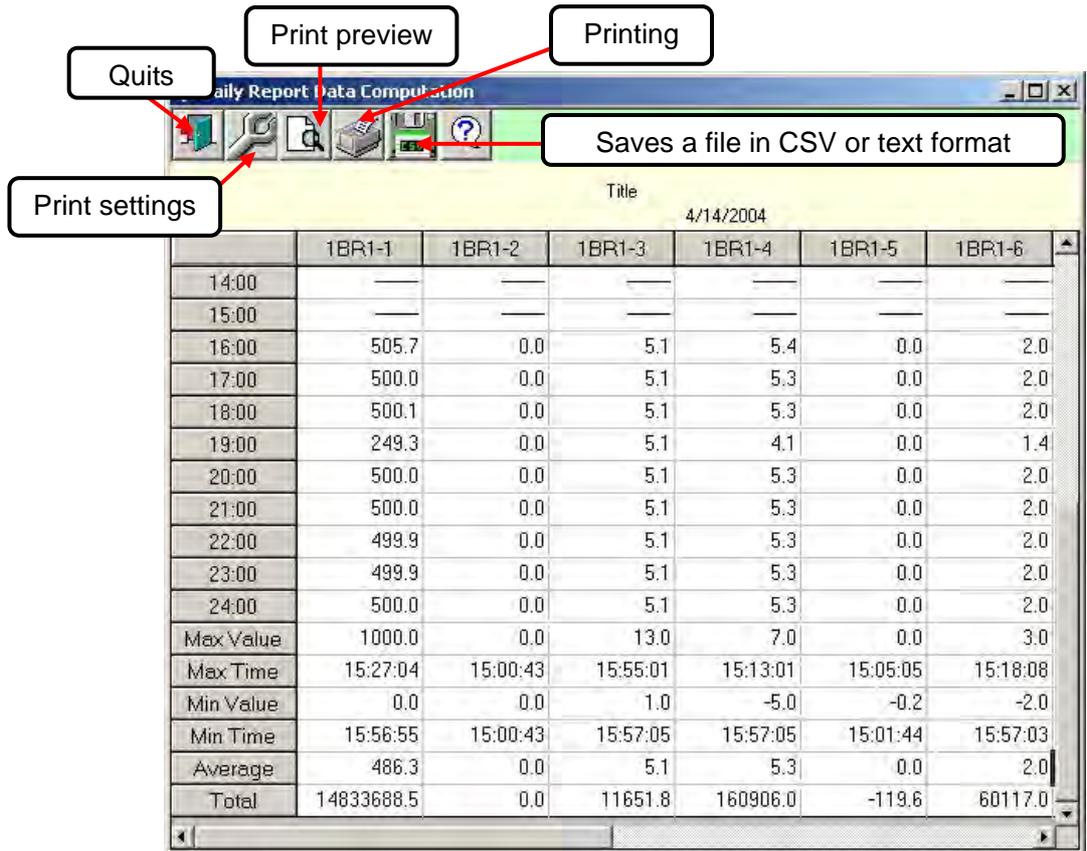
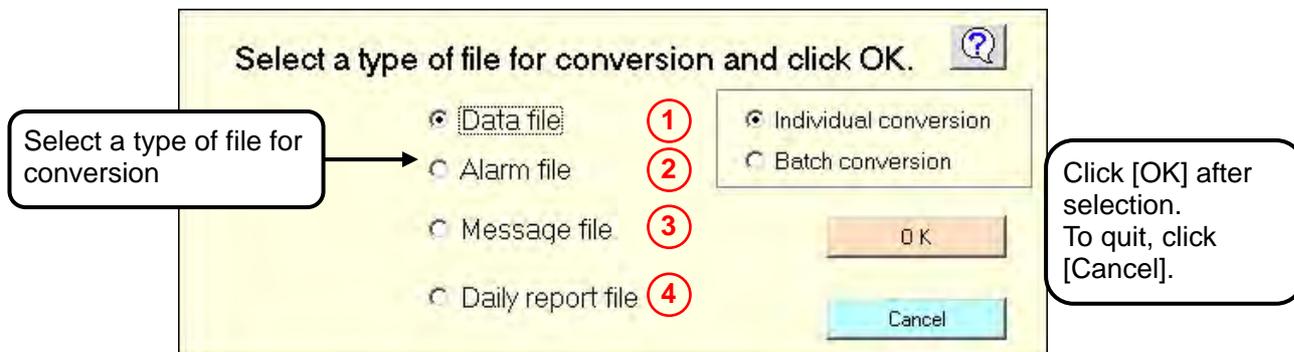## 7-8-2 Example of daily report printing

The example shown below is a printing in [A4 longitudinal] by using a page printer. The number of data printed on one page differs on Windows printer settings.

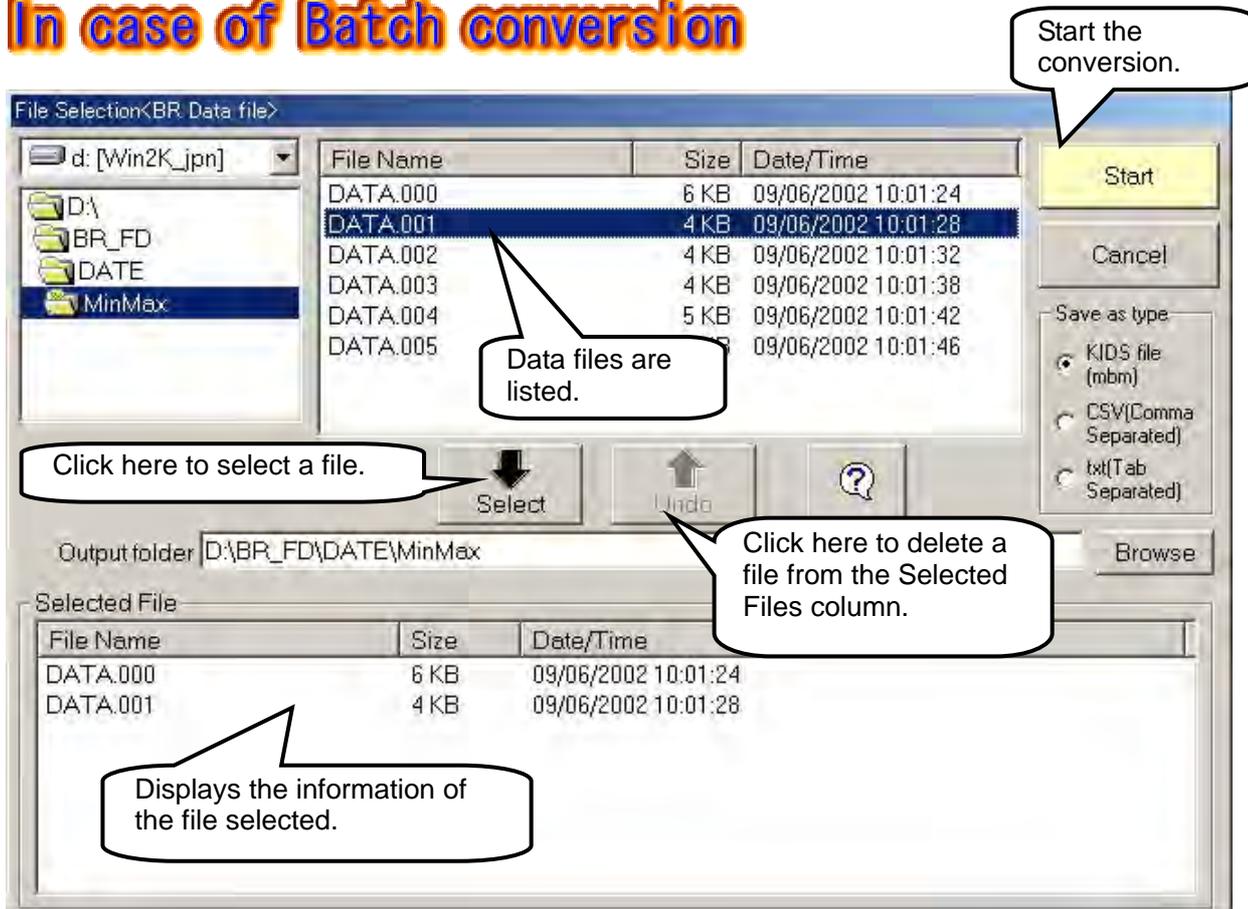|	CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8	CH9	CH10
	Sample 1 ... 5/29/2003									
Unit	℃	℃	℃	℃	℃	℃	℃	℃	V	℃
1:00	131.7	115.1	149.3	177.4	202.1	208.2	202.0	201.7	1.52	164
2:00	131.3	114.6	148.8	177.0	201.6	207.8	201.5	201.2	1.55	159
3:00	130.8	114.1	148.4	176.5	201.2	207.3	201.1	200.8	1.63	157
4:00	130.4	113.7	148.0	176.1	200.8	206.9	200.7	200.4	1.60	153
5:00	130.2	113.4	147.7	175.9	200.5	206.6	200.4	200.1	1.54	151
6:00	129.9	113.2	147.5	175.6	200.3	206.4	200.1	199.8	1.47	153
7:00	129.7	113.0	147.3	175.4	200.1	206.1	199.9	199.6	1.40	165
8:00	129.4	112.7	147.0	175.2	199.8	205.9	199.6	199.3	1.32	202
9:00	129.2	112.5	146.8	174.9	199.6	205.6	199.4	199.0	1.28	231
10:00	129.5	112.6	146.8	175.0	199.8	205.5	199.2	198.9	1.29	254
11:00	129.6	112.7	147.0	175.1	199.9	205.8	199.4	199.3	1.29	270
12:00	129.9	113.0	147.1	175.4	200.1	205.9	199.6	199.5	1.30	286
13:00	129.7	112.7	146.9	175.1	199.9	205.8	199.4	199.3	1.29	299
14:00	129.7	112.7	147.0	175.1	199.9	205.7	199.4	199.2	1.27	306
15:00	129.9	112.8	147.0	175.1	199.9	205.7	199.4	199.2	1.24	312
16:00	130.7	113.7	147.9	176.0	200.8	206.5	200.3	200.1	1.26	319
17:00	129.3	112.4	146.7	174.7	199.5	205.8	199.5	199.2	1.31	285
18:00	130.0	113.3	147.4	175.6	200.3	205.5	199.1	198.9	1.38	274
19:00	131.1	114.4	148.5	176.7	201.4	206.7	200.4	200.2	1.50	256
20:00	131.3	114.5	148.6	176.8	201.6	207.2	201.0	200.7	1.52	224
21:00	131.6	114.8	148.9	177.1	201.9	207.4	201.1	200.9	1.50	205
22:00	131.9	115.1	149.2	177.4	202.2	207.7	201.5	201.3	1.46	193
23:00	132.0	115.2	149.3	177.5	202.4	207.9	201.7	201.5	1.36	181
24:00	132.0	115.2	149.3	177.5	202.3	208.0	201.8	201.6	1.38	175
Max Value	132.5	115.2	149.4	177.5	202.4	208.5	202.2	201.9	1.63	319
Max Time	22:10:15	23:00:08	22:06:30	23:00:00	22:00:00	23:00:00	23:00:00	23:00:00	3:00:00	16:00:00
Min Value	192.2	112.4	146.7	174.7	199.5	205.5	198.7	198.5	1.24	151
Min Time	8:00:00	16:00:00	16:00:00	16:00:00	16:00:00	16:00:00	16:10:00	16:09:00	15:00:00	5:00:00
Average	130.5	113.6	147.8	176.0	200.8	206.7	200.4	200.1	1.40	224
Total									33.6	5374

7-9 BR Data Conversion

You can create a data file, an alarm file, message file, a message file or a daily report file for data stored in a floppy disk or a memory card installed in the BR series graphic recorder.

You can convert a data file into a file format (extension: .mbm) that can be displayed in the historical data monitoring, text format or CSV format and convert an alarm file, a message file or a daily report file into text format or CSV format. You can chose "Individual conversion" or "Batch conversion".

Select a type of file for conversion

Click [OK] after selection.
To quit, click [Cancel].

In case of Batch conversion

Start the conversion.

Data files are listed.

Click here to select a file.

Click here to delete a file from the Selected Files column.

Displays the information of the file selected.

Save as type -----Select a binary KIDS file [*.mbm], a CSV file or a Text file for conversion. For the historical data monitoring, select a binary KIDS file [*.mbm]. KIDS file[mbm] is only displayed for Data file.

About converted file name.

Data file	Filename is BR filename.extension(.mbm , .csv , .txt)	
	Ex) When BR filename is A.000 ,	
	Save as type	File name after conversion.
	KIDS file	A.000.mbm
	CSV	A.000.csv
	TXT	A.000.txt
Alarm file	Filename is BR filename.extension(.csv , .txt)	
	Ex) When BR filename is A.ALM ,	
	Save as type	File name after conversion.
Message file	CSV	A.ALM.csv
	TXT	A.ALM.txt
Daily report file	In order to descriminate Daily report file from Data file,R is added after the BR filename.	
	Ex) When BR filename is A.000,	
	Save as type	File name after conversion.
	CSV	A.000R.csv
	TXT	A.000R.txt

In case of Individual conversion

① Data file

Select a binary file (*.mbm), a CSV file or a text file for conversion. For the historical data monitoring, select a binary file (*.mbm).

Click here to select a file.

Specify a file name in a saving location and start the conversion.

Specify the conversion condition.

Quits the BR data conversion.

BR Data Conversion

LOAD SAVE SET QUIT Help

Information of conversion file

Top data time   09/06/2002 09:24:45

File storage time   09/06/2002 09:29:05

Data storage period   100   *100msec

Condition of conversion

Start time   09/06/2002 09:24:45

End time   09/06/2002 09:29:05

Period   100   *100msec

Indicate data on 30 record at the head.

	Date	Time	Tc [MIN]	Tc [MAX]	CH 2[MIN]	CH 2[MAX]	CH 3[MIN]
1	09/06/2002	09:24:45	629.4	637.8	26.5	26.6	26.6
2	09/06/2002	09:24:55	646.2	654.5	26.5	26.6	26.6
3	09/06/2002	09:25:05	662.8	671.0	26.6	26.6	26.7
4	09/06/2002	09:25:15	679.2	687.3	26.		
5	09/06/2002	09:25:25	695.4	703.4	26.		
6	09/06/2002	09:25:35	711.3	719.2	26.		
7	09/06/2002	09:25:45	727.0	734.7	26.		
8	09/06/2002	09:25:55	742.4	750.0	26.6	26.6	26.7
9	09/06/2002	09:26:05	757.5	765.0	26.6	26.6	26.7
10	09/06/2002	09:26:15	772.3	779.6	26.6	26.6	26.7

30 data from the top in the file and their date/time and tags are displayed.

(2) **Alarm file**

All alarm activation/reset information, their date/time, channels and levels in the file are read and displayed. (Up to 200 data) You can store an alarm file as a CSV file or a text file.

(3) **Message File**

All messages and their date/time in the file are read and displayed. (Up to 200 data)

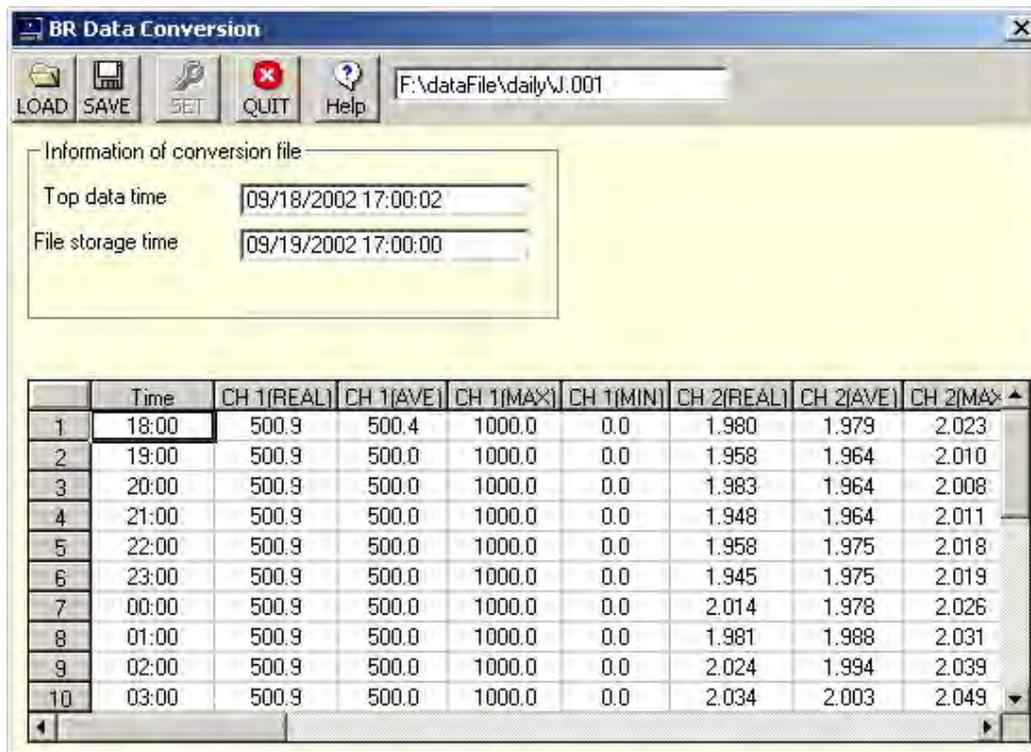You can store an alarm file as a CSV file or a text file.

④ **Daily report file**

Instantaneous values/average values/minimum values/maximum values in the time period set and maximum values/minimum values/average values in a day are displayed.

You can store an alarm file as a CSV file or a text file.

※ **Files created with BR series graphic recorder**

When a data file is stored into a floppy disk or a memory card with BR series graphic recorder, the file with the following file name is stored depending on the storing condition.

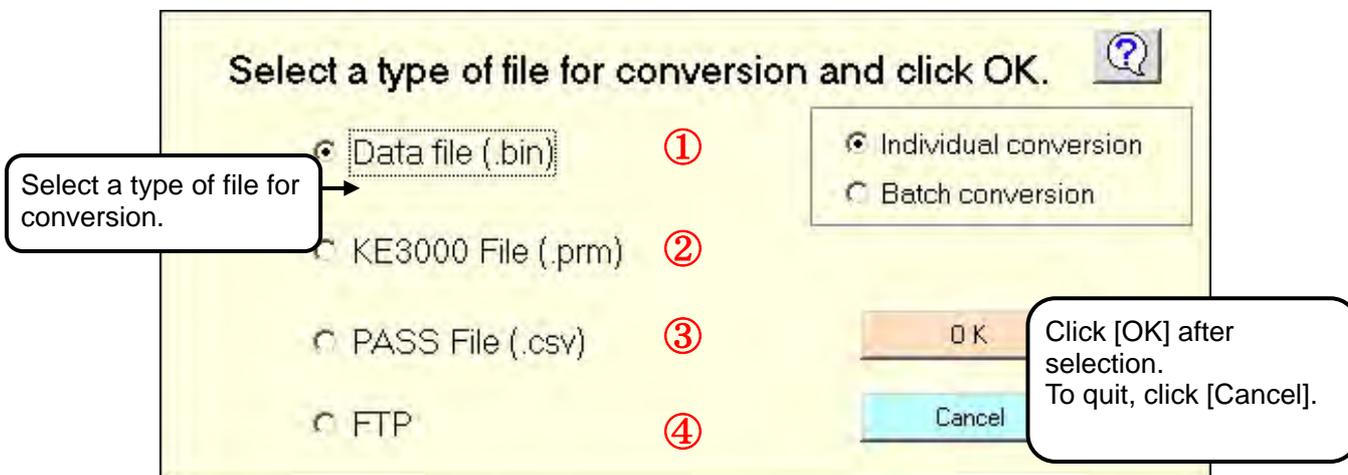| File type	File name	Explanation
Data file Event file Daily report file	Filename.000 Filename.001 Filename.002	"Filename" is the name (up to 8 digits) configured in the File Programming" of BR recorder."000" is a continuous number. When file storage starts at the preset condition, when the power supply is turned off, when the settings are changed, and so on, a new file is created with a new number.
Alarm file	*****.alm	The extension is "alm".
Message file	*****.msg	The extension is "msg".
Configuration file	*****.set	The extension is "set".

※**In the BR data conversion, a configuration file is not converted.**

7-10 KE3 File Conversion

The data file created in memory card of KE3000 can be converted in to KIDS format(mbm),Excel format (xls),HTML format,CSV format,or Text format.

You can chose "Individual conversion" or "Batch conversion".

The setting file of KE3000 is changed into the format of PASS, and the setting file of PASS is changed into the setting file of KE3000.

Select a type of file for conversion and click OK.

Select a type of file for conversion.

- ① Data file (.bin)
- ② KE3000 File (.prm)
- ③ PASS File (.csv)
- ④ FTP

Individual conversion
Batch conversion

O K

Cancel

Click [OK] after selection.
To quit, click [Cancel].

① Data file

Select a KIDS format (mbm), a Excel format (xls) ,a HTML format (htm) ,a CSV format or a text format for conversion. For the historical data monitoring, select a binary file (*.mbm).

② KE3000 file

The setting file of KE3000 is changed into the format of PASS.

③ PASS file

The setting file of PASS is changed into the setting file of KE3000.

④ FTP

Communication between File and instruments.

CHINO