Data Display Program

K2
K2Sprint

DATA VIEWER
Instruction Manual

IMV CORPORATION

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English Edition

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12.0.0	2016.01.29	First edition
13.0.0	2016.05.11	Applied to Windows10, modified description of requirements for PC
13.6.0	2017.10.18	Additional description of function to restore the display configuration and overlaid graph file selection method
14.1.0	2018.04.27	Additional description of a palette tool icon
14.2.0	2018.09.10	Additional description of function to mark cursor data

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Chapter1　Data Viewer

1.1 Outline

DATA VIEWER is attached as the standard software to display graph data file (*.vdf) saved using a K2 application software such as SINE.

1) Available data with DATA VIEWER
   ① Available graphs with the application software
   ② Available operation status with the application software
   ③ Available test definition with the application software[*1]
   ④ Available history log with the application software[*2]

2) Available functions with DATA VIEWER
   ① Available functions in graph operation with the application software
   ② Print function
   ③ Report generation function using Report Generator
   ④ Function to overlay graphs of different files
      Available functions when overlaying have some limitations. Please see the next paragraph for the details.
   ⑤ Display of different file 3D graph
      Available functions when overlaying have some limitations. Please see the paragraph 4) for the details.
   ⑥ Report generation function using Quick Report[*3]

3) Specification of the function to overlay graphs of different files
   ① Available data files of the application software
   ② SINE, RANDOM, SHOCK, CAPTURE
   ③ Available graph types
      Waveform, SINE level tracing, PSD, Transmissibility (provided that the same unit is applied)
   ④ Number of graphs which can be overlaid
      64graphs
   ⑤ Unavailable functions
      Report Generator

4) Specification of display of different file 3D graph

① Available 3D graph display type

Waterfall graph, Color map

② Data file of available application software

SINE(SPOT test is unavailable), RANDOM, SHOCK, CAPTURE

③ Available graph type

Response, Monitor, Monitor Distortion (SINE only), Drive (SHOCK only), Control error (SHOCK only)

(Unit should be same)

④ Available depth axis data type

File name, Time*4, Elapsed time (SINE, RANDOM only) *4, Sweep count (SINE only) *4, Loop count (SHOCK only) *4

⑤ Number of graphs displayable simultaneously

255

⑥ Unavailable function

Report generator

*1 This data is available from data saved by Ver7.0.5.0 or later.

*2 This data is available from data saved by Ver12.2.0.0 or later.

*3 The selection of operation status items is available from data saved by Ver12.2.0.0 or later.
All information of operation status is available in all version.

*4 This data type is available from data saved by Ver11.2.0.0 or later.

1.2 Requirements

Microsoft Windows 10 Pro(64bit), Windows 10 IoT Enterprise(64bit) or Windows 7 Professional SP1(32bit/64bit).

Chapter 2　Installation

2.1 Installation of DATA VIEWR

This section describes the installation of the DATA VIEWER.

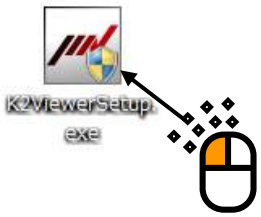
When installing them, **log in the Windows as the "User with authority of administrators".**

If K2 software has already been installed, DATA VIEWER cannot be installed using "K2ViewerSetup.exe".

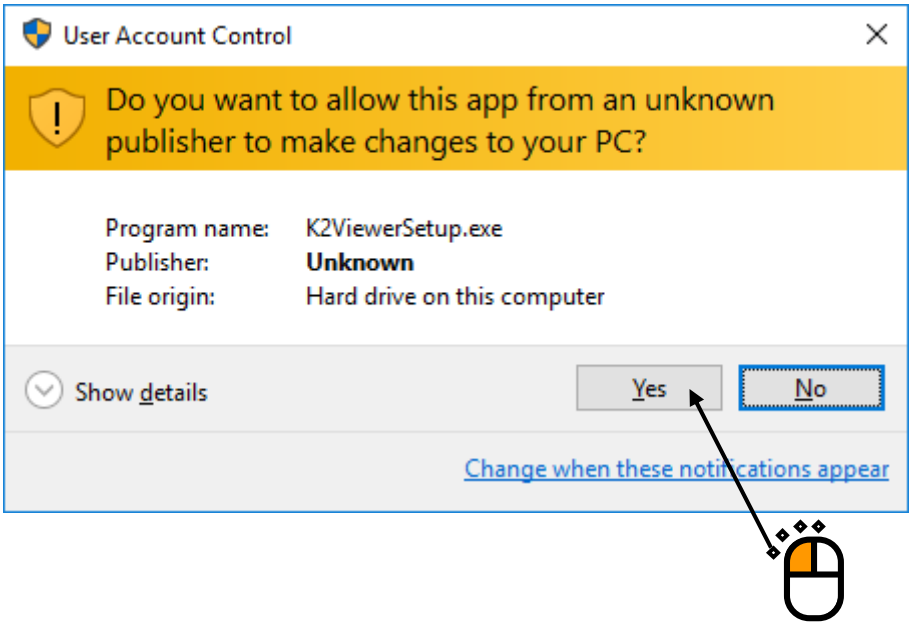
＜Procedures＞

＜Step 1＞

Double-click the icon of 'K2ViewerSetup.exe'.

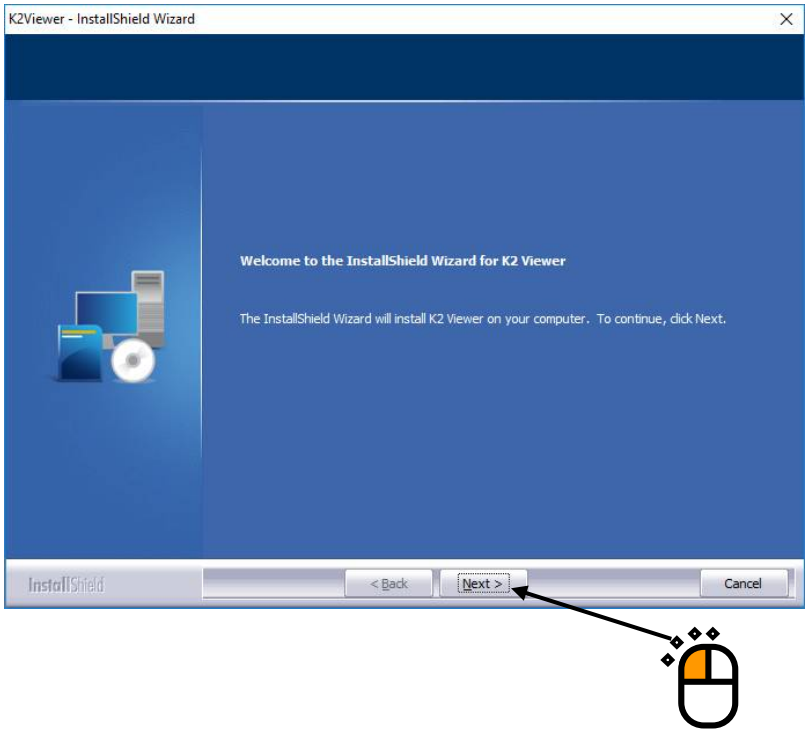


Press the button of [Yes] if the screen of 'User Account Control' appears.



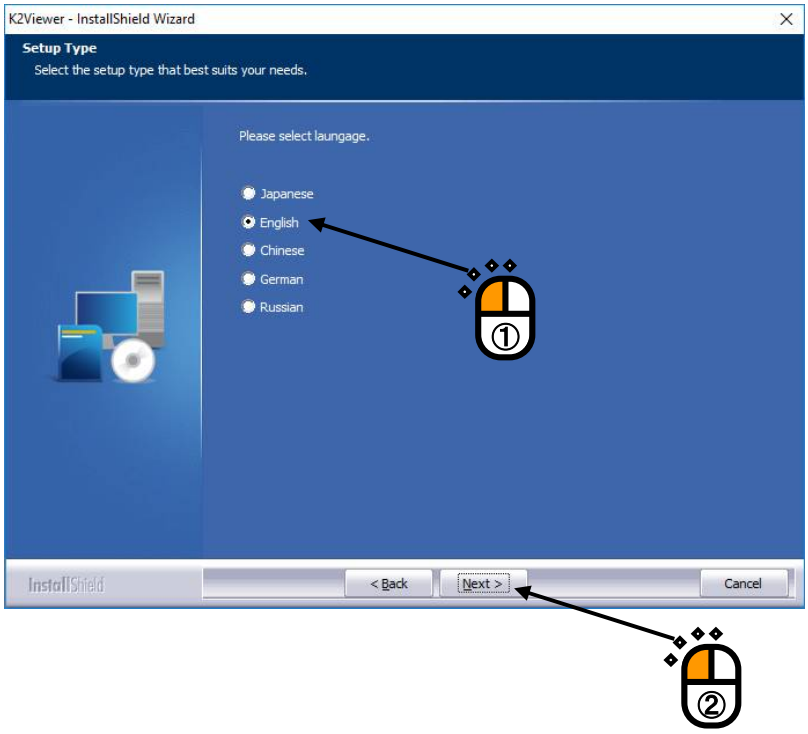
＜Step 2＞

The initial screen of installation appears. Press the button of [Next].



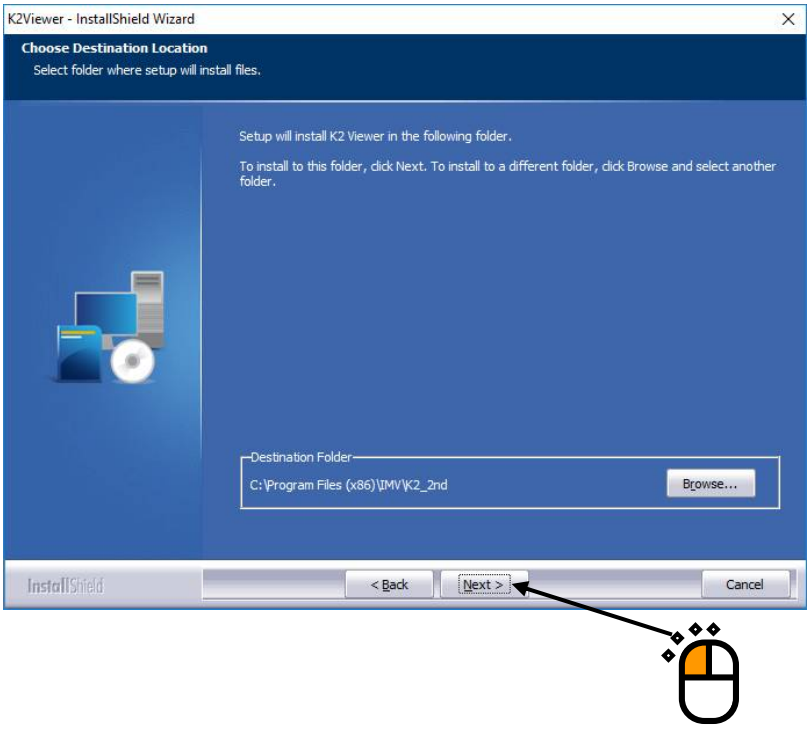
＜Step 3＞

The screen of selecting the language of DATA VIEWER. Select your desired language, and press the button of [Next] .



＜Step 4＞

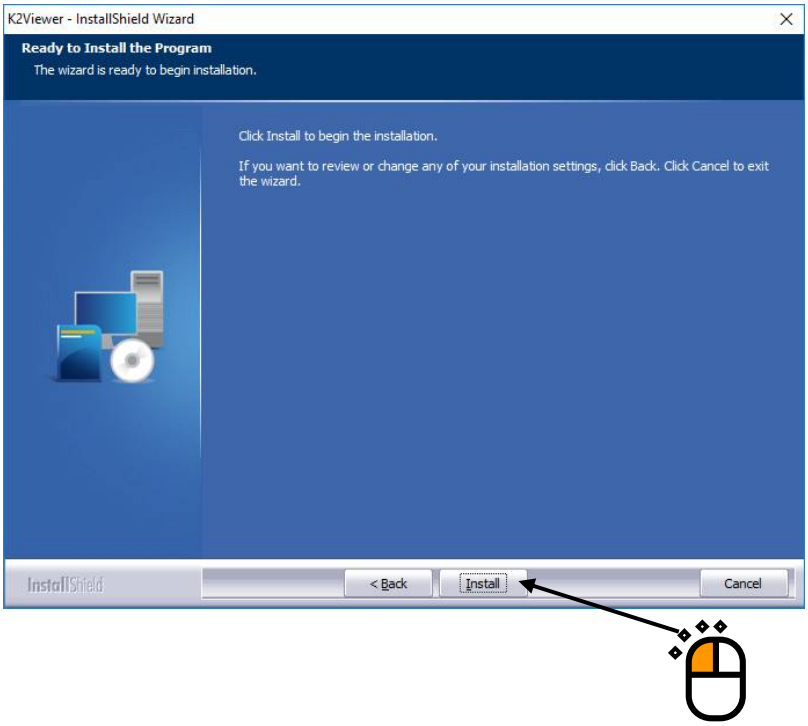
The screen of setting the destination of DATA VIEWER. Press the button of [Next].



<Step 5>

The screen of starting installation appears. Press the button of [Install].

Installation of the DATA VIEWER is started.



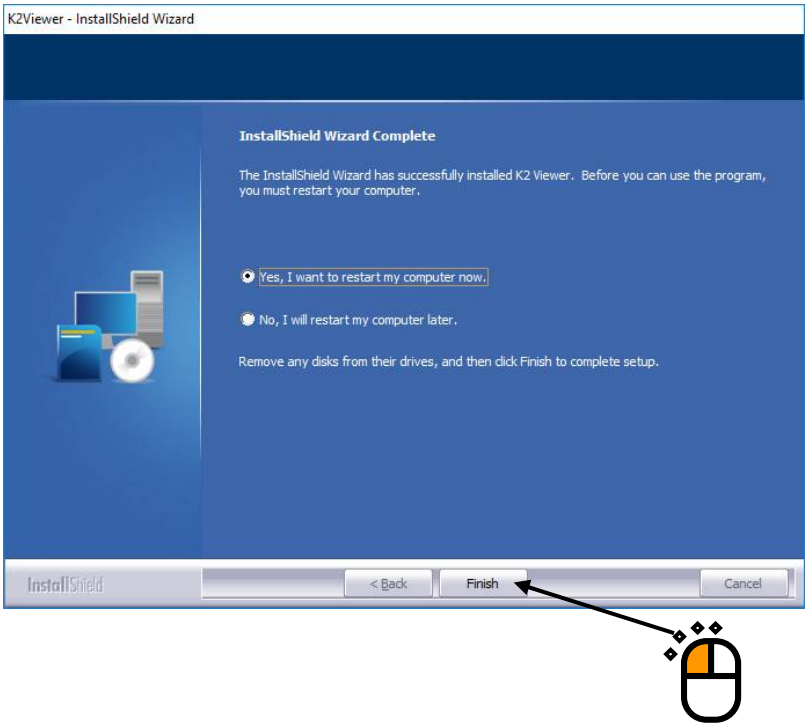
After the installation of the K2 application is finished, the shortcut icon of ‘K2Launcher’ is made on the desktop screen.

<Step 6>

The screen noticing the completion of installation appears.

Select the message of ‘Yes, I want to restart my computer now’, and press the button of [Finish].

Then, the PC is restarted.



Then, installation of the DATA VIEWER is complete.

2.2 Uninstallation of DATA VIEWER

This section describes the uninstallation of the DATA VIEWER.

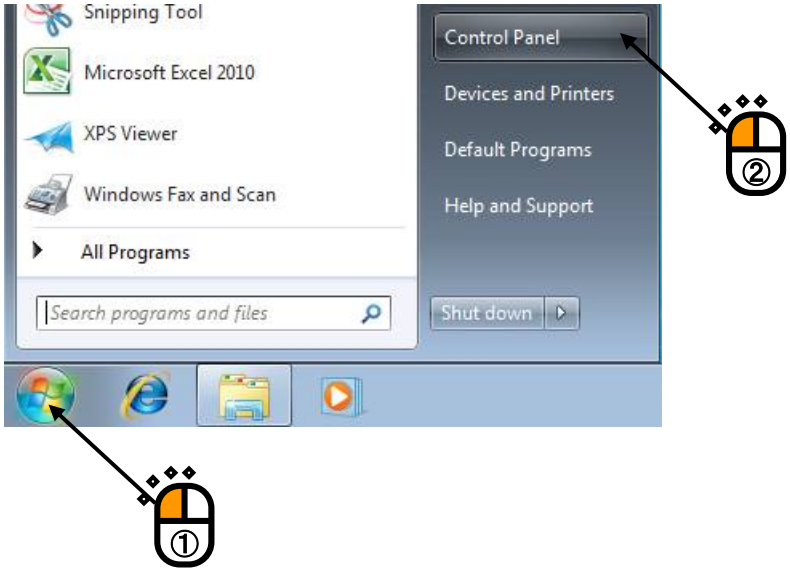
Access to the screen displaying the message of ‘Uninstall or change a program’ through the Control Panel.

1) Windows 7

＜Procedures＞

＜Step 1＞

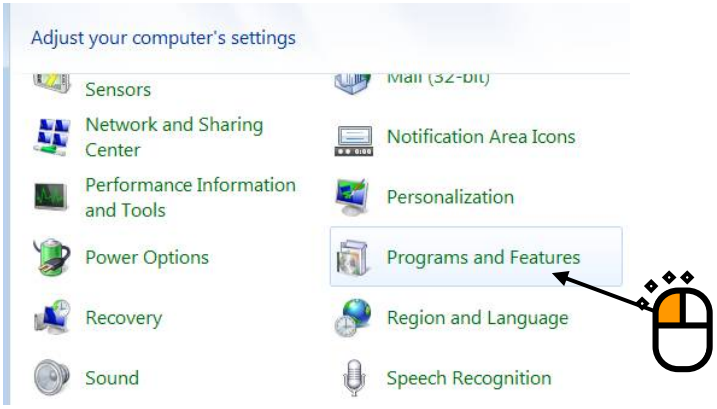
Select ‘Control Panel’ on the ‘Start Menu’.



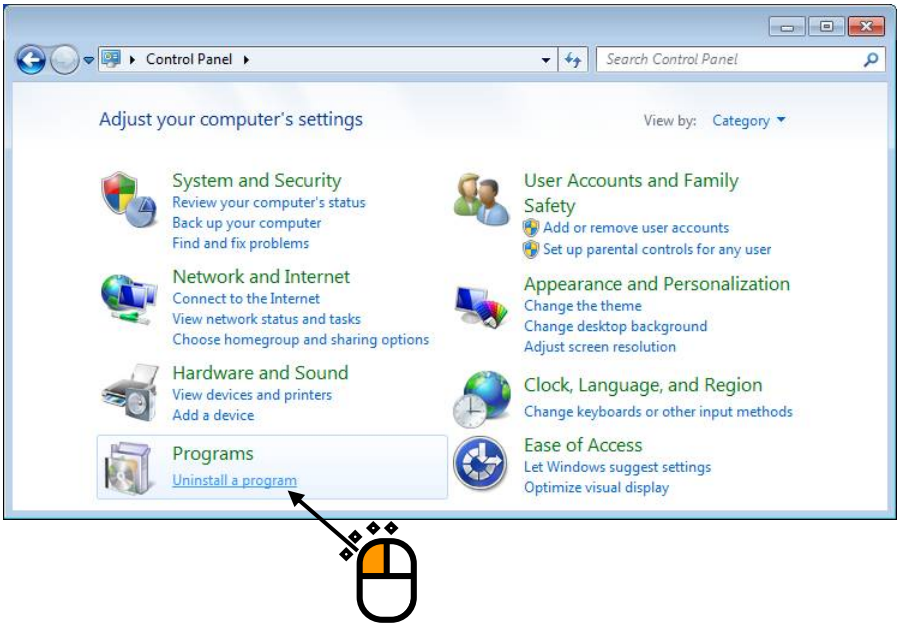
＜Step 2＞

The ‘Control Panel’ screen appears.

If the viewing method of the control panel is set to ‘Large icons’ or ‘Small icons’, select ‘Programs and Features’.



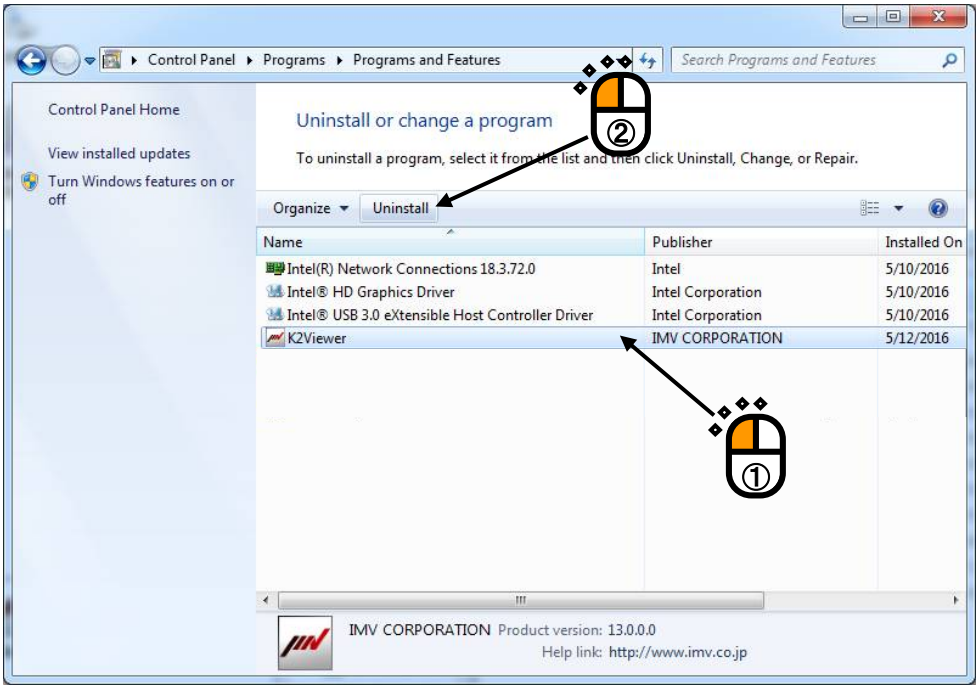
If the viewing method of the control panel is set to ’Category’, select ‘Uninstall a program’.



＜Step 3＞

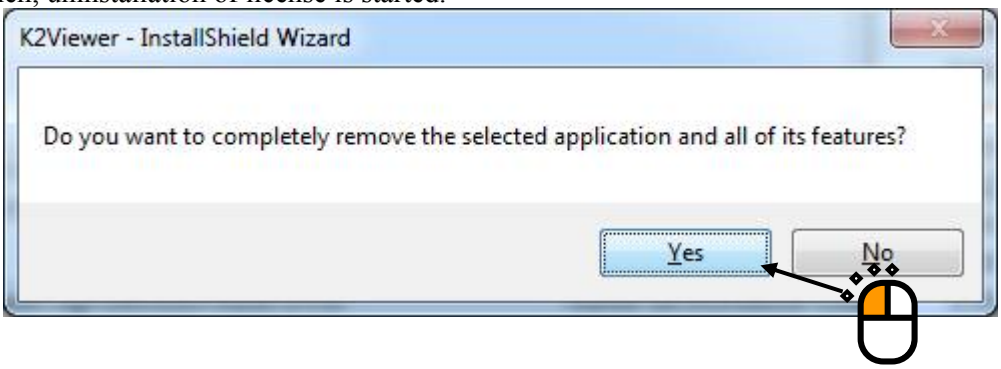
The screen displaying the message of ‘Uninstall or change a program’ appears.

Select ‘K2 Viewer’ on the screen of ‘Uninstall or change a program’, and then, select ‘Uninstall’.



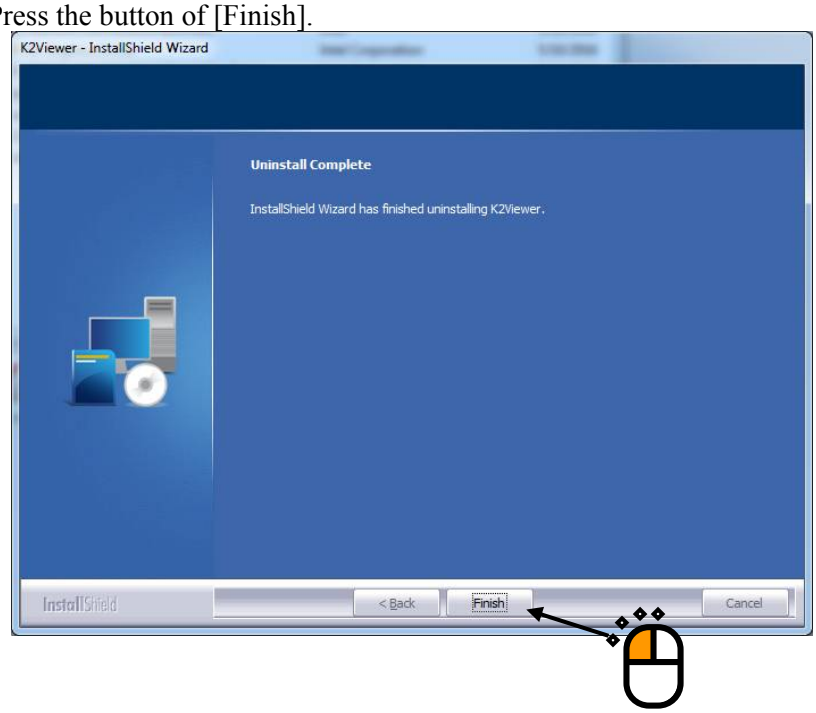
＜Step 4＞

The message box asking the confirmation of uninstallation appears. Press the button of [Yes]. Then, uninstallation of license is started.



＜Step 5＞

After the uninstallation of license is completed, the screen noticing the completion of uninstallation appears. Press the button of [Finish].



Then, uninstallation of DATA VIEWER is complete.

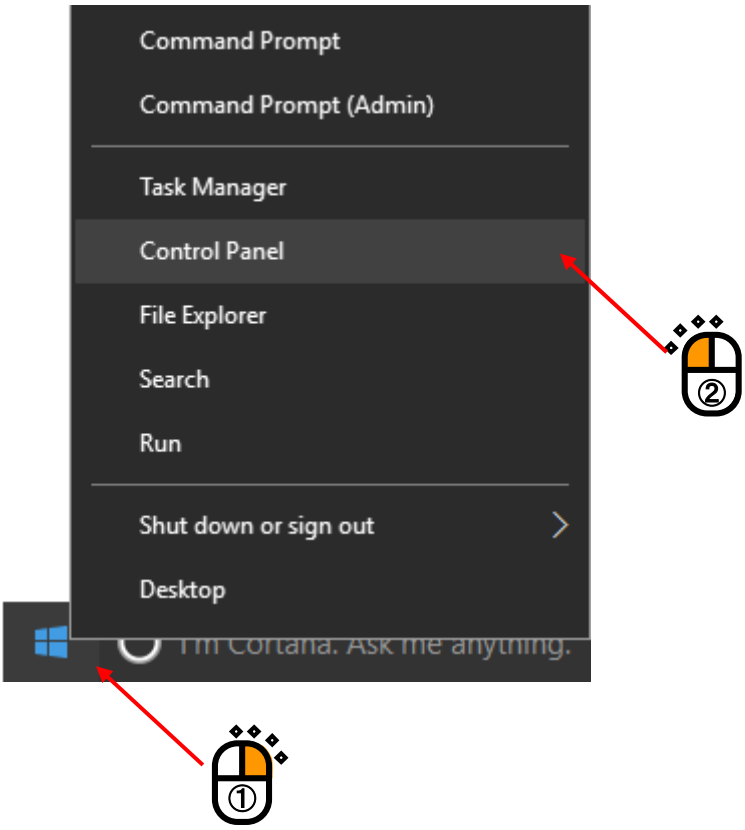
2) Windows 10

＜Procedures＞

＜Step 1＞

Right-click the ‘Start Menu’.

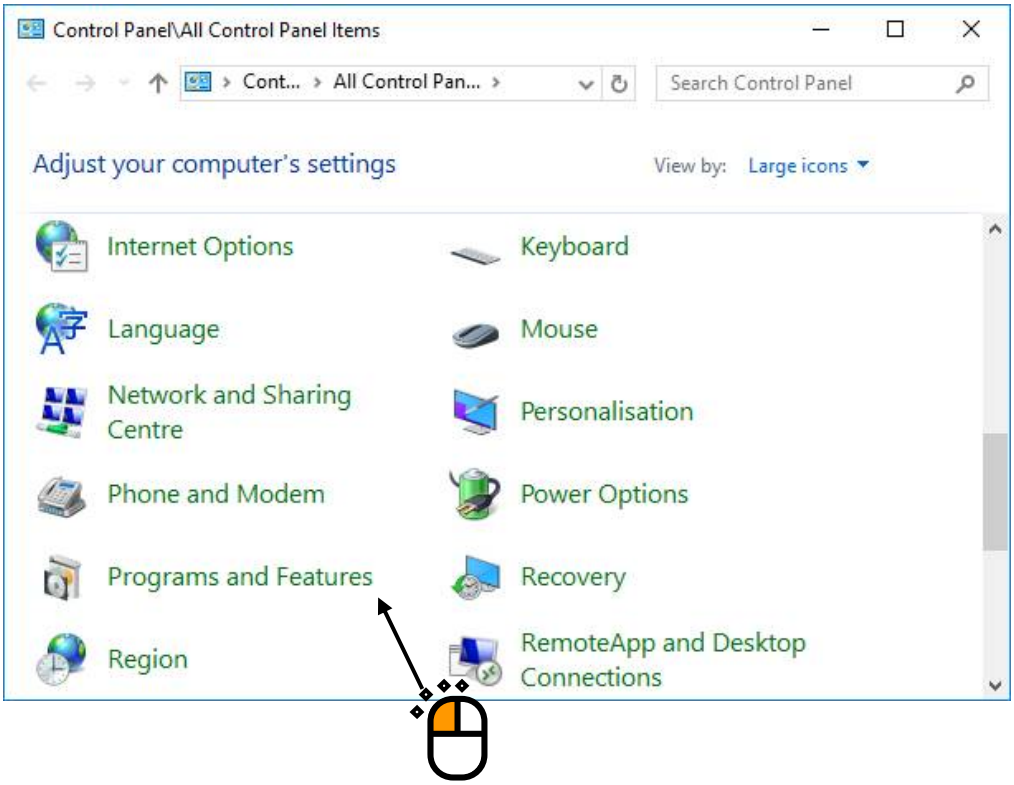
And select ‘Control Panel’ on the displayed menu.



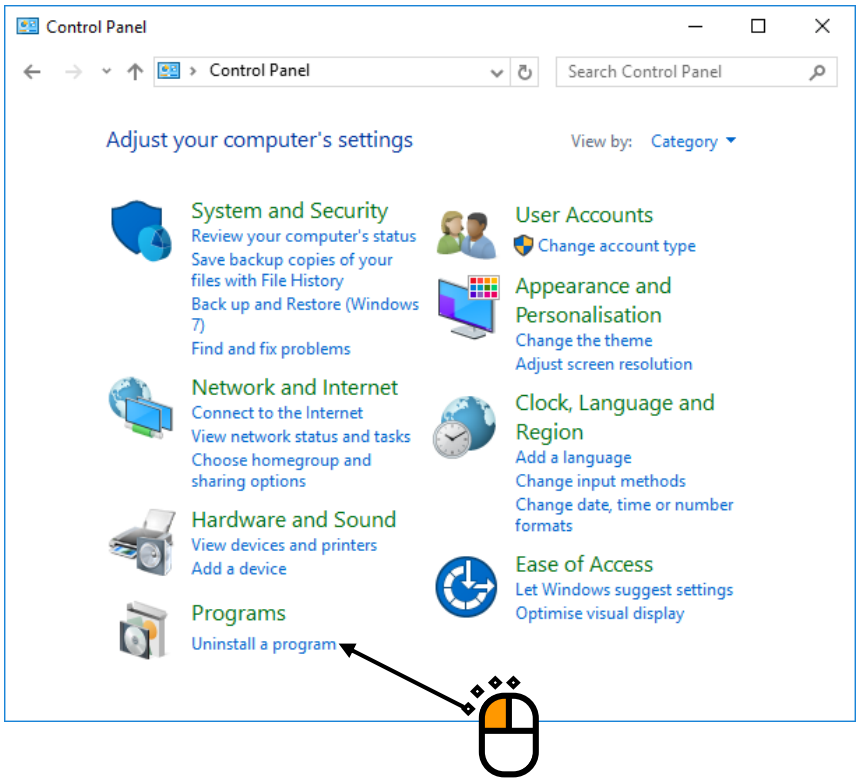
＜Step 2＞

The ‘Control Panel’ screen appears.

If the viewing method of the control panel is set to ‘Large icons’ or ‘Small icons’, select ‘Programs and Features’.



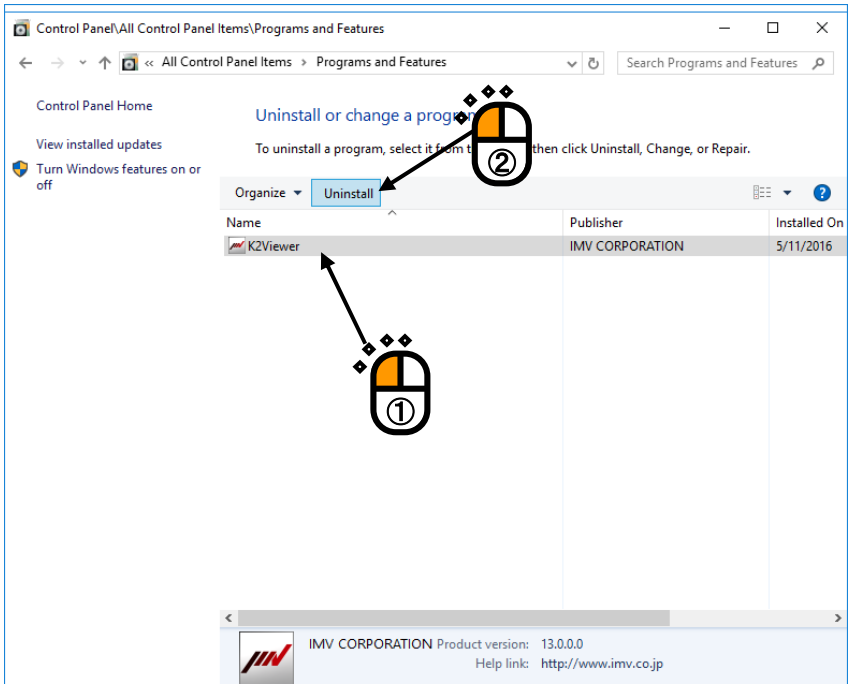
If the viewing method of the control panel is set to ’Category’, select ‘Uninstall a program’.



＜Step 3＞

The screen displaying the message of ‘Uninstall or change a program’ appears.

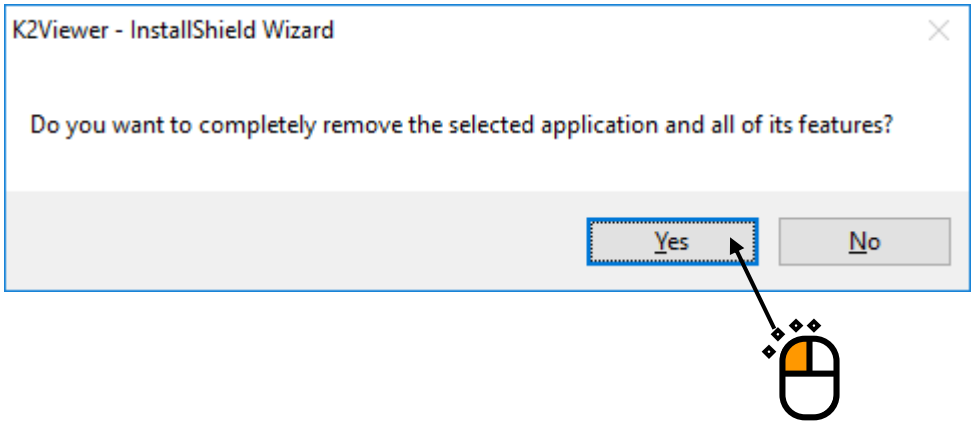
Select ‘K2 Viewer’ on the screen of ‘Uninstall or change a program’, and then, select ‘Uninstall’.



＜Step 4＞

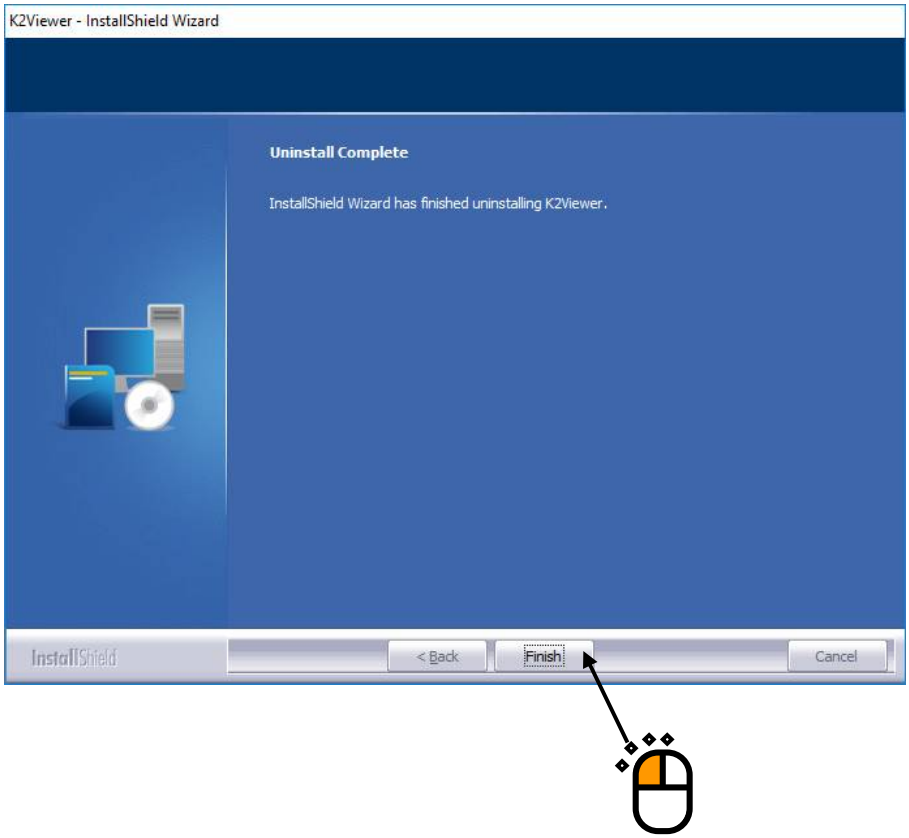
The message box asking the confirmation of uninstallation appears. Press the button of [Yes].

Then, uninstallation of license is started.



＜Step 5＞

After the uninstallation of license is completed, the screen noticing the completion of uninstallation appears. Press the button of ‘Finish’.



Then, uninstallation of DATA VIEWER is complete.

2.3 Update of DATA VIEWER

When upgrading a DATA VIEWER, uninstall the DATA VIEWER installed already, and then, install a new version DATA VIEWER.

For operating procedures of the uninstallation of DATA VIEWER, refer to “2.2 Uninstallation of DATA VIEWER”.

For operating procedures of the installation of DATA VIEWER, refer to “2.1 Installation of DATA VIEWER”.

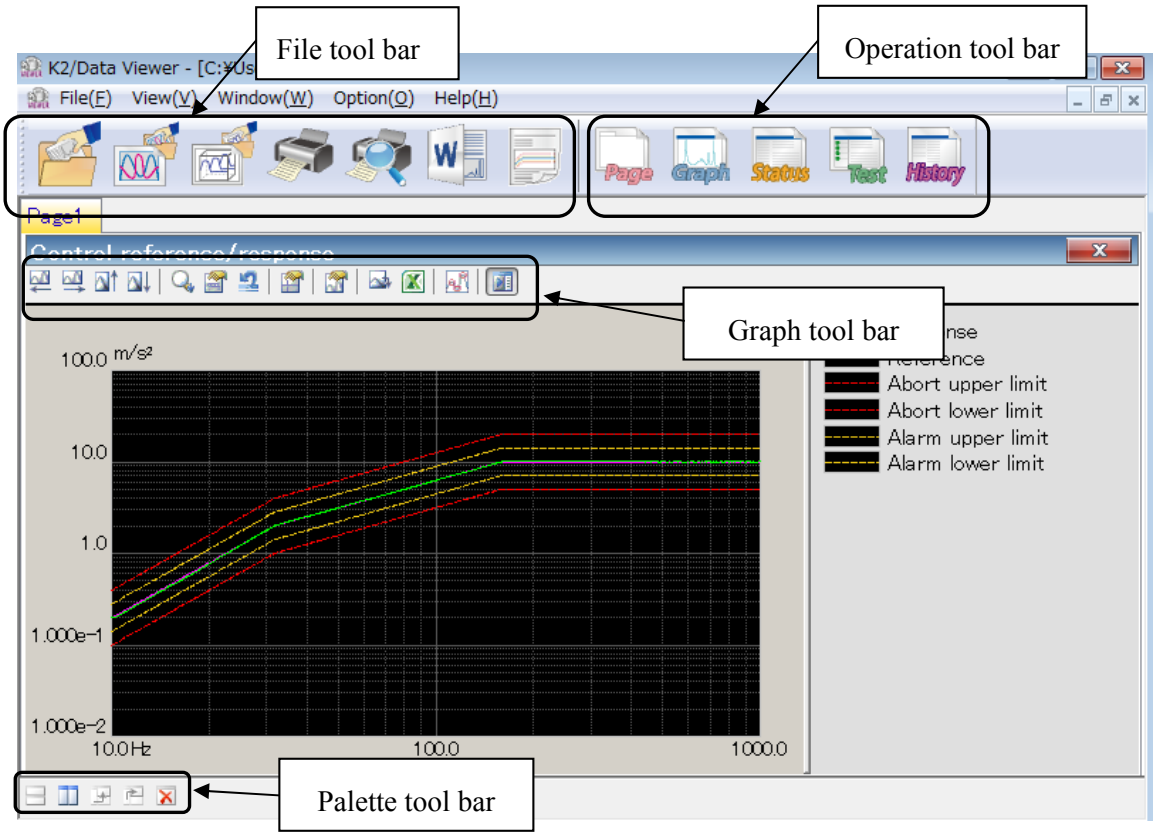
Chapter 3 Fundamental Operation Method

3.1 Outline

In DATA VIEWER, operation after booting up is executed by using the keyboard and the mouse. The window displayed as below appears when this application is started.

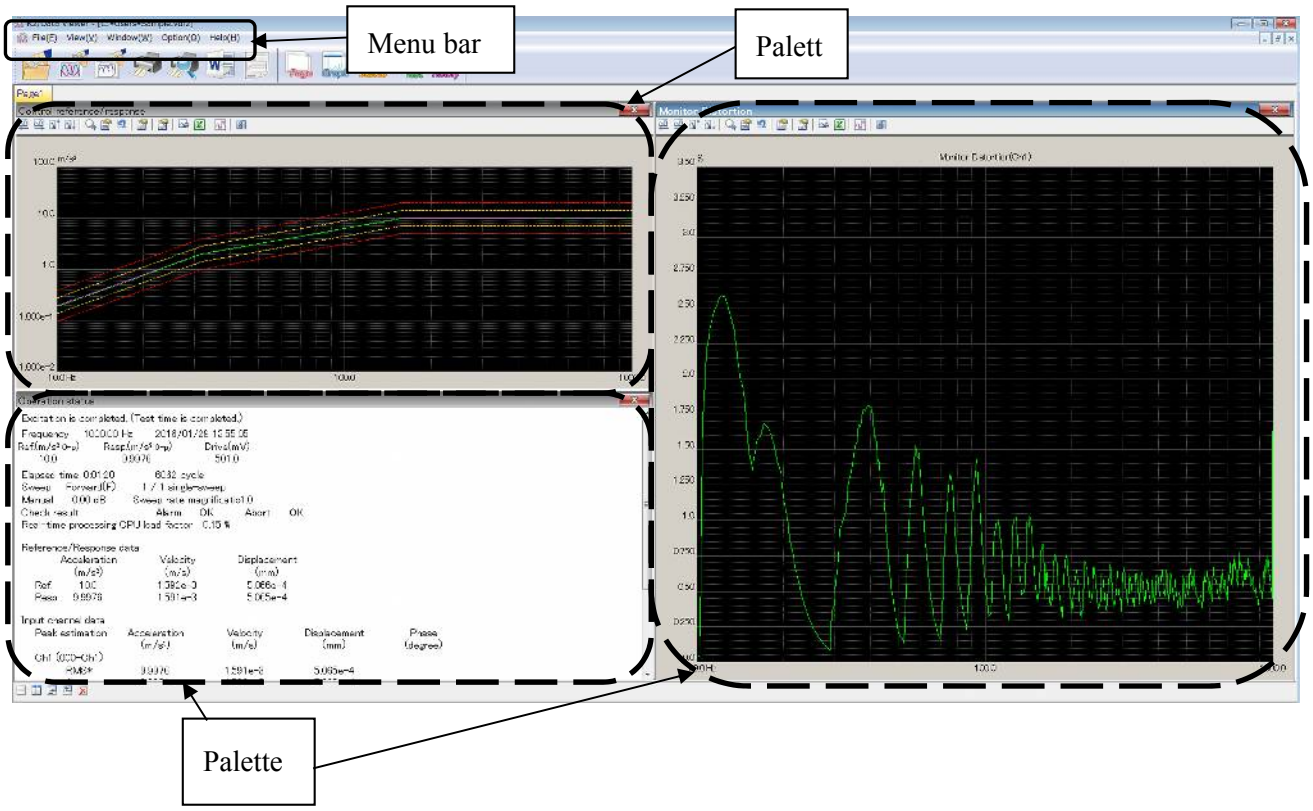
Each tool bar displays the commands that are frequently used in the menu as icons.

When an icon is clicked, the command corresponding with this icon is operated or the dialog box corresponding with this command is opened.



The names of all menus available in this application are displayed at the menu bar. A list of available commands appears by clicking each name of menus.

DATA VIEWER provides the function that the display space (a palette) of graphs and logs can easily be moved or copied.



3.2 Operation example

3.2.1 Description of Icons

3.2.1.1 Tool Icons

The commands that frequently used in the menu bar are displayed as icons on the tool bar below the menu bar. When an icon is clicked, a command corresponding with the icon is executed immediately or a dialog box corresponding with this command is opened.

This command is for opening a new graph data file and adding a new graph window.

This command is for displaying new overlaid graphs and adding a new graph window.

This command is for displaying new 3D graph and adding a new graph window.

Print

Print preview

Report generation on Microsoft Word (Report Generator)

Quick report generation on web browser or Microsoft Word(Quick Report)

This command is for adding pages to the graph window which is currently selected.

This command is for adding graphs to the graph window page which is currently selected.

This command is for adding operation status to the graph window page which is currently selected.

This command adds test definition to the graph window page being selected.

This command adds history log to the graph window page being selected.

3.2.1.2 Graph Tool Icons

Commands used for handling graphs are indicated by icons on the upper part of graph display area. When any icon is clicked, command corresponding to the icon will be executed immediately, or a dialogue box corresponding to the command appears.

Moves in graph display area leftward.

Moves in graph display area rightward.

Moves in graph display area upward.

Moves in graph display area downward.

Changes graph zooming by dragging.
(Zooming horizontally only, vertically only, and in both directions are allowed)

Changes graph scale. (Refer to “3.3.4 Scale”)

Returns scale to the initial status.

Displays a cursor. (Refer to “3.3.5 Cursor Display”)

Changes the currently displayed graph. (Refer to “3.3.6 Graph Change”)

Converts a graph into CSV data. (Refer to “3.5.1 File conversion to CSV”)

Outputs a graph on Excel. (Refer to “3.5.2 Graph display on Excel”)

Displays peak marks. (Refer to “3.3.7 Peak Mark”)

Displays legends.

3.2.1.3 Palette Tool Icons

Commands used for handling pallets are indicated by icons on the lower part of graph display area. When any icon is clicked, corresponding command is executed immediately.

Pallets are indicated split horizontally. (Refer to “3.2.4.1 Moving the Palette”)

Pallets are indicated split vertically. (Refer to “3.2.4.1 Moving the Palette”)

Pallets are indicated split in a grid pattern. (Refer to “3.2.4.1 Moving the Palette”)

Positions of displayed some pallets are changed by turning them counterclockwise.
(Refer to “3.2.4.1 Moving the Palette”)

Positions of displayed some pallets are changed by turning them clockwise.
(Refer to “3.2.4.1 Moving the Palette”)

Deletes pallets.

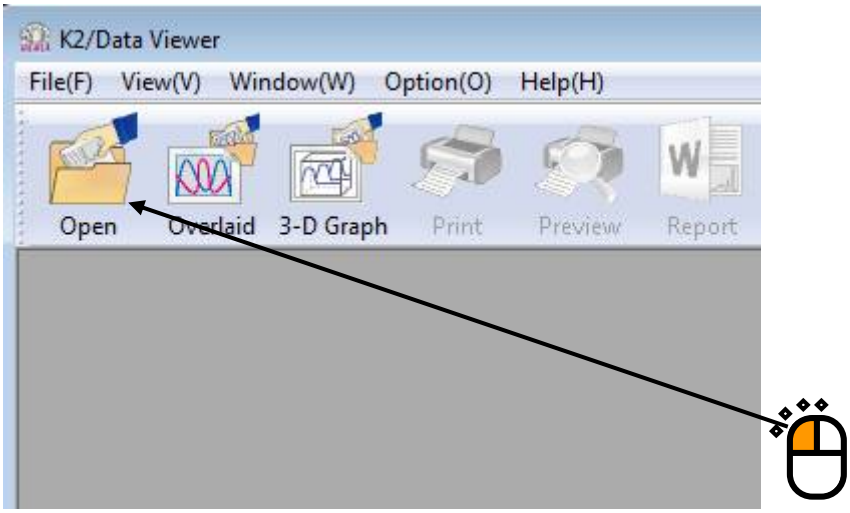
3.2.2 File Open

File management dialog in K2 application is described as below.

<Procedure>

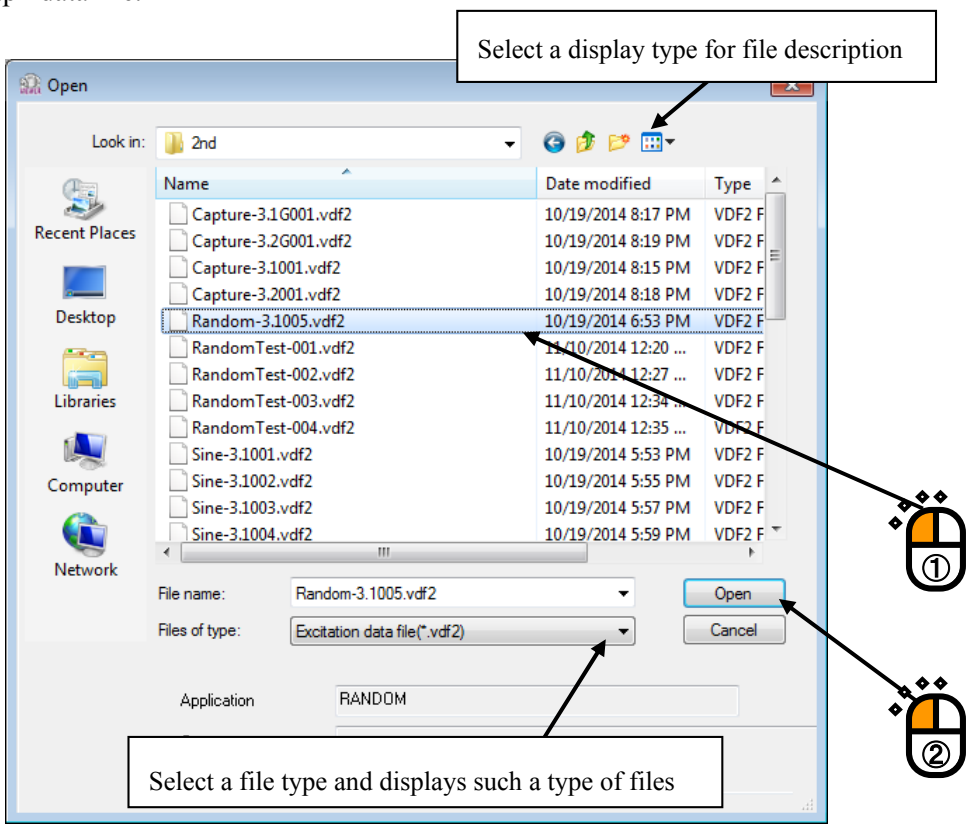
<Step1>

Select “File” on the menu bar and click “Open”, or click the “Open” icon on the tool bar.



<Step2>

Select the graph data file.

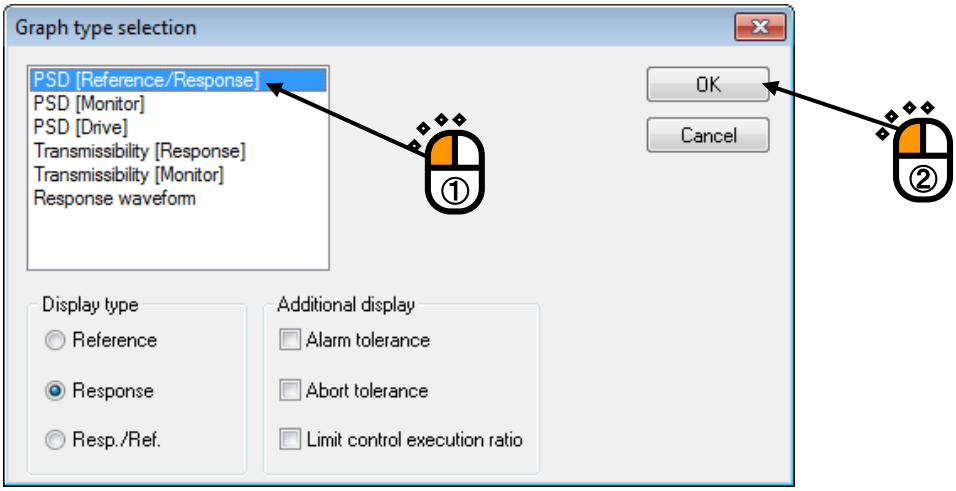


<Step3>

Graph type selection dialog is displayed corresponding to each application software.

Select the graph to be displayed.

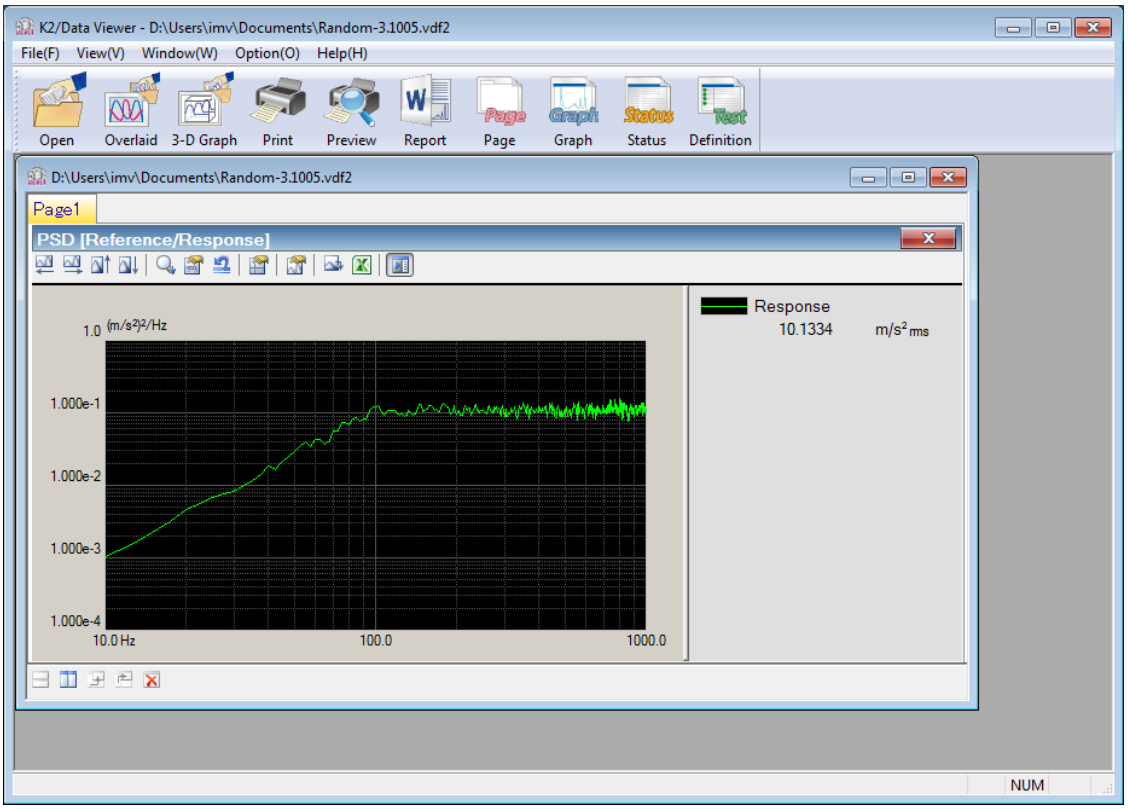
As for the graph type applicable to 3D graph, “Waterfall graph” or “Color map” can be selected. For details, refer to “3.3.1 Selecting of 3D graph and Color map”.



<Step4>

A graph window is added and the selected graph is displayed.

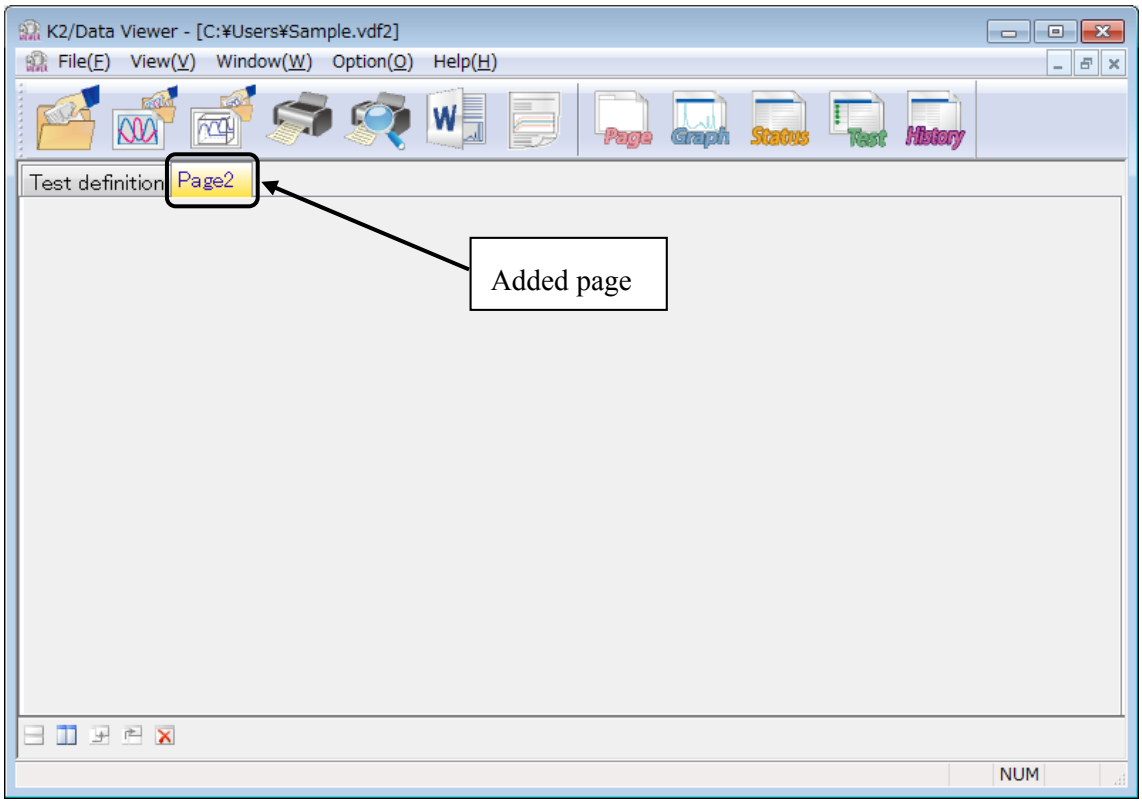
Graphs can be operated in the same way as graphs on the application software.



3.2.3 Add a Page

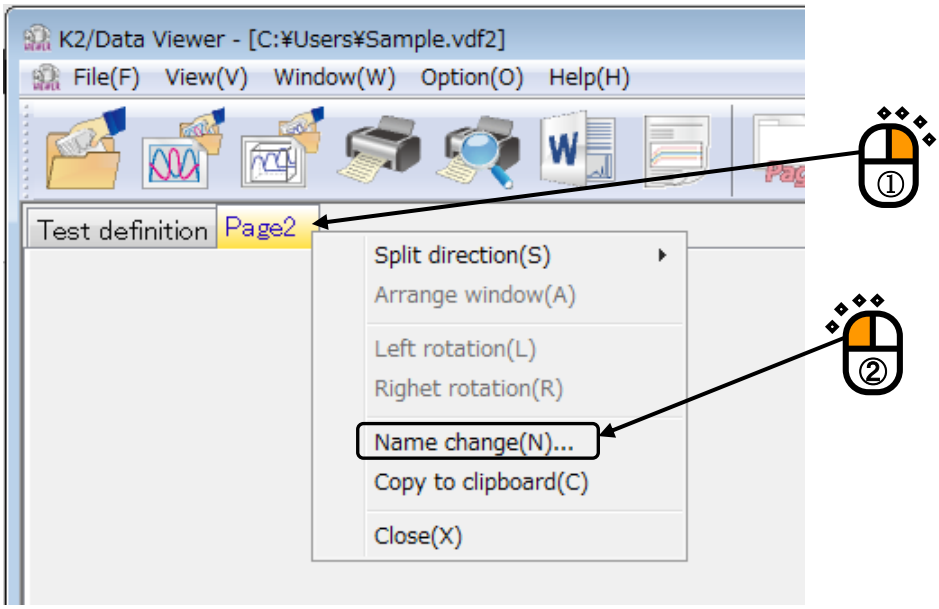
This function is for adding of the pages for displaying graphs and logs in a manner which is frequently used in scratchpad software like EXCEL.

Select “Window” on the menu bar, and click “Add a Page”, or click the icon of “Add a Page” on the tool bar. Then, a dialog shown below appears.

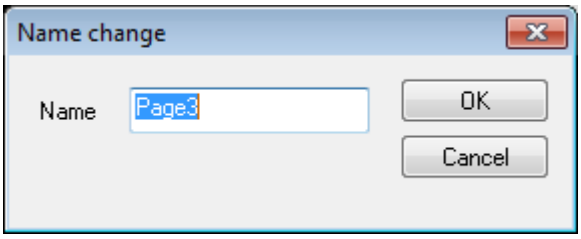


< Others > Rename the 3D graph

A name of the additional page can be changed by double clicking on the tab of the page in the display when it is necessary.



"Name change" window is displayed below;

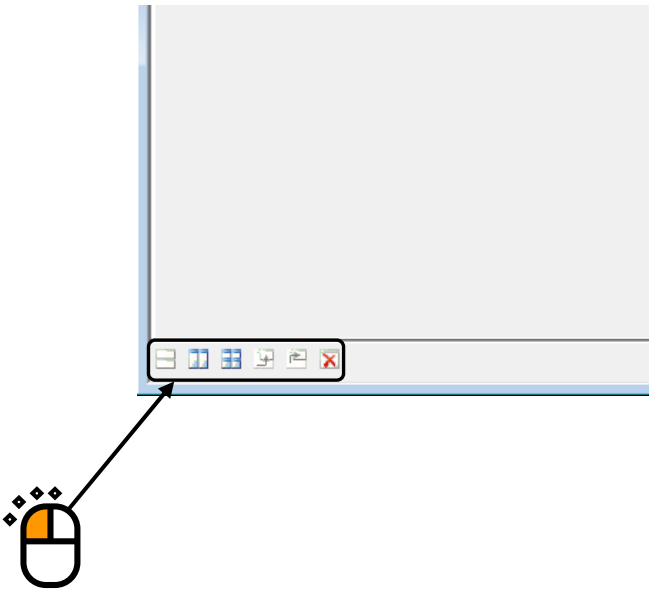


3.2.4 Palette Operation

DATA VIEWER provides the function that the display space (a palette) of graphs and logs can easily be moved or copied.

3.2.4.1 Moving the Palette

Palette can be moved by operating the palette operation button provided at the bottom of the displayed page.



3.2.5 Set Up

＜Transmissibility display unit＞

This item is for selecting the display unit of amplitude value in Transmissibility Graph.

This unit selected in this item is valid only for the transmissibility graphs calculated from the two data giving the same unit.

In case that the transmissibility graph is calculated from the two data having different units, the display unit of amplitude always appears as ‘Unit/Unit’.

3.3 Graph Operation

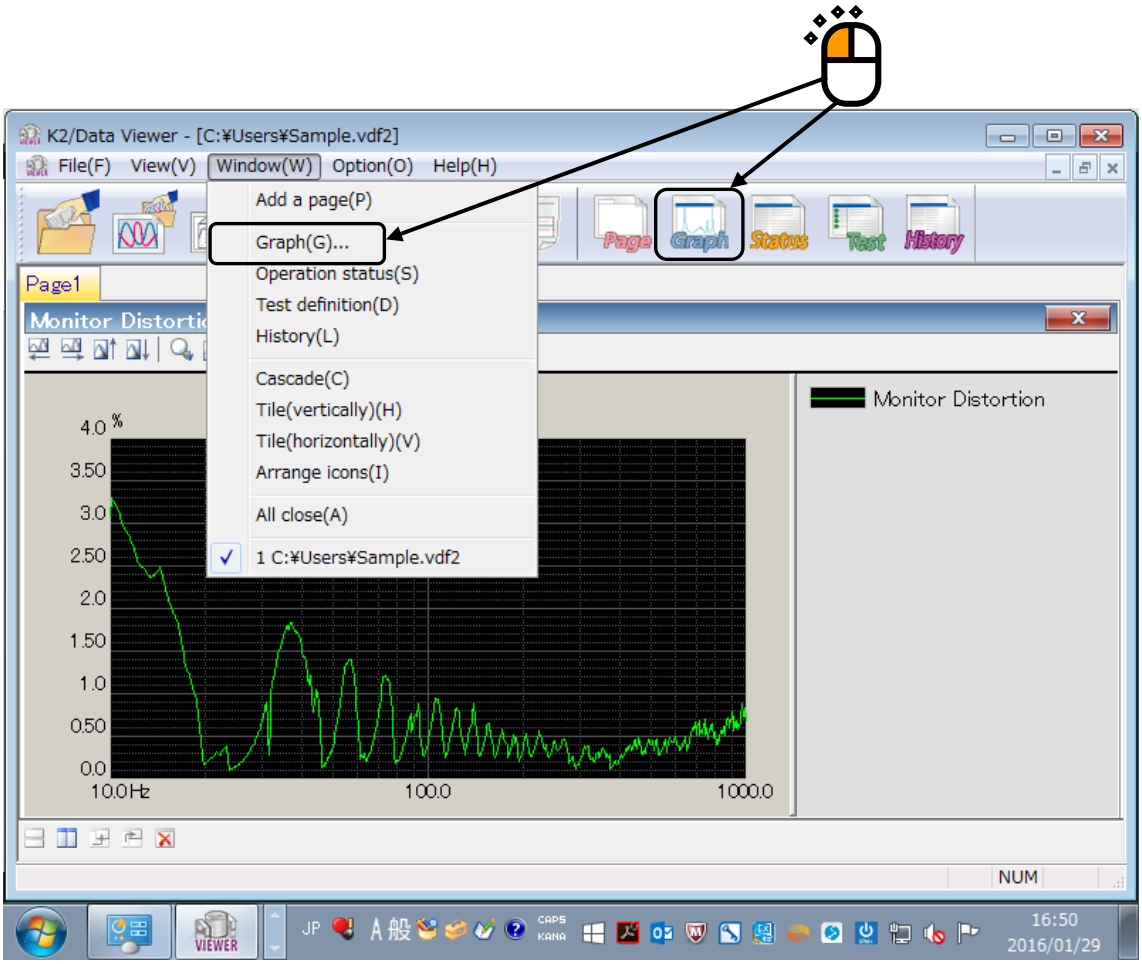
It describes about items that are used for graph operations such as selecting of graph display and changing of scale as below.

3.3.1 Selecting of Graph Display

< Procedures >

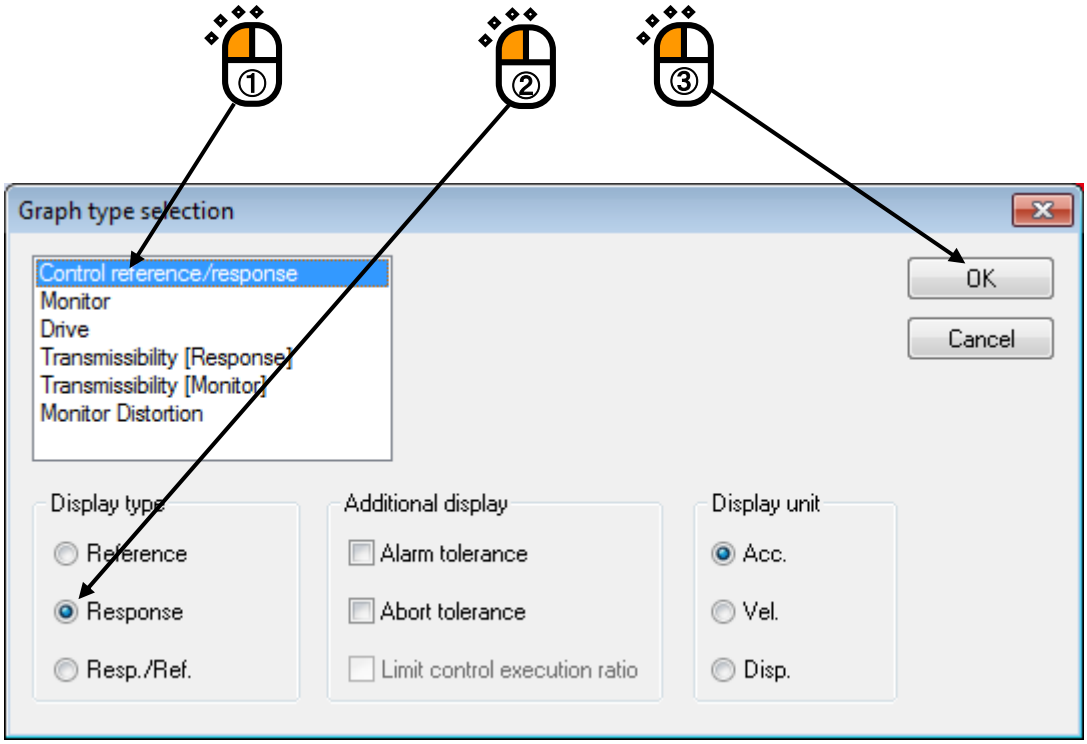
< Step 1 >

Select “Window” on the menu bar and click “Graph”, or click the icon of “Graph” on the tool bar.



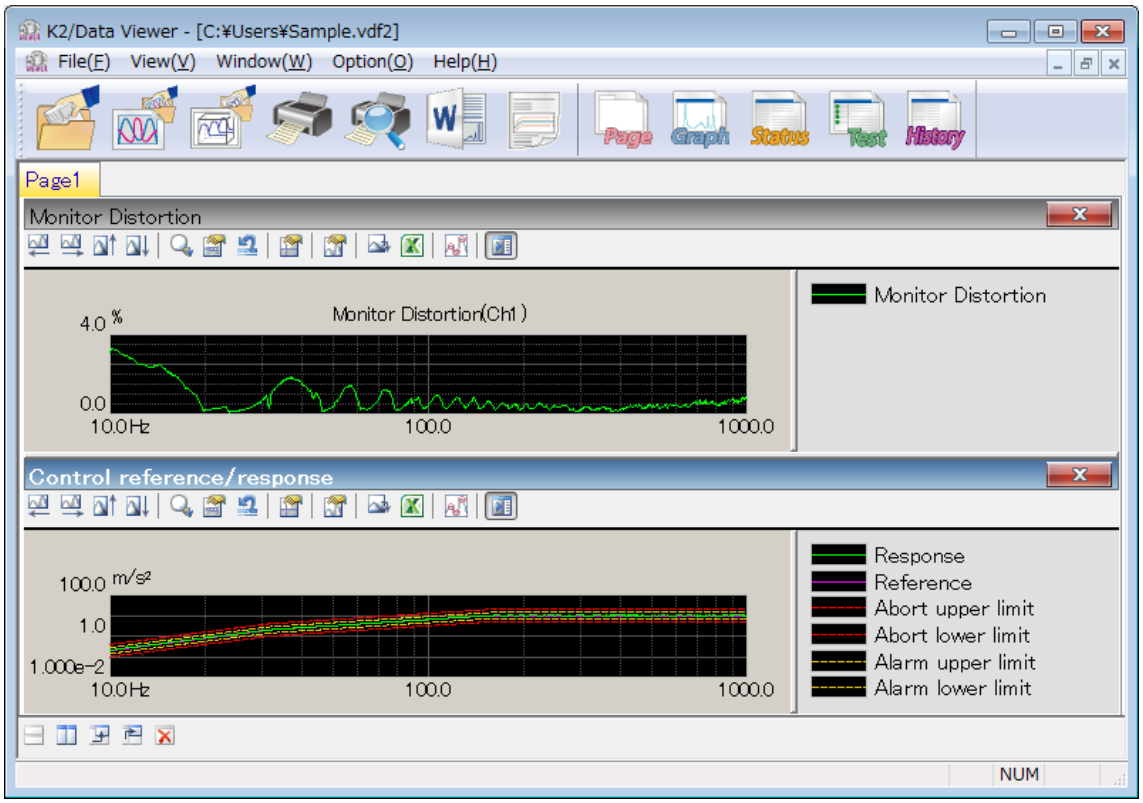
< Step 2 >

Select one item each in the list of Graph type and another descriptions and press the [OK] button.



< Step 3 >

A graph of the page displayed currently appears in the display.



3.3.1.1 Selecting of 3D graph and Color map

Graph types applicable to waterfall graph (3D graph with depth axis fixed) and color map are as shown below.

SINE:	Monitor, Transmissibility[Monitor], Monitor Distortion
RANDOM:	PSD[Monitor], Transmissibility[Monitor], Sine Data[Monitor]
SHOCK:	Monitor, Transmissibility[Monitor]
CAPTURE:	Waveform, PSD, Transmissibility[Monitor]

The following is the explanation of display procedures taking SINE monitor graph as an example.

< Procedure >

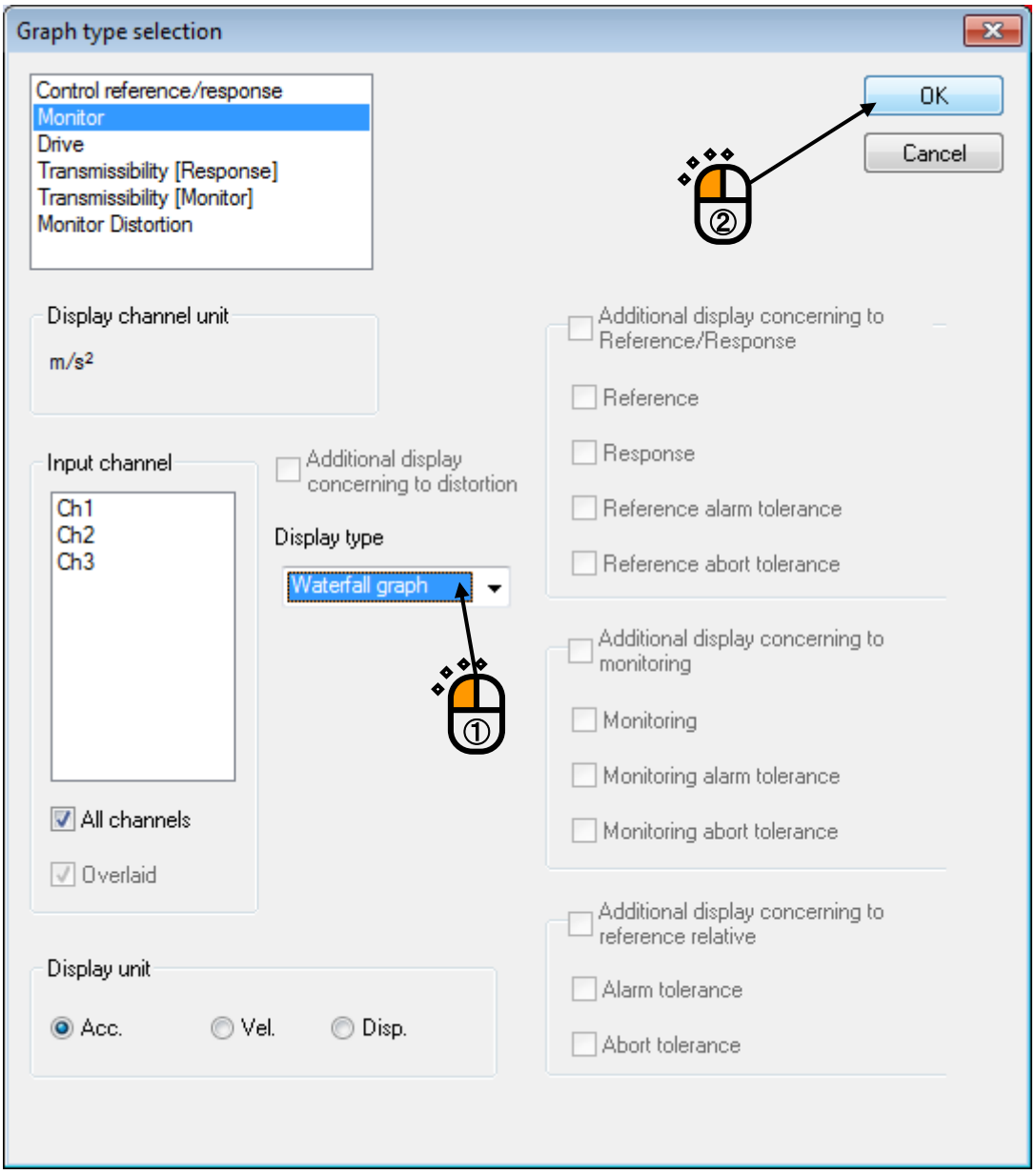
< Step1 >

Select “Window” on the menu bar and click “Graph”, or click the icon of “Graph” on the tool bar.

< Step2 >

Select “Waterfall graph” from Graph type, and press [OK] button.

(For DATA VIEWER only, “Color map” can be selected here.)



< Step3 >

Additional graph appears on the currently displayed page.

3.3.2 Display of Overlaid Graph

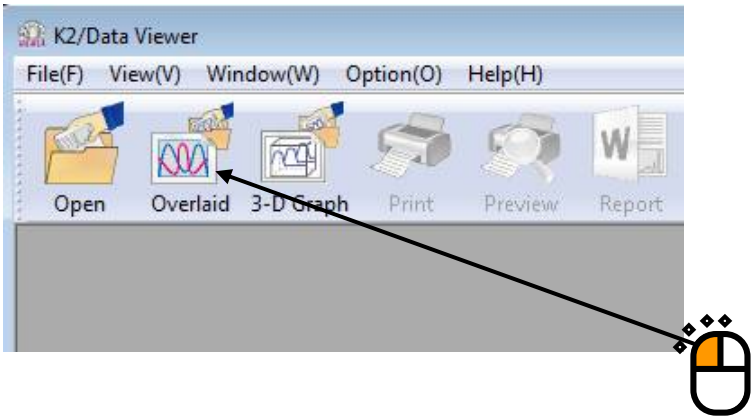
The screen to choose object data file of overlaid graph are available in tree display and dialogue display, selectable between them. Type of graph allowing overlaying differs depending on the screens.

3.3.2.1 Select on Tree Display

<Procedure>

<Step1>

Press the [Overlaid graph] button.

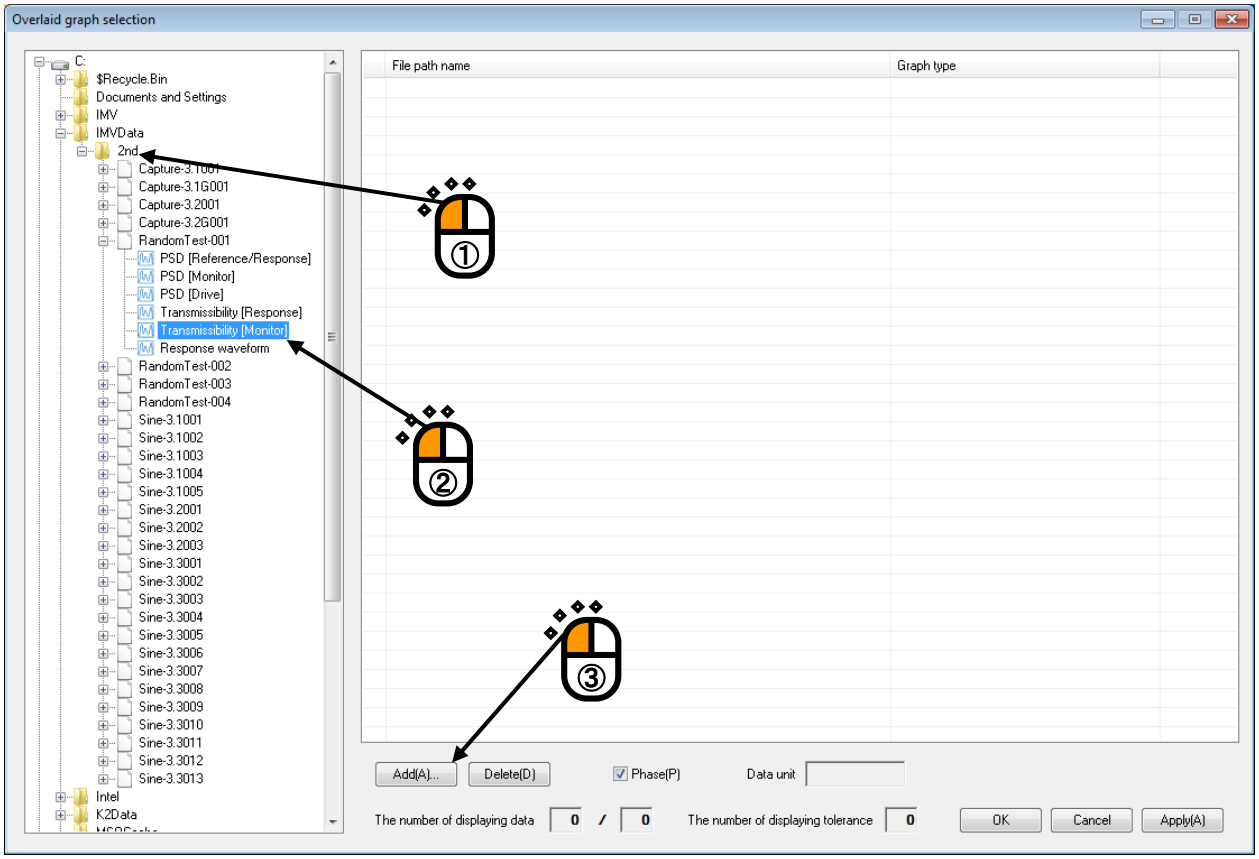


<Step2>

Overlaid graph selection dialog is displayed.

All graph data files in the folders which were opened last time with DATA VIEWER are displayed in a treeview.

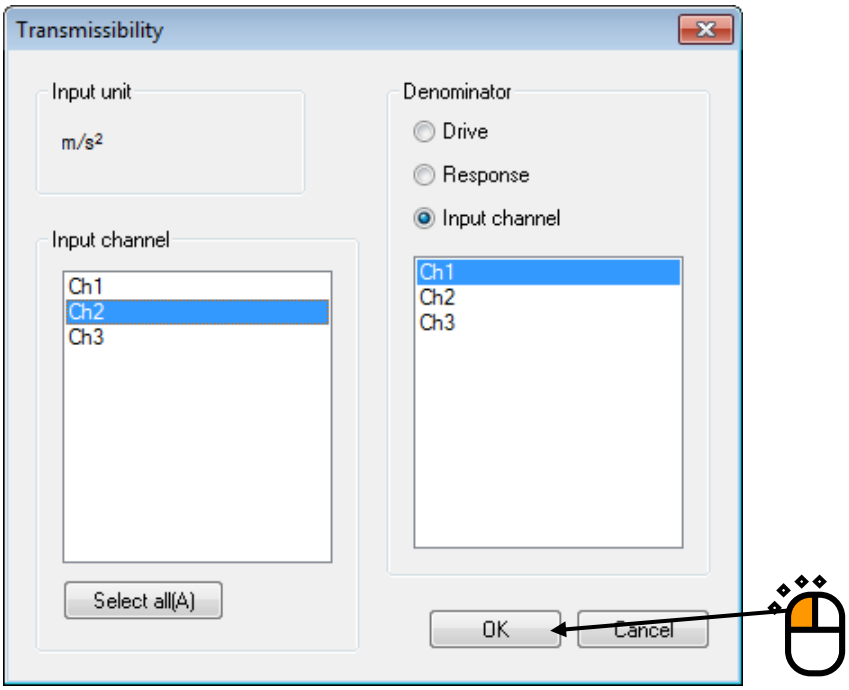
Select the graph data files to be overlaid, select the graph type and then press [Add] button.



<Step3>

Graph selection dialog is displayed corresponding to each graph type.

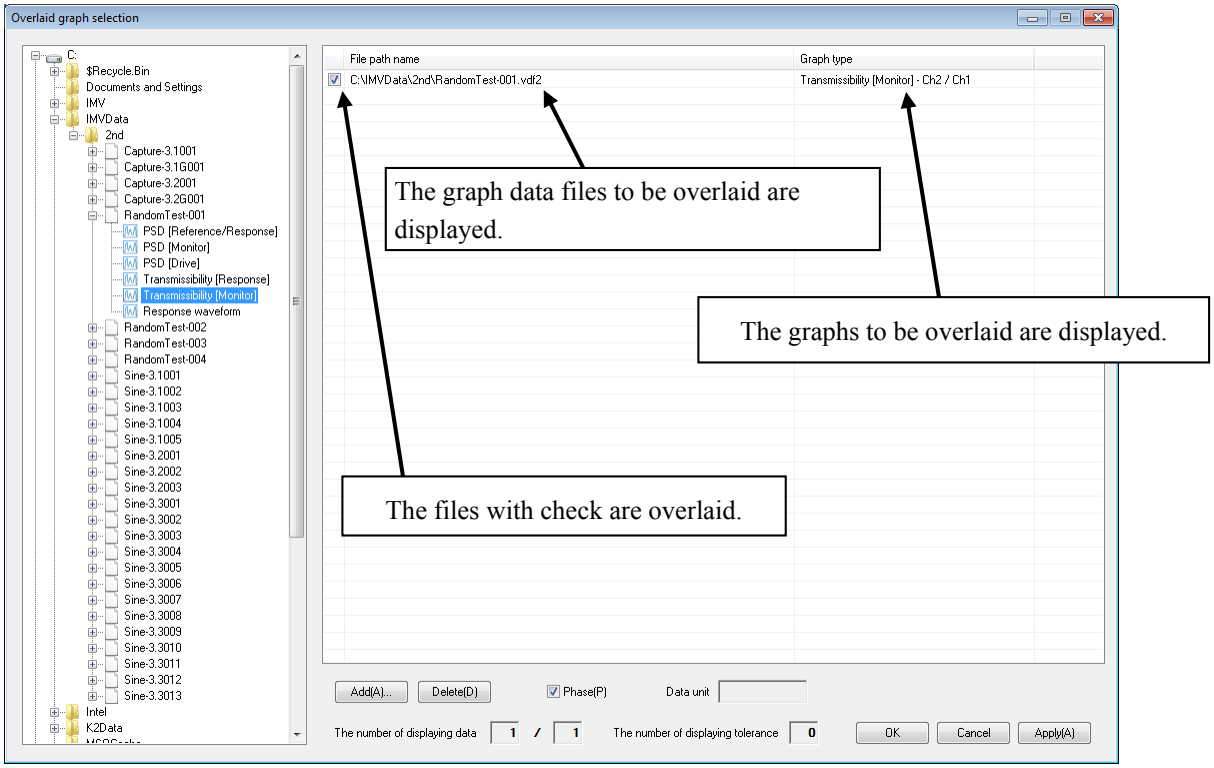
Select the display conditions.



<Step4>

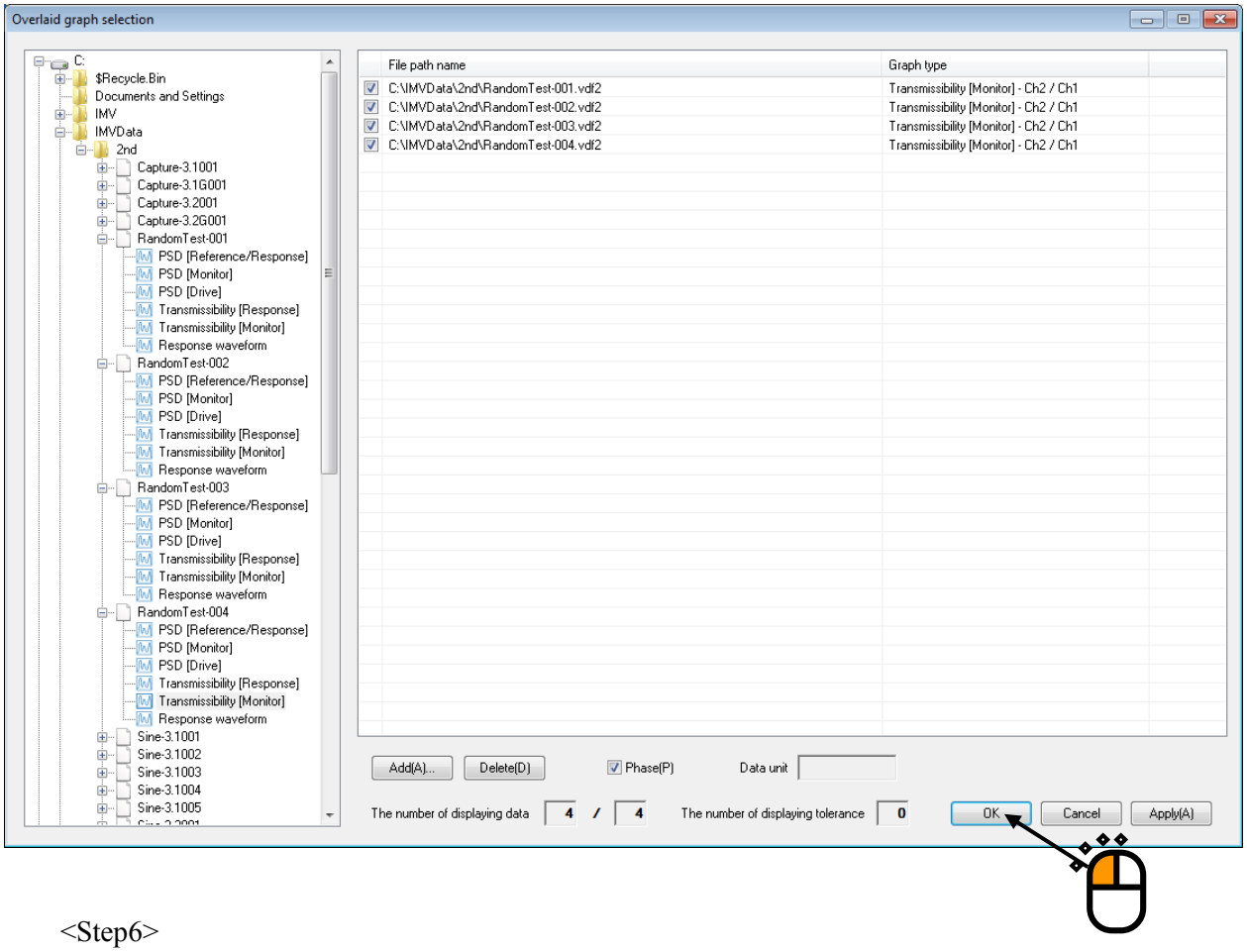
The selected graphs are set to be subject to overlay operation.

Only graphs with the same graph type and physical quantity can be overlaid.



<Step5>

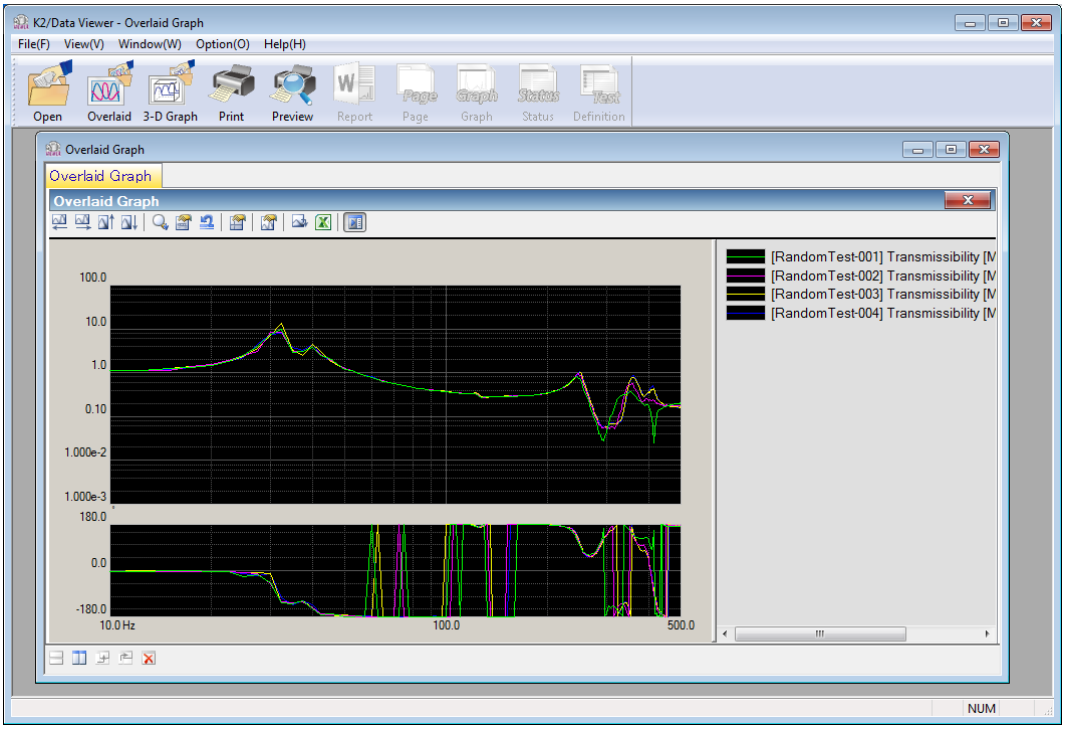
Complete the set up of graphs to be overlaid and then press the [OK] button.



<Step6>

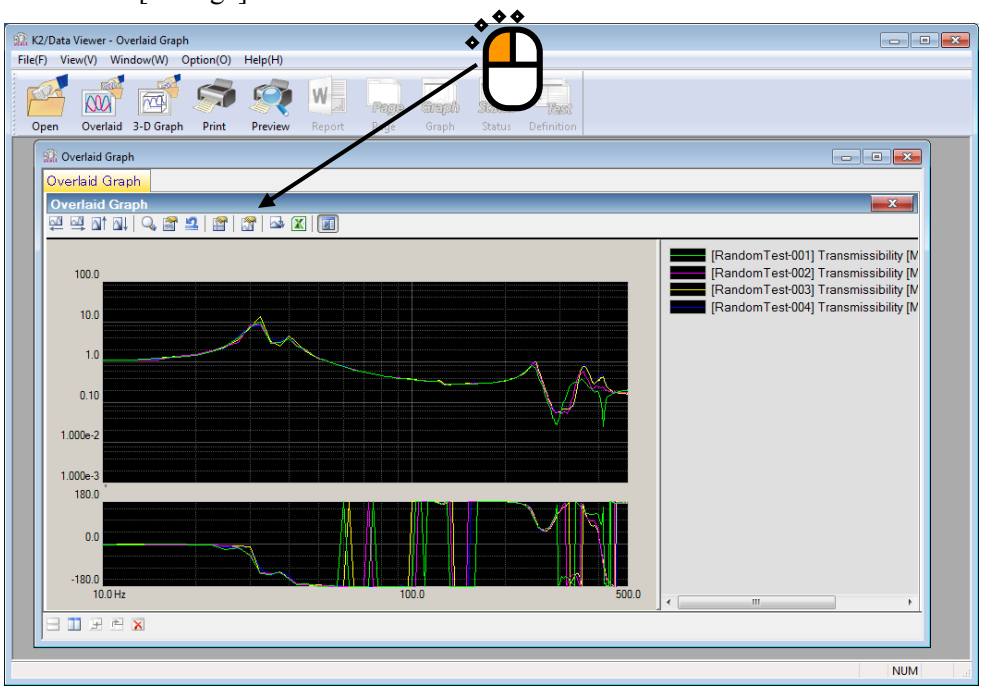
A graph window is added and the selected graphs are overlaid and displayed.

Those graphs can be operated in the same way as those on the application software.

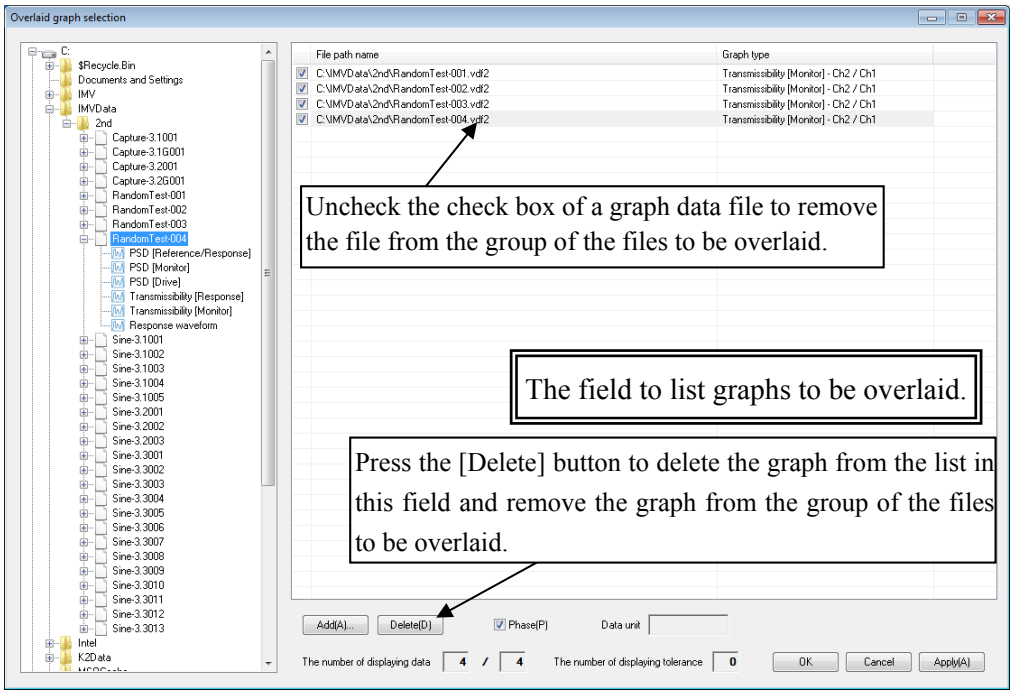


<To change the graph>

Press the [Change] button.



Overlaid graph selection dialog is displayed. Graphs can be added or deleted in this dialog.



Supplementary Note)

① If the check box of a graph is unchecked, the graph is removed from the group of the graphs to be overlaid.

② Select a graph and press the [Delete] button so that the graph is deleted from the list in the field and removed from the group of the graphs to be overlaid.

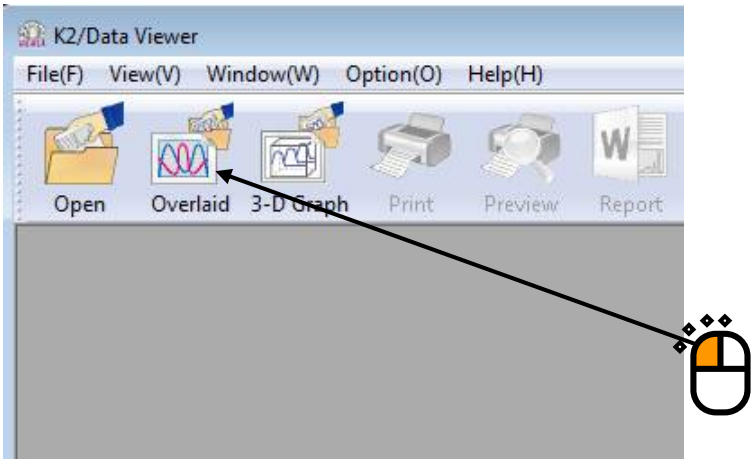
③ To display the different type of graphs, delete all graphs which are set up and then add new graphs.

3.3.2.2 Select on Dialogue Display

<Procedure>

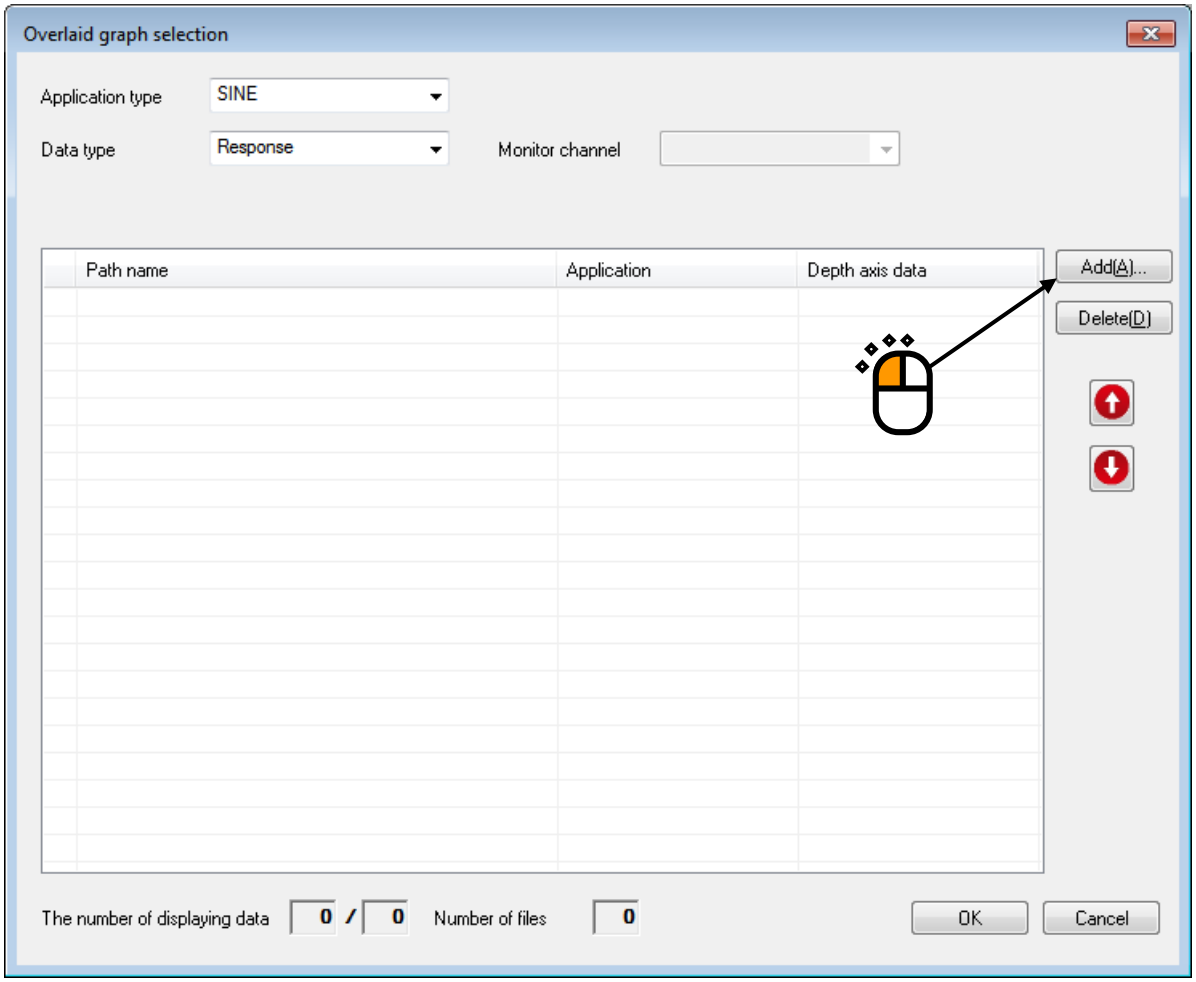
<Step1>

Press the [Overlaid graph] button.



<Step2>

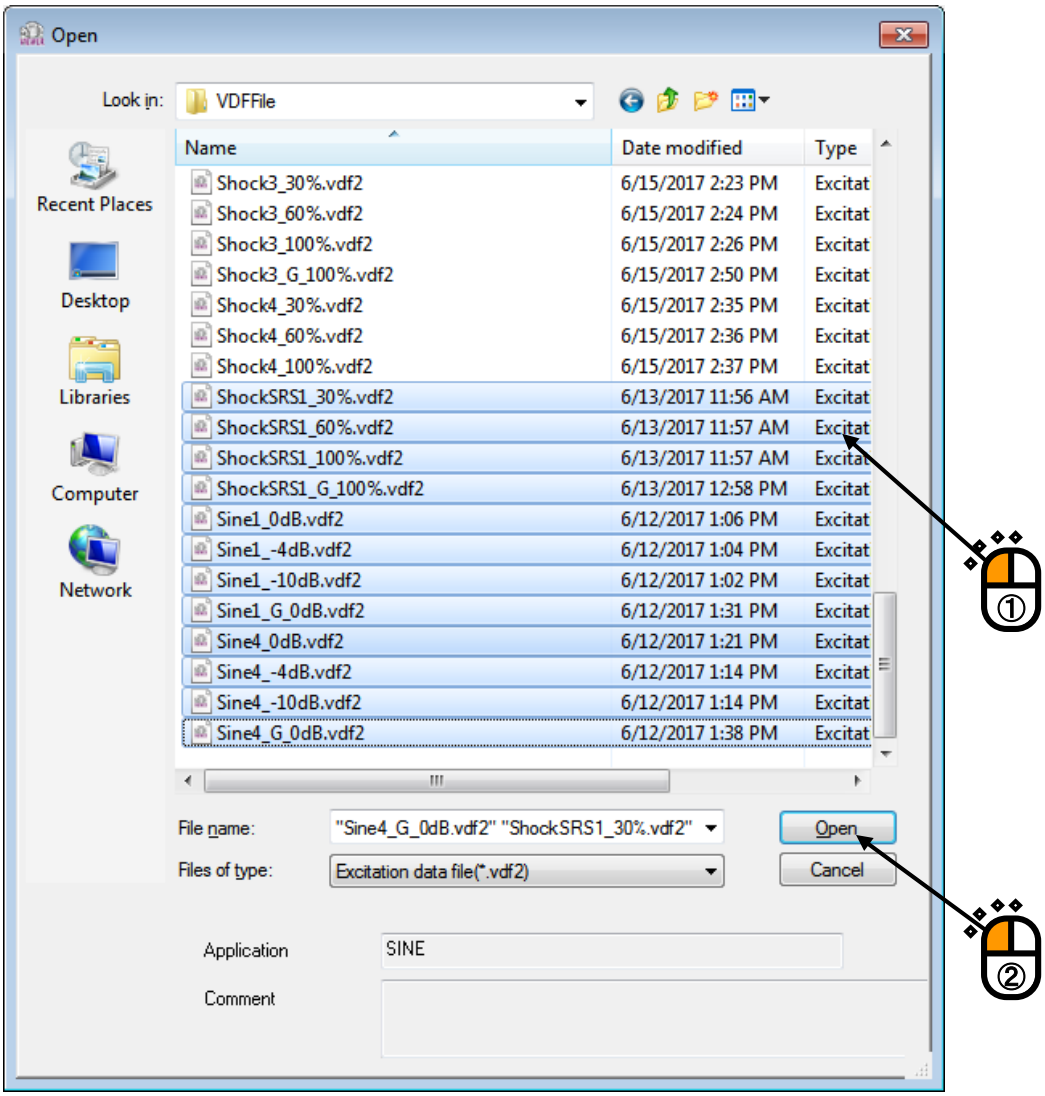
Overlaid graph data selection dialogue appears. Press [Add] button.



<Step3>

Select desired data file.

(Some files can be selected at a time.)



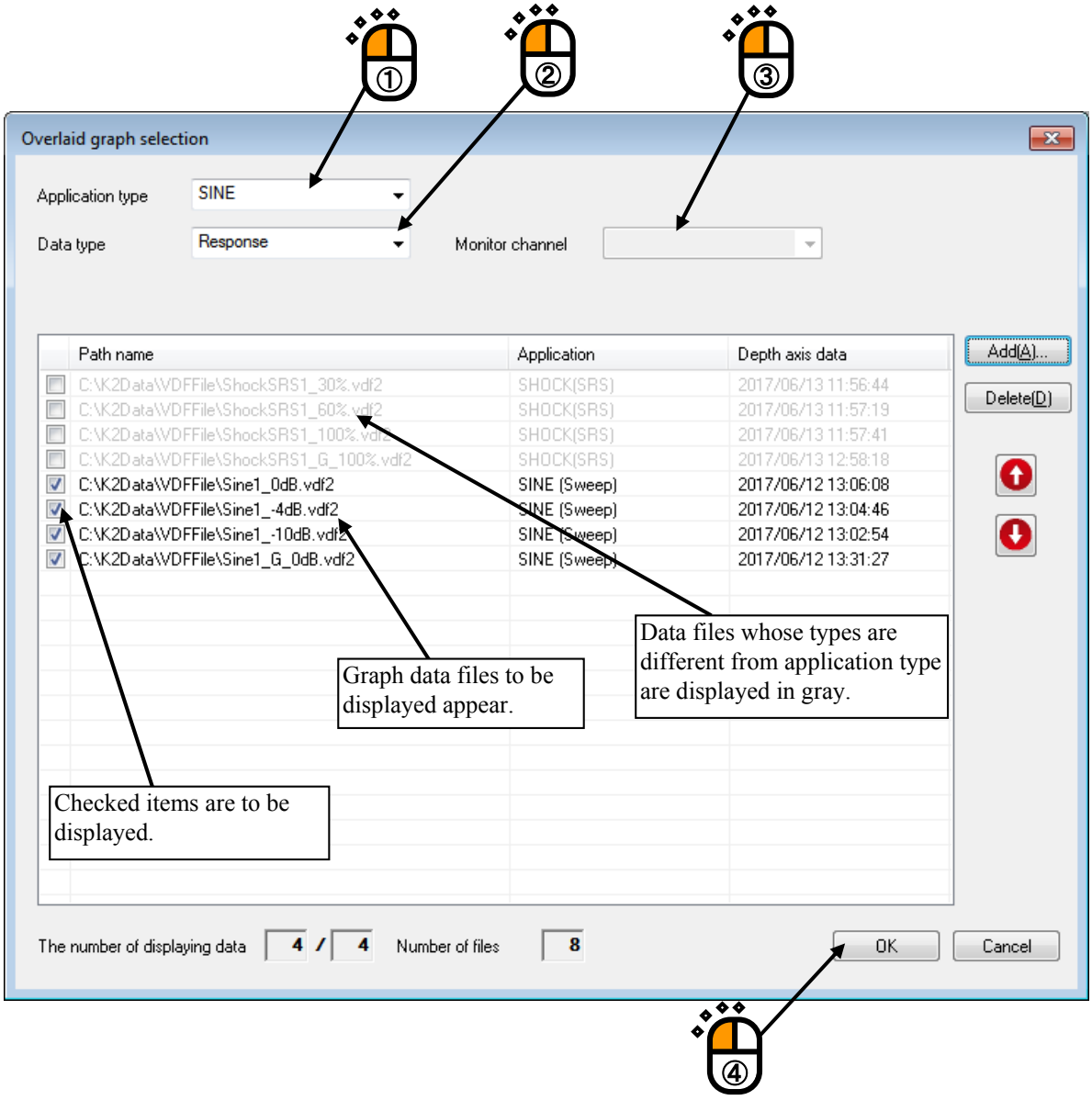
<Step4>

Selected data files are set as the target of overlaid.

Select application type, display type and data type.

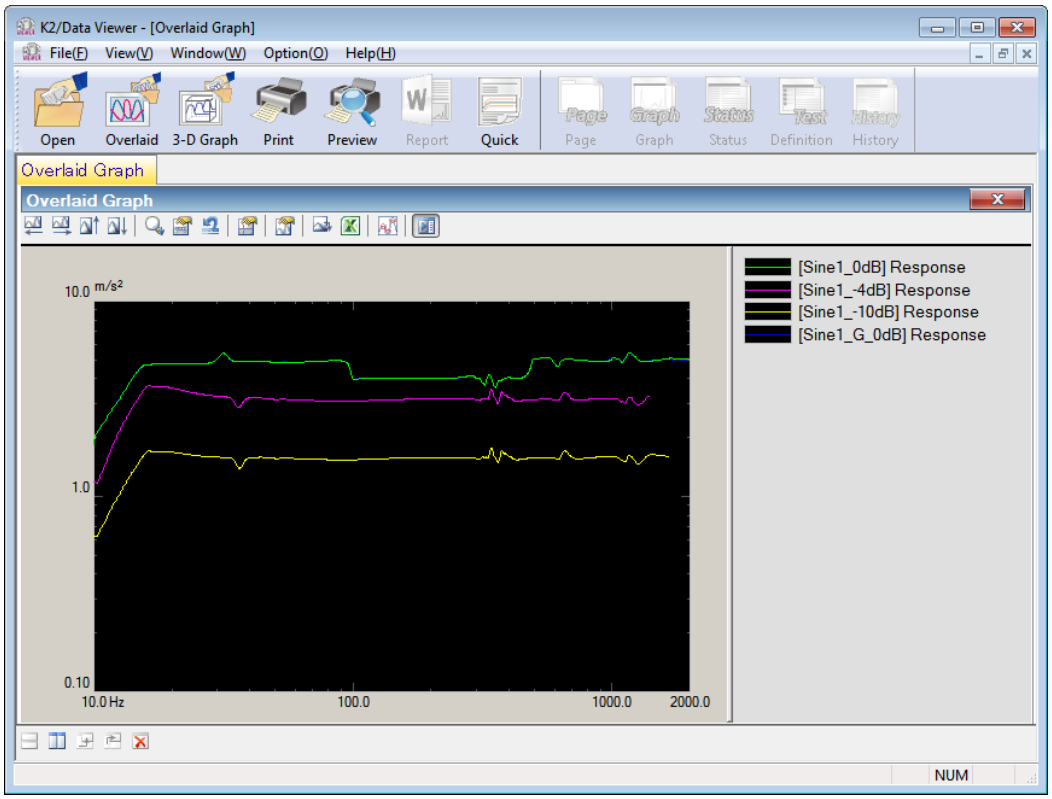
If the data type is set to “Monitor”, select the monitor channel.

If data files different from the selected application type are displayed, they are displayed in gray.



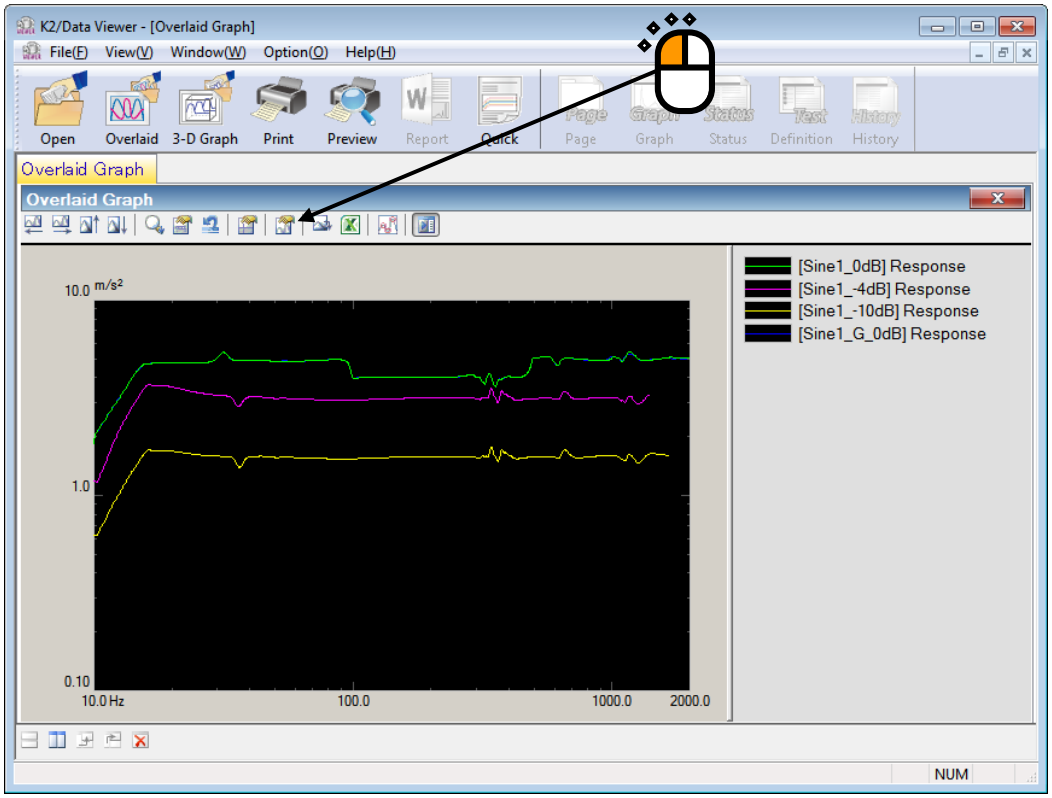
<Step5>

Graph window is added, and the selected graph appears.

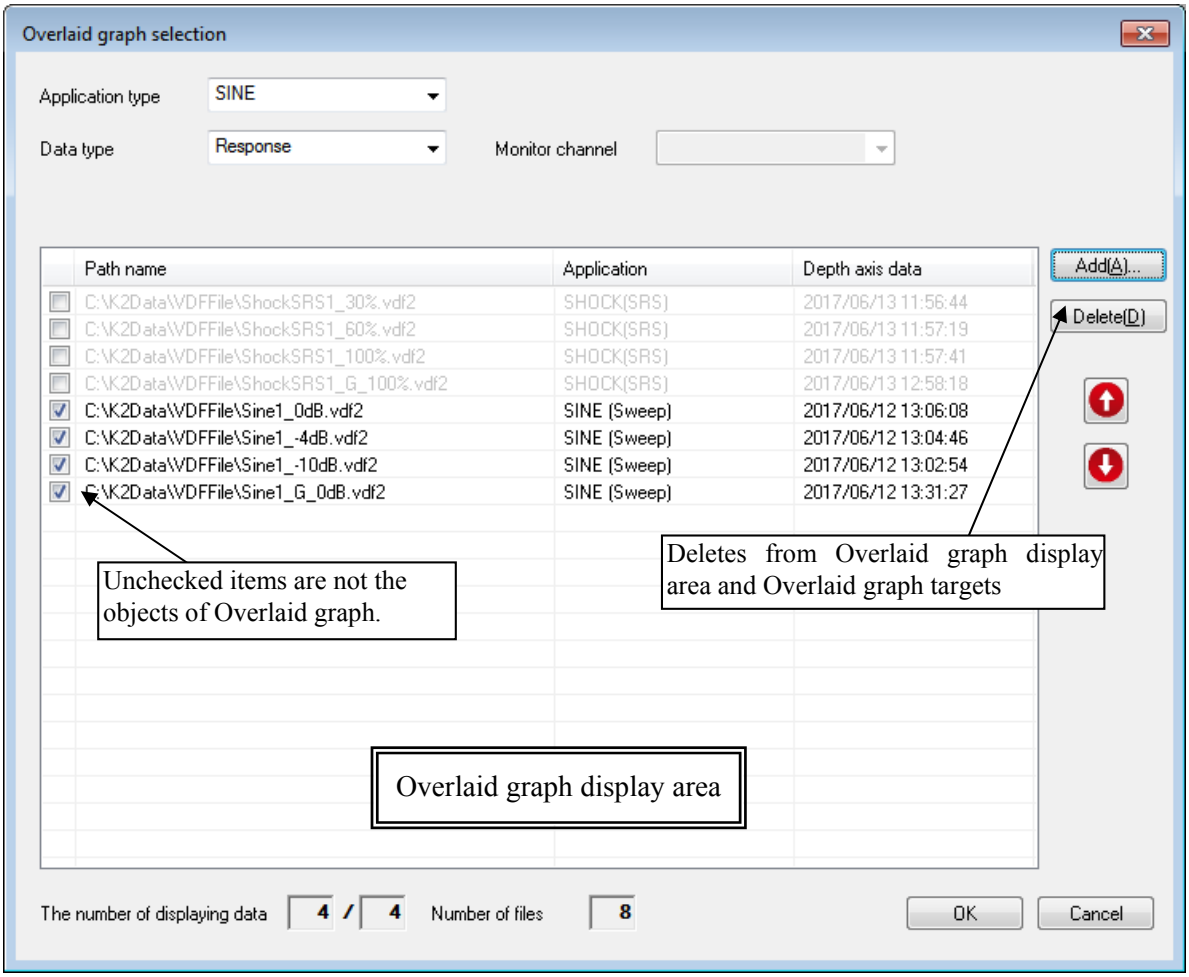


<Change of displayed graph>

Press the graph change button.



Overlaid graph data selection dialogue appears. Addition or deletion of desired graph is allowed.



Supplementary Note)

① Unchecked graphs are excluded from Overlaid graph targets.

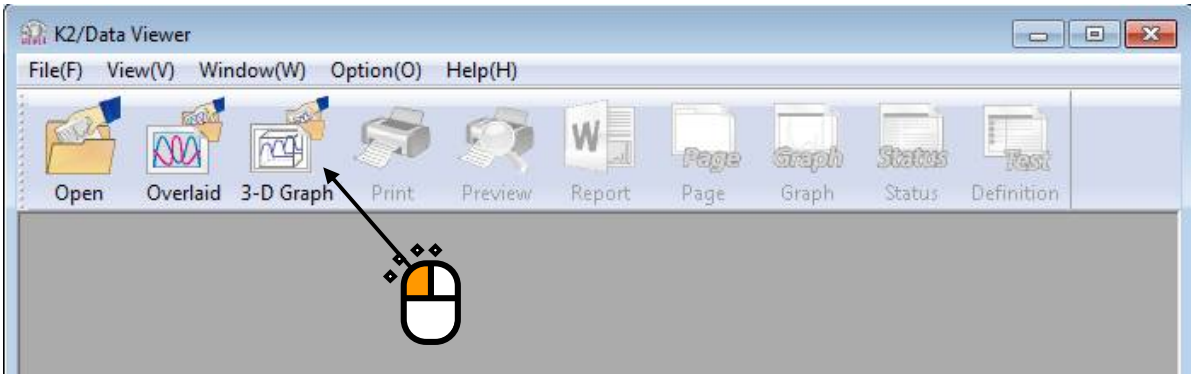
② Select desired graphs and press the [Delete] button. Then, they are deleted from the Overlaid graph display area and Overlaid graph targets.

3.3.3 Display of 3D graph

<Procedure>

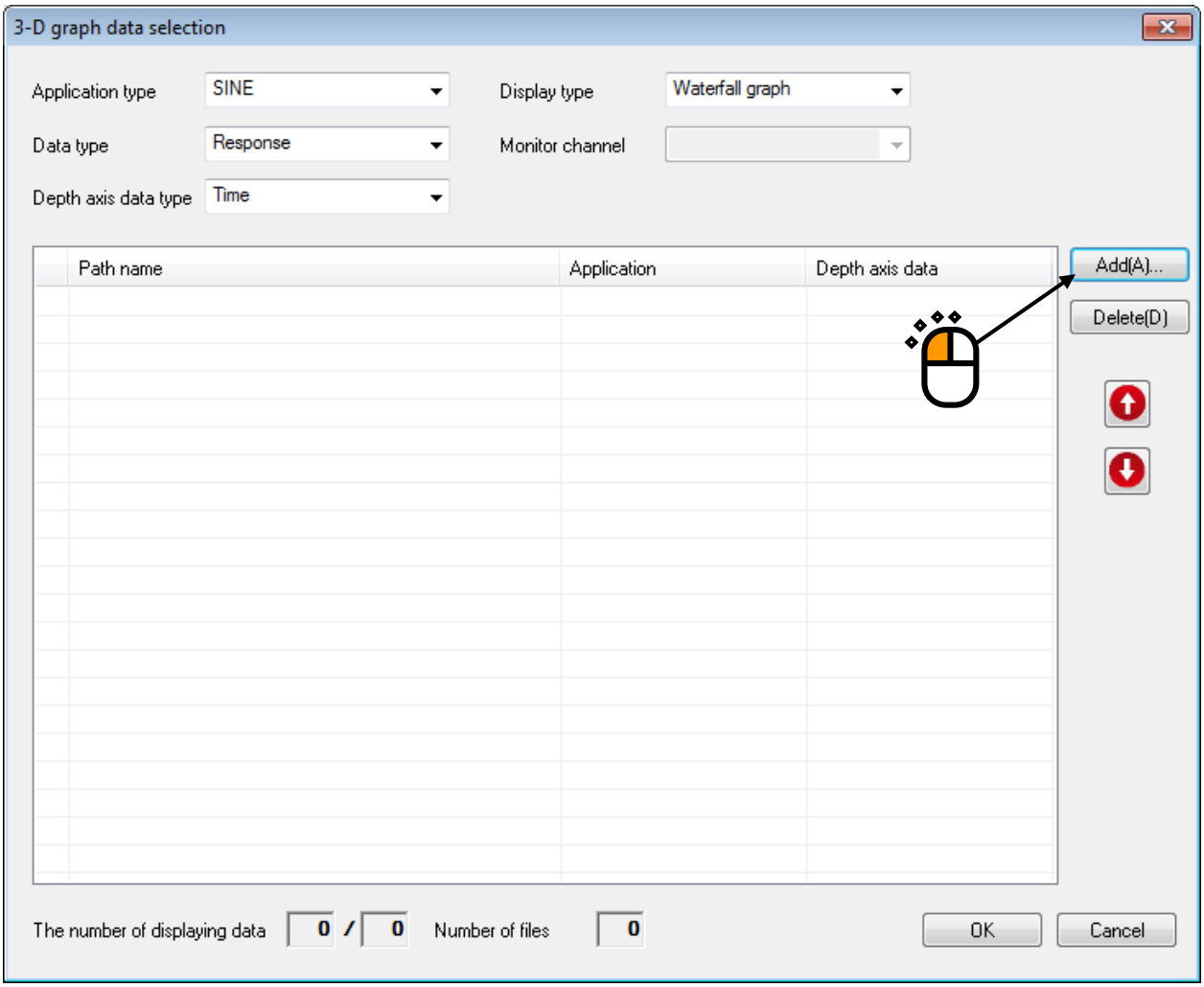
<Step1>

Press [3D graph] button.



<Step2>

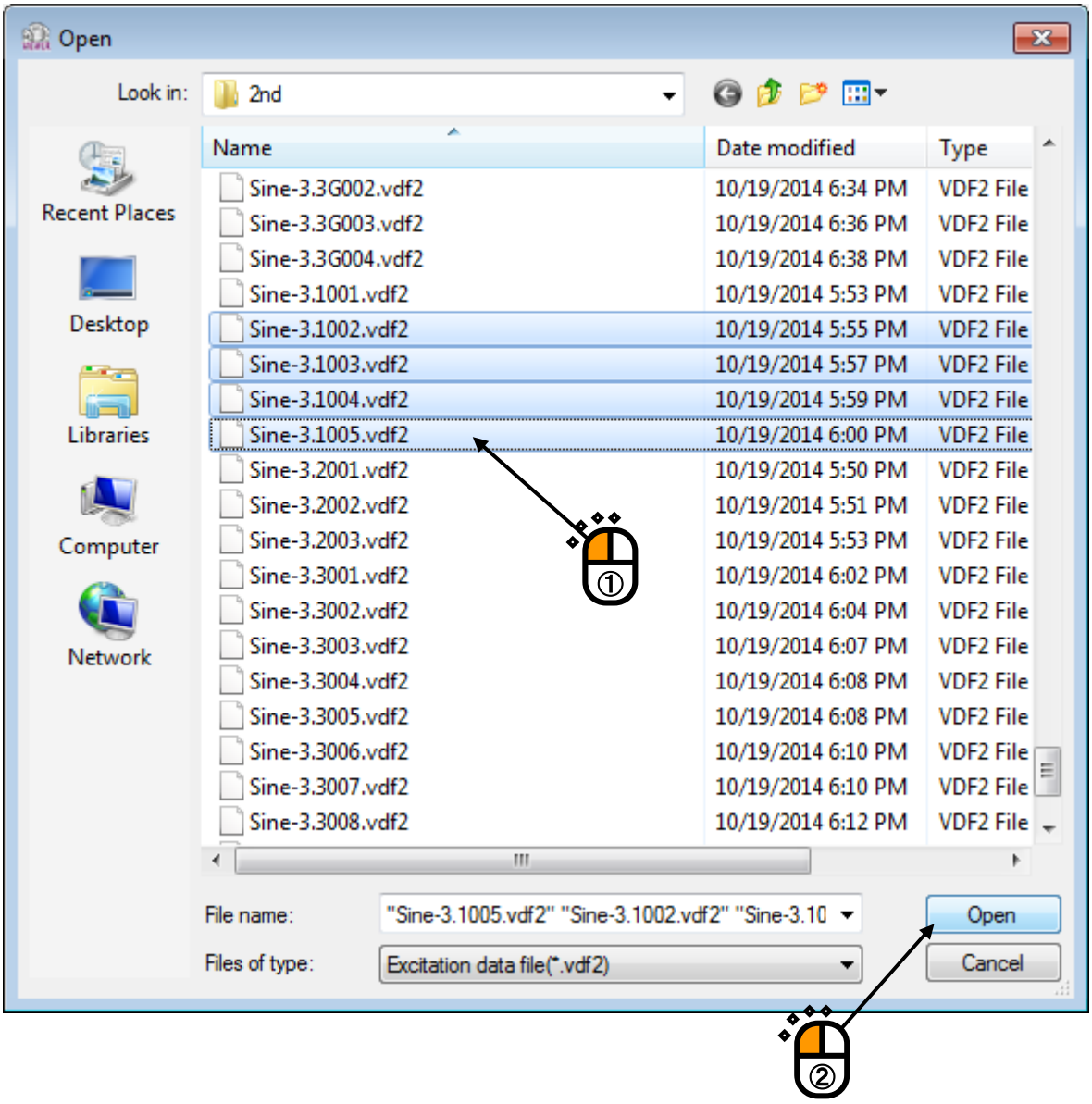
3D graph data selection dialogue appears. Press [Add] button.



<Step3>

Select desired data file.

(Some files can be selected at a time.)



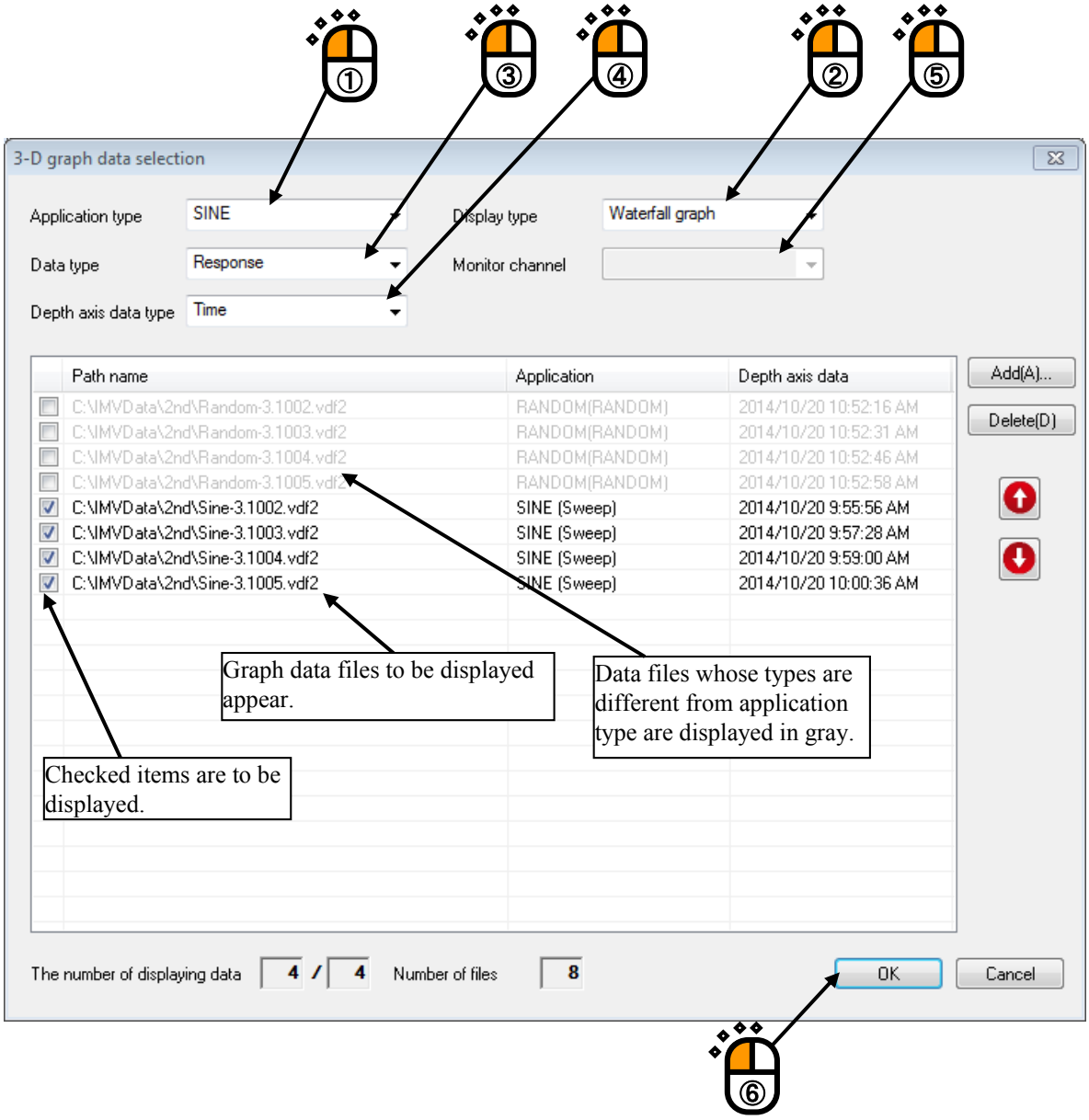
<Step4>

Selected data files are set as the target of overlaid.

Select application type, display type, data type, and depth axis data type.

If the data type is set to “Monitor”, select the monitor channel.

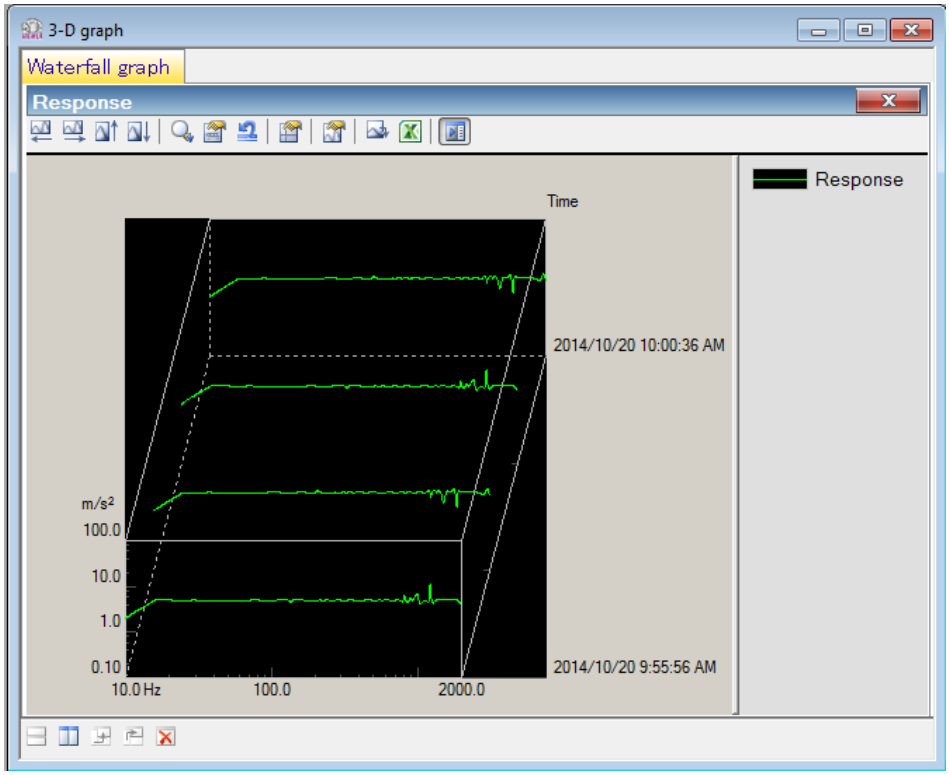
If data files different from the selected application type are displayed, they are displayed in gray.



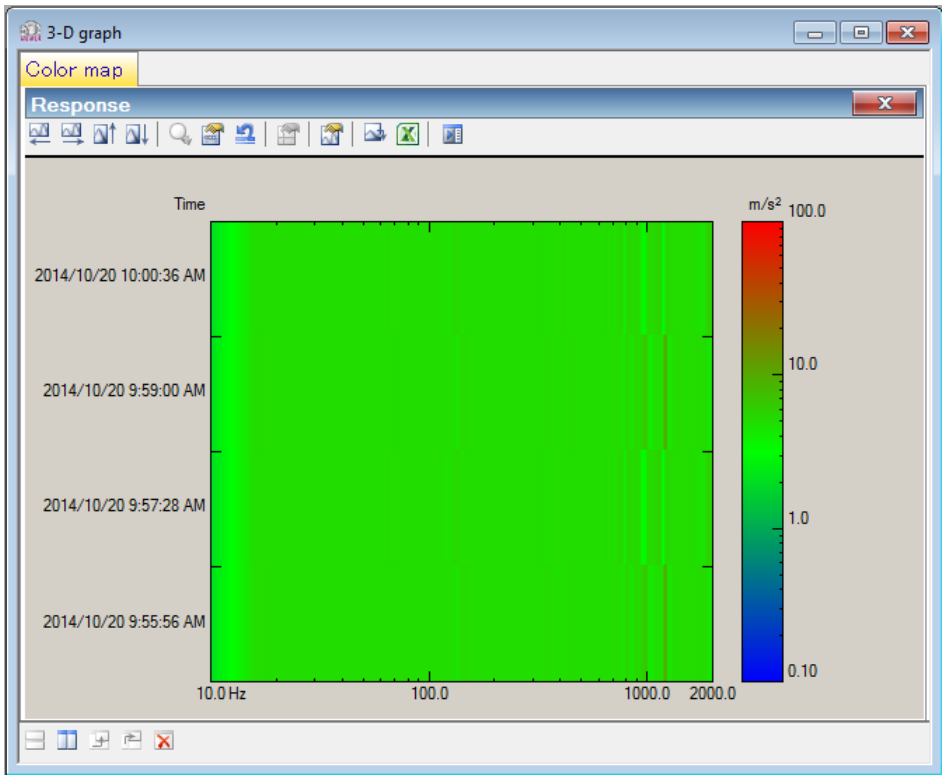
<Step5>

Graph window is added, and the selected graph appears.

- Display example of waterfall graph

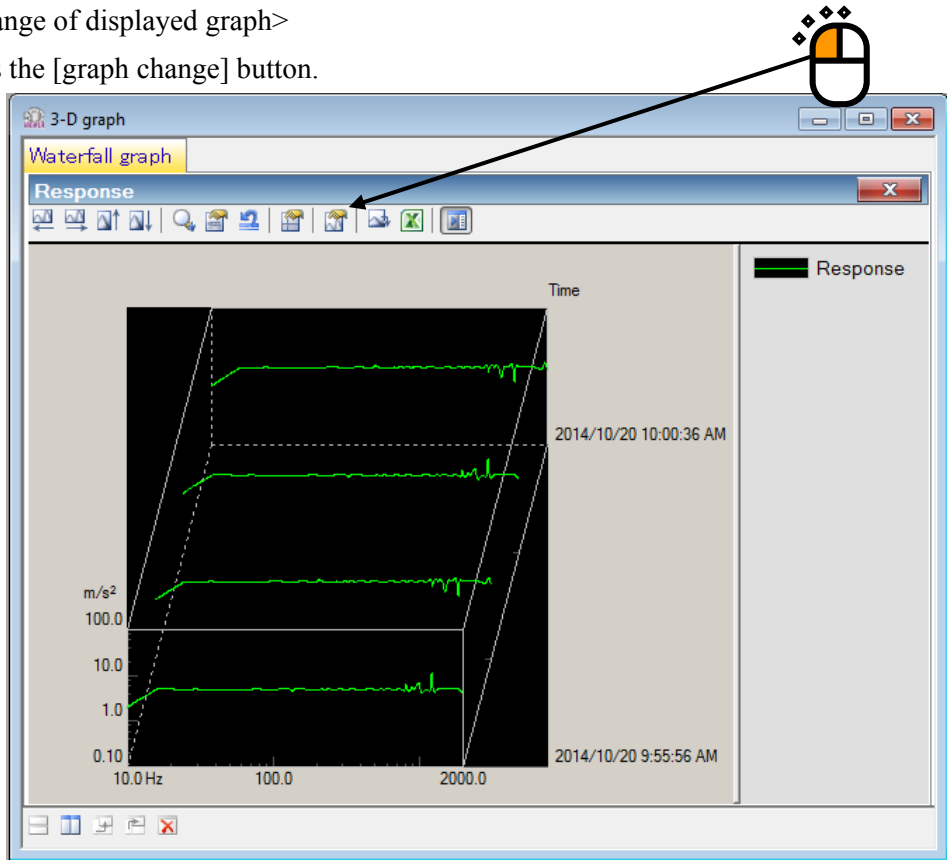


- Display example of color map

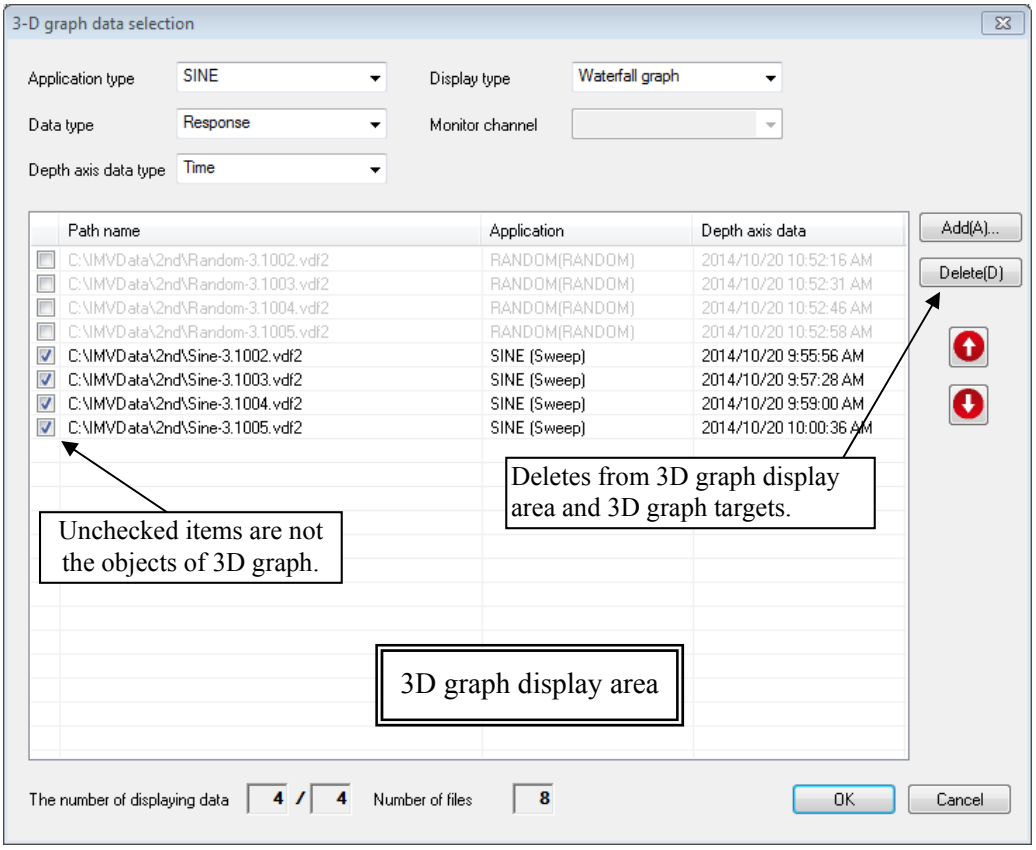


<Change of displayed graph>

Press the [graph change] button.



3D graph data selection dialogue appears. Addition or deletion of desired graph is allowed.



Supplementary Note)

① Unchecked graphs are excluded from 3D graph targets.

② Select desired graphs and press the [Delete] button. Then, they are deleted from the 3D graph display area and 3D graph targets.

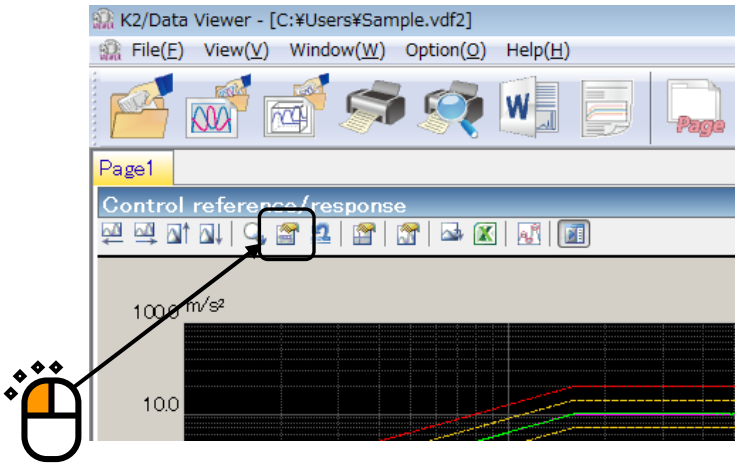
3.3.4 Scale

This function is for changing the scale of the graph displayed currently for its vertical and horizontal axes.

< Procedures >

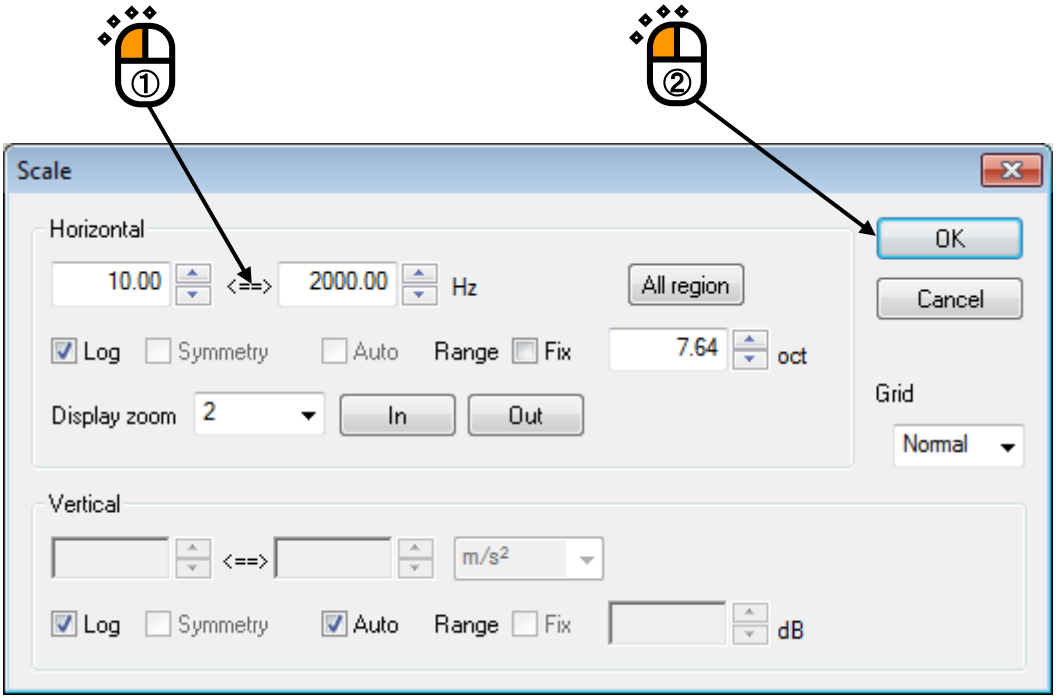
< Step1 >

Click a [Scale change button] on the graph display window.



< Step2>

Change values of the graph range for horizontal axis displayed and press the [OK] button.

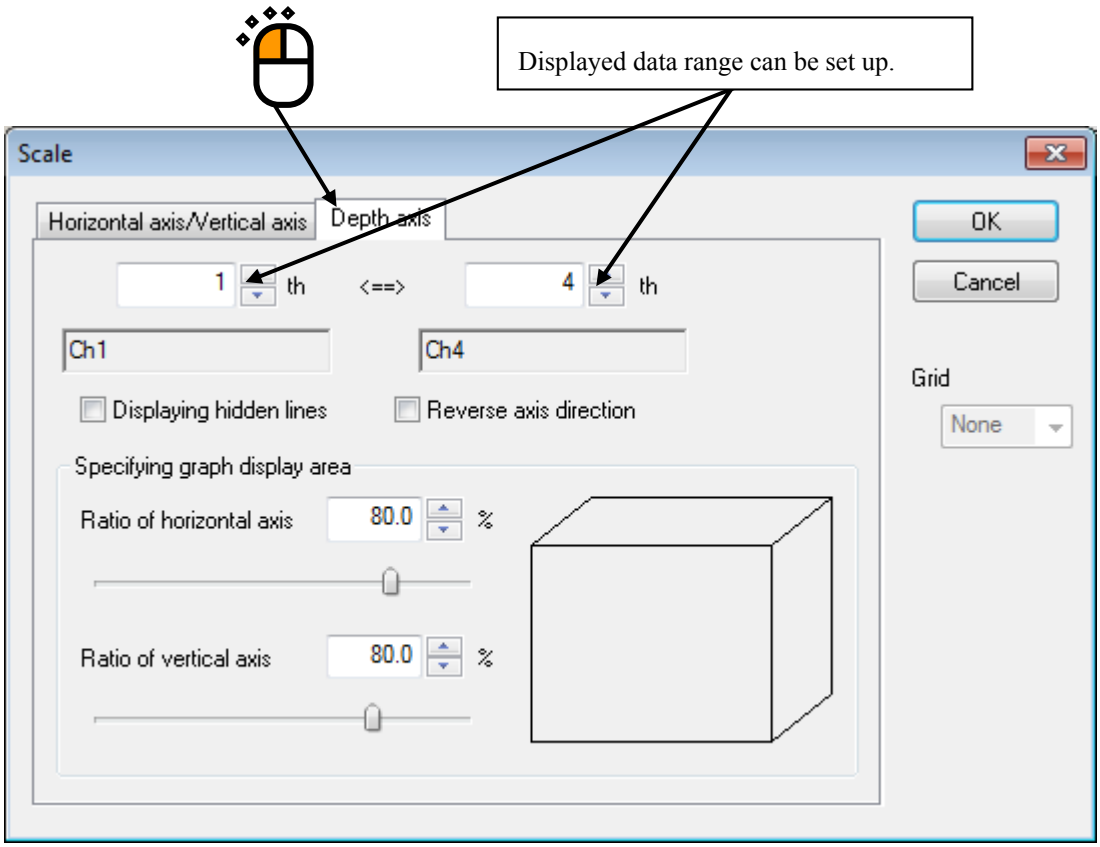


3.3.4.1 3D graph scale change

In 3D graphs, the scale of depth axis can be changed.

The setup items are as shown below.

Display first No.:	First No. of displayed data can be set up.
Display last No.:	Last No. of displayed data can be set up.
Hidden line display:	Lines hidden backward (hidden lines) can be displayed.
Reverse direction display:	Data with large number can be placed foremost.
Ratio of horizontal axis:	The horizontal axis ratio of graph display area can be set up.
Ratio of vertical axis:	The vertical axis ratio of graph display area can be set up.



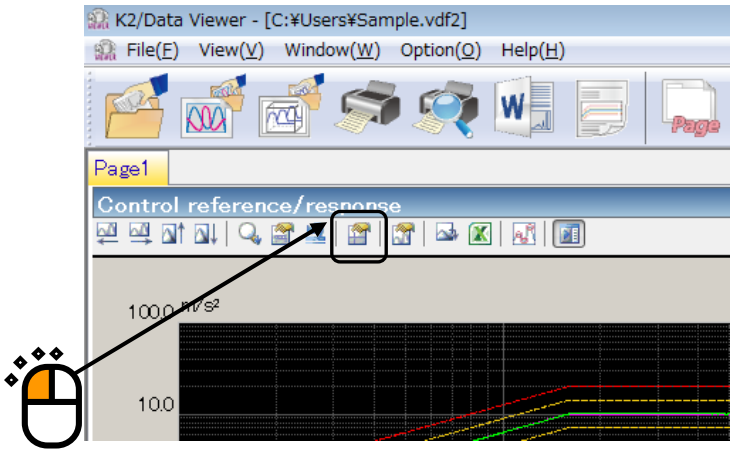
3.3.5 Cursor Display

This function is for displaying of hairline cursors in a specified graph currently displayed.

< Procedures >

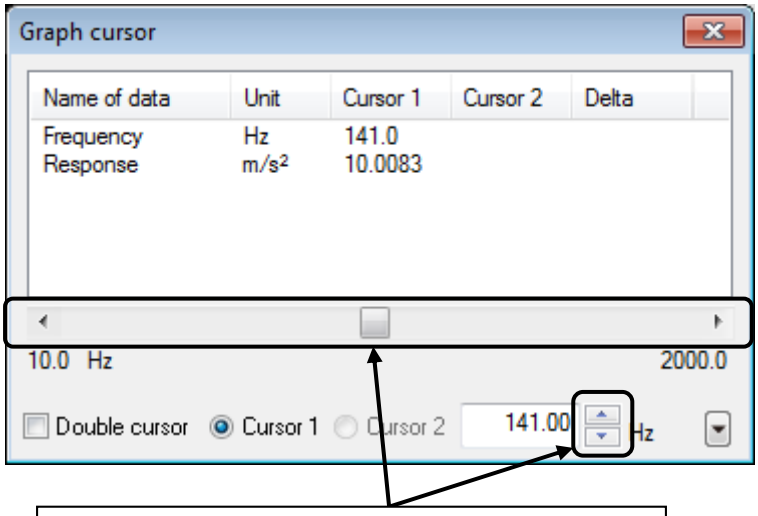
< Step 1 >

Right-click the mouse button on the graph or click the [cursor] button to display the cursor in the graph.



< Step 2 >

Use the dialog of 'Graph cursor'. The cursor in the graph is shifted by the operation.



Use these buttons to shift the cursor by a mouse.

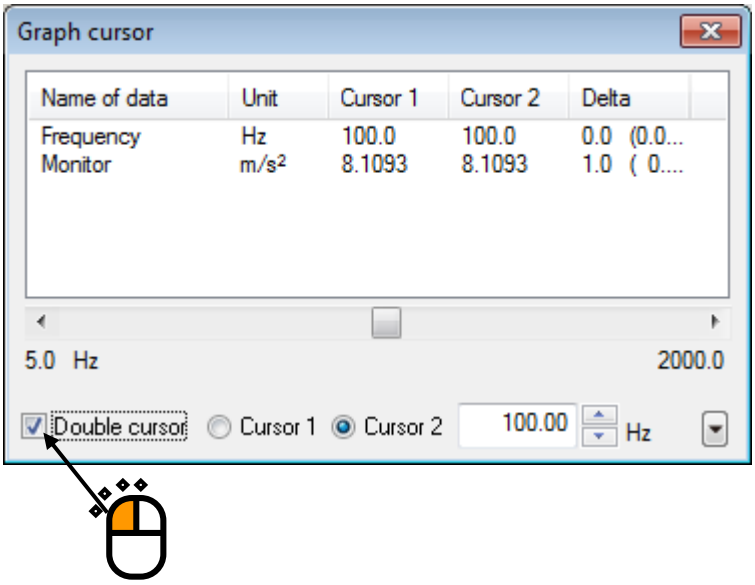
3.3.5.1 Double cursor display

< Operating procedure >

< Step1 >

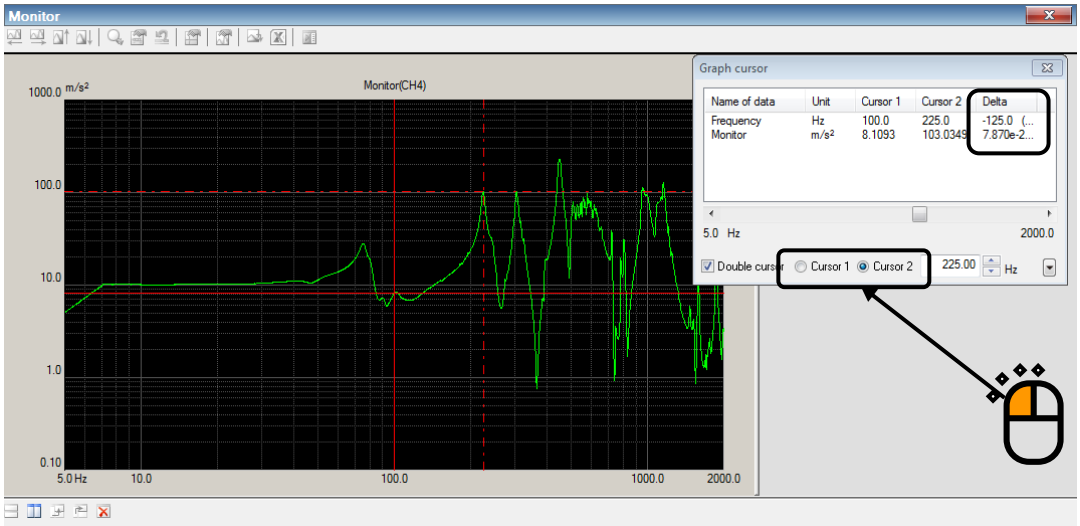
Check double cursor in the graph cursor dialog box.

Cursor 2 is enabled.



< Step2 >

Select and operate cursor 2.



If cursor 1 is selected, you can operate cursor 1.

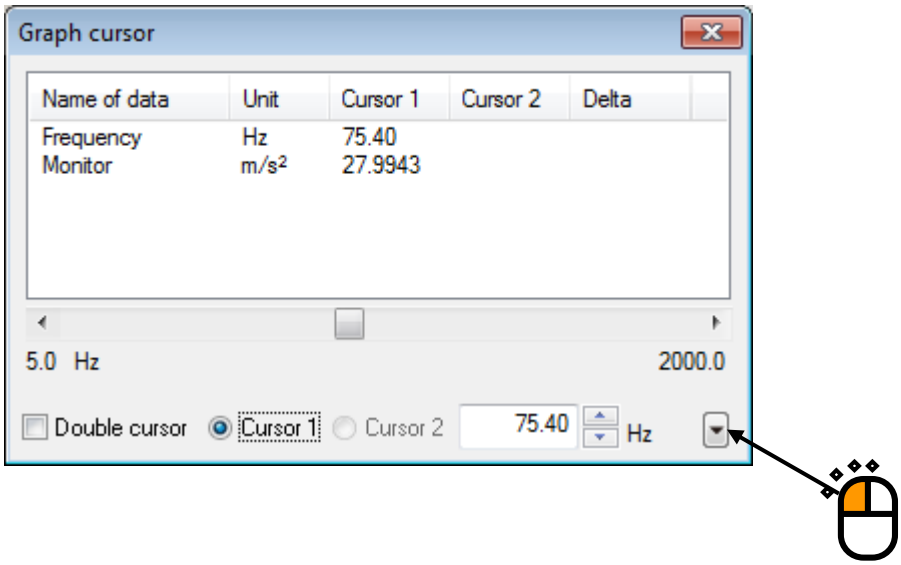
The graph cursor dialog box displays the difference between cursor 1 and cursor 2.

3.3.5.2 Peak search

< Operating procedure >

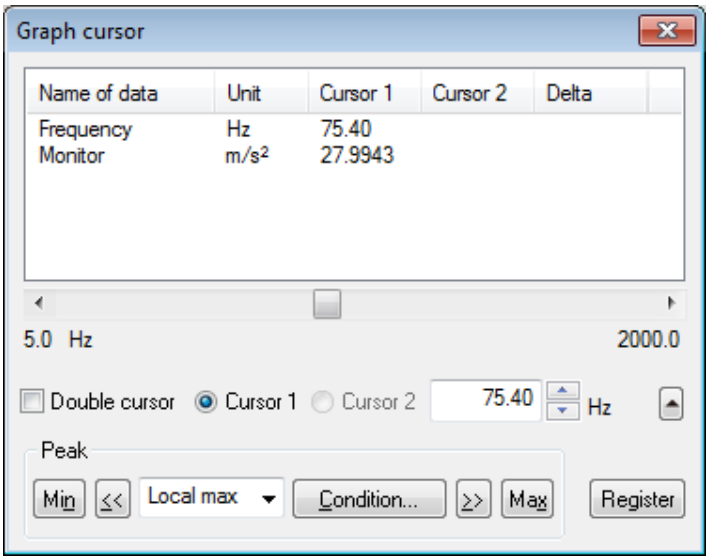
< Step1 >

Press the down arrow at the lower right corner of the graph cursor dialog box.



< Step2 >

The peak search setting window opens.



Press the following buttons to search the peak and move the cursor:

[<<]	:	Searches the peak in the horizontal axis minus direction.
[>>]	:	Searches the peak in the horizontal axis plus direction.
[Min]	:	Searches the minimum value.
[Max]	:	Searches the maximum value.
[Condition]	:	Sets the conditions of peak determination.

・Peak is searched within the displayed graph scale range.

・The peak to search can be selected from ‘Max./ Min./Both’.

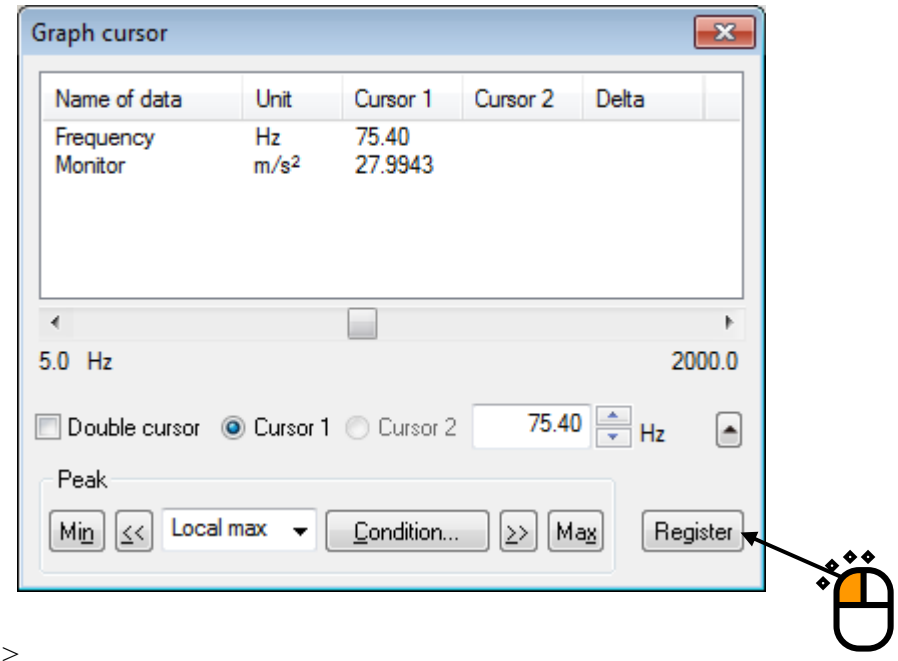
・Click the data displayed in the list to select the data to search.

3.3.5.3 Saving cursor data

< Operating procedure >

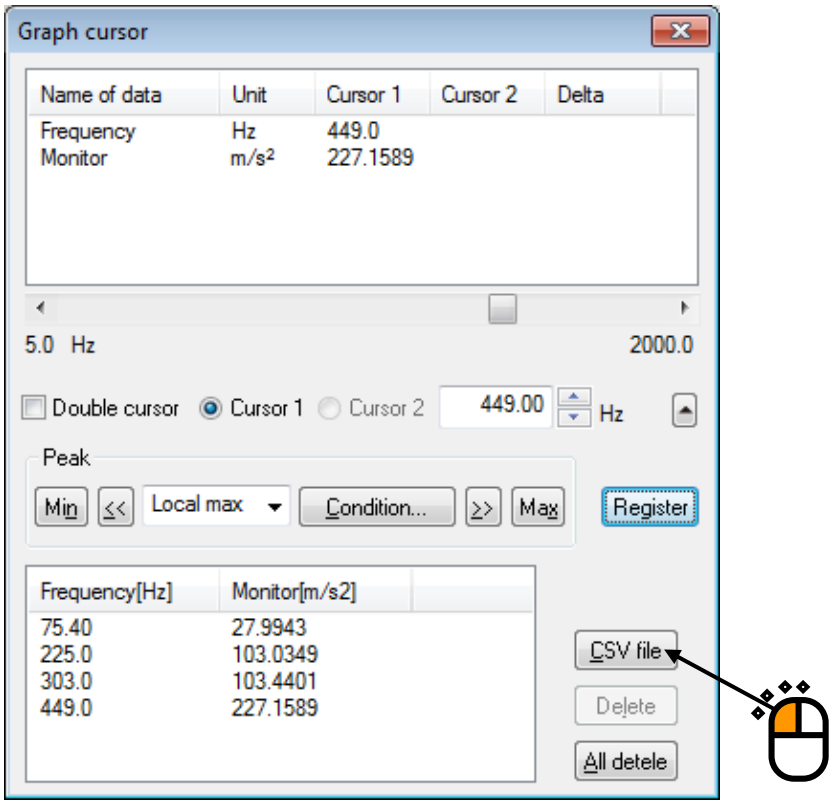
< Step1 >

Press the [Register] button in the peak search setting window.



< Step2 >

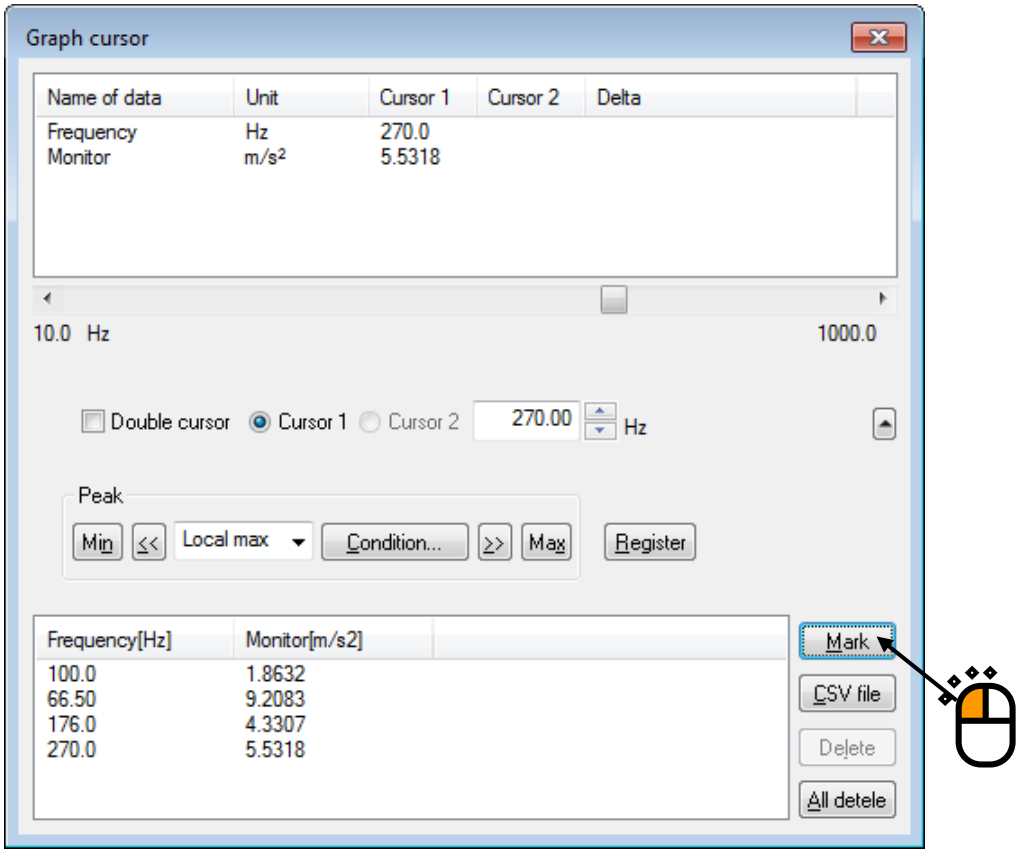
The cursor data selected when the [Register] button has been pressed will be saved in the list.

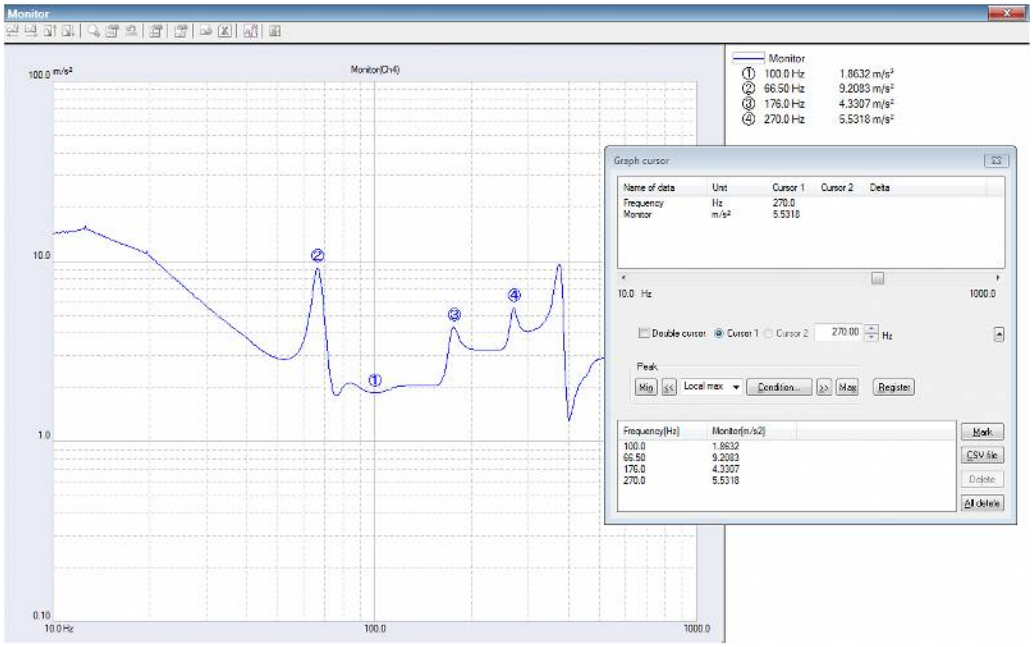


Press the [CSV File] button to save the cursor data displayed in the list in a CSV file.

＜Step3＞

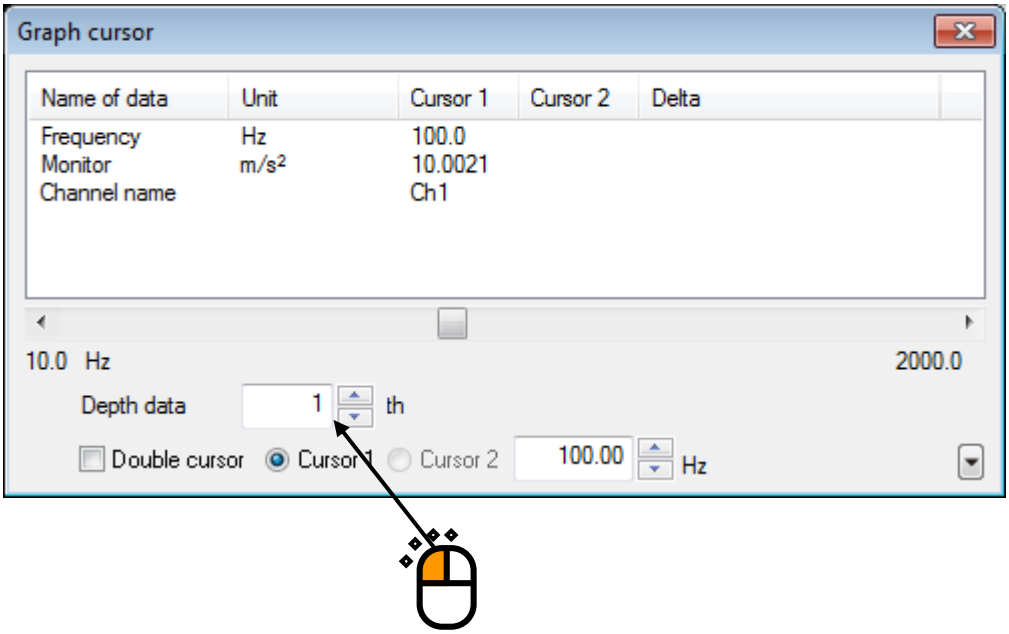
Press the [Mark] button to mark the cursor data displayed in the list.





3.3.5.4 Cursor display in 3D graph

Although the operation procedures are similar to those of normal graph, depth data needs to be selected.



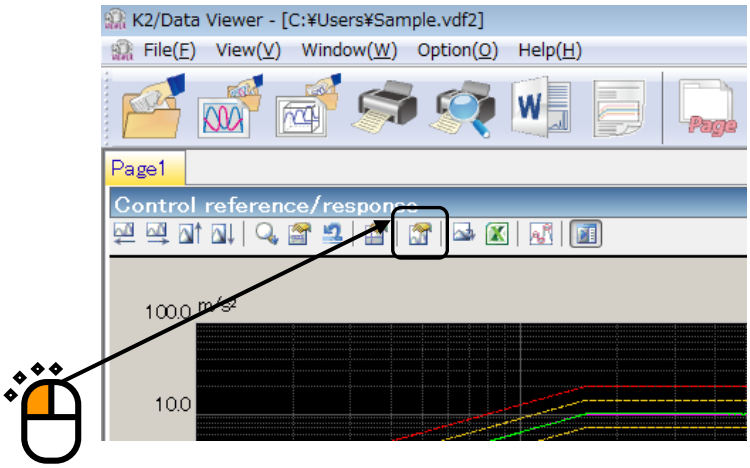
3.3.6 Graph Change

The graph displayed in the current display is changed.

< Procedures >

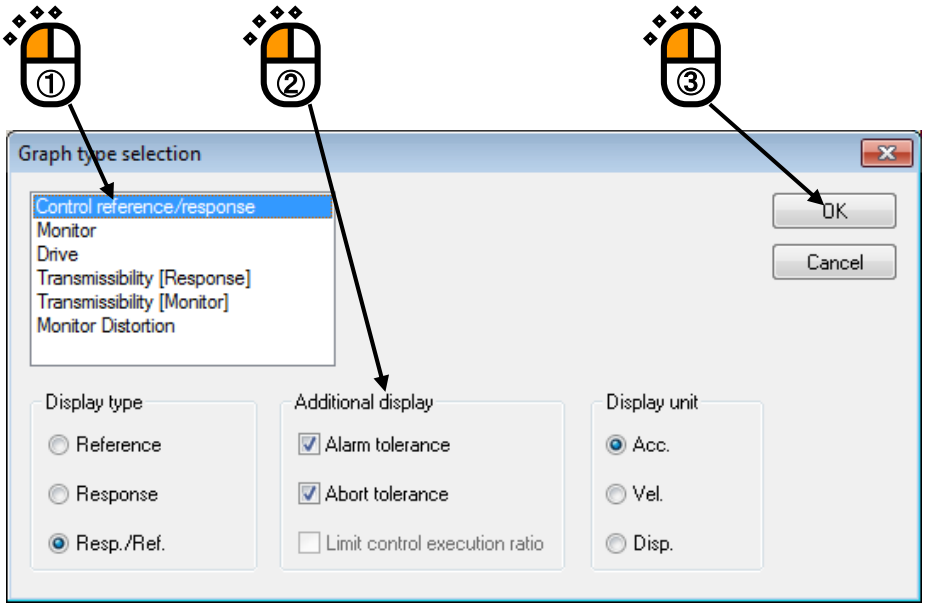
< Step 1 >

Click a [Graph change] button on the graph display window.



< Step 2 >

Select one item each in the list of Graph type and another descriptions and press the [OK] button.



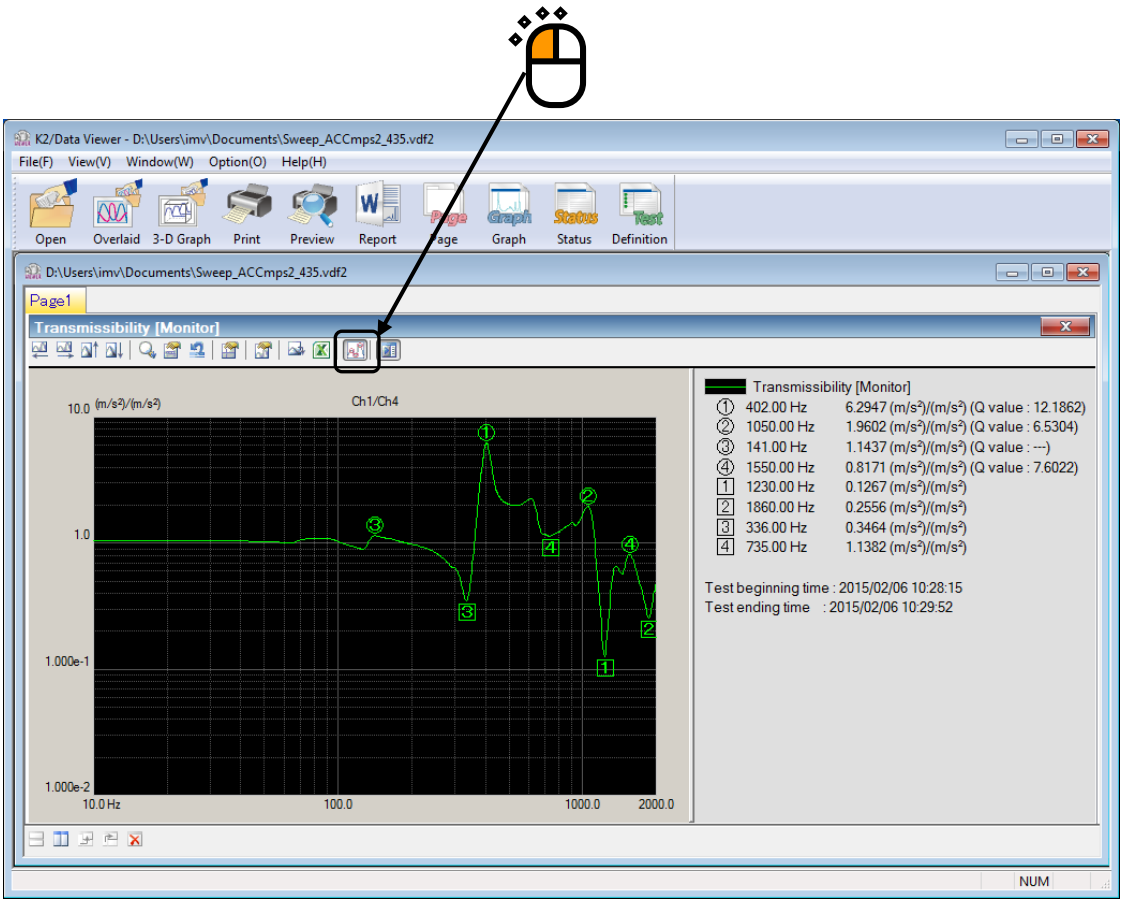
3.3.7 Peak Mark

Peaks and valleys in the graph data currently displayed can be marked.

< Procedures >

< Step 1 >

Click the icon of ‘Peak Mark’.



Peaks are marked with rounds, and valleys are marked with squares from the higher order.

The values appear in the legend window.

As for the peak detecting conditions, maximum number of marks, changing of display/non-display of value Q, refer to ‘3.3.8 Graph Color Setting’.

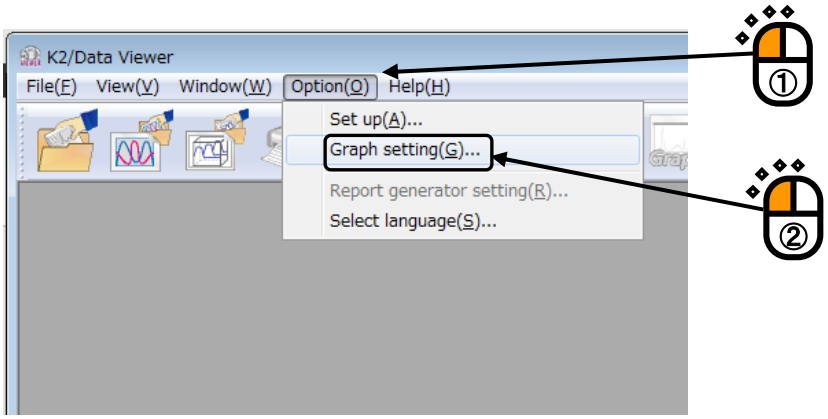
3.3.8 Graph Color Setting

This function is for changing the setting of graph freely to be displayed.

< Procedures >

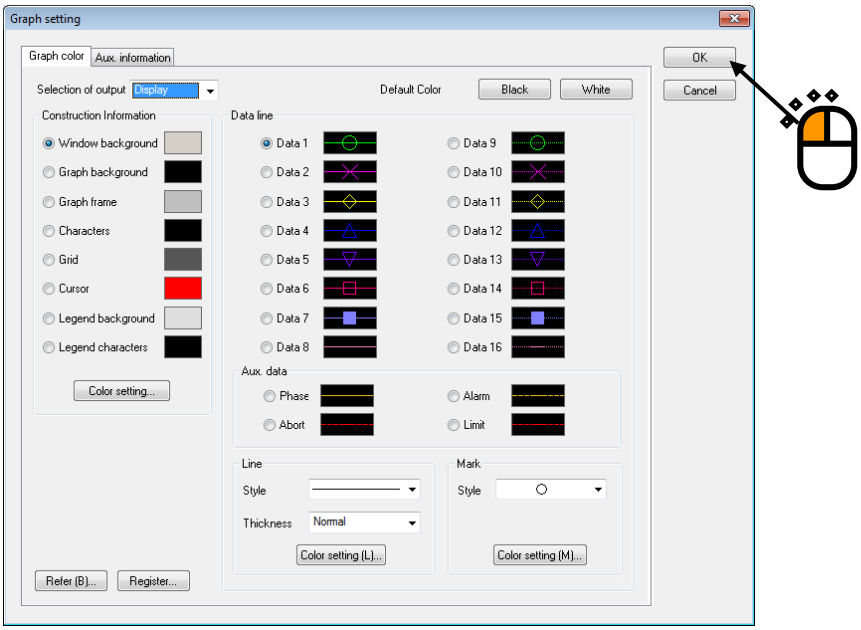
< Step 1 >

Select [Option] in the menu bar and click the [Graph color setting].



3.3.8.1 Change Graph Color

Select items to be changed on the tab of 'Graph color', and change the settings of line types, marks, and colors.

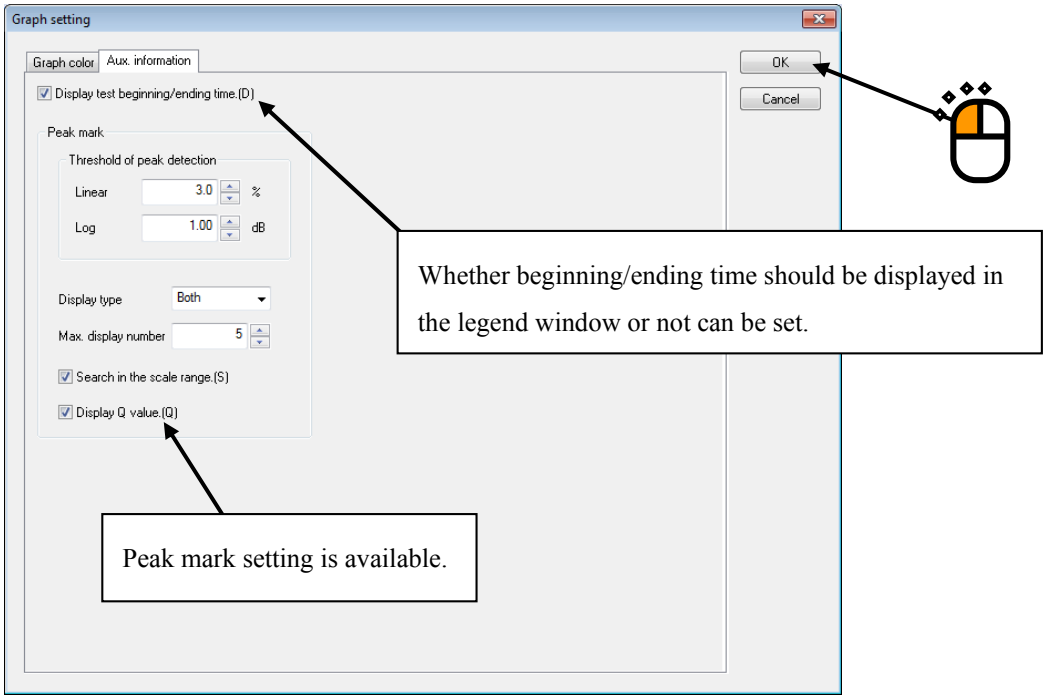


Note) **The setting of 'Graph color setting' is not influenced to the setting of 'Print color setting'. Refer to 'Print color setting' in "3.4 Output to the Printer" about changing the color of a graph to be printed.**

3.3.8.2 Change of Auxiliary Information

Change the settings of display/non-display of ‘Test beginning/ending time’ and peak mark on the tab of ’Aux. information’ tab.

After completing necessary changing, press the button of [OK].



3.3.8.2.1 Test Beginning/Ending Time

Whether test beginning/ending time should be displayed in the legend window or not can be set.

While a test is being executed, test beginning time is displayed when excitation is started, and test ending time is displayed when the excitation is ended.

This setting is valid for applications shown below.

SINE, RANDOM, SHOCK, RESONANCE DWELL, Multi-SWEEP SINE
BMAC, Multi-RANDOM, Multi-SINE, BMAC with Torsion

Note) There may be some differences between the time displayed and that of the execution status and history.

3.3.8.2.2 Peak Mark

Setting relative to peak mark is available.

＜Threshold of peak detection＞

Threshold to judge peak/valley can be set up.

＜Display type＞

Select any object to be marked among the choices of ‘Maximum value/Minimum value/both’.

＜Max. display number＞

Maximum number of marking can be set up. (from 1 to 10)

If detected peaks and valleys are less than it, only the detected items are marked.

＜Search in the scale range＞

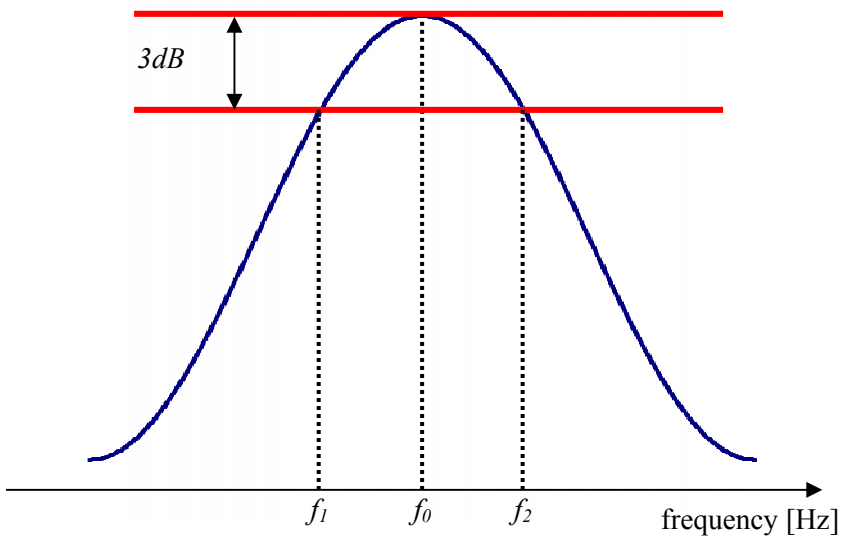
Whether peaks and valleys should be detected in the scale range currently displayed or in all the data can be set up.

＜Display Q value＞

Whether Q value should be displayed with the peak value in the remark window or not can be set up.

Note) This function is valid only in transmissibility graph.

Q value is calculated by using the formula below.



$$Q = \frac{f_0}{f_2 - f_1}$$

3.4 Output to the Printer

3.4.1 Print

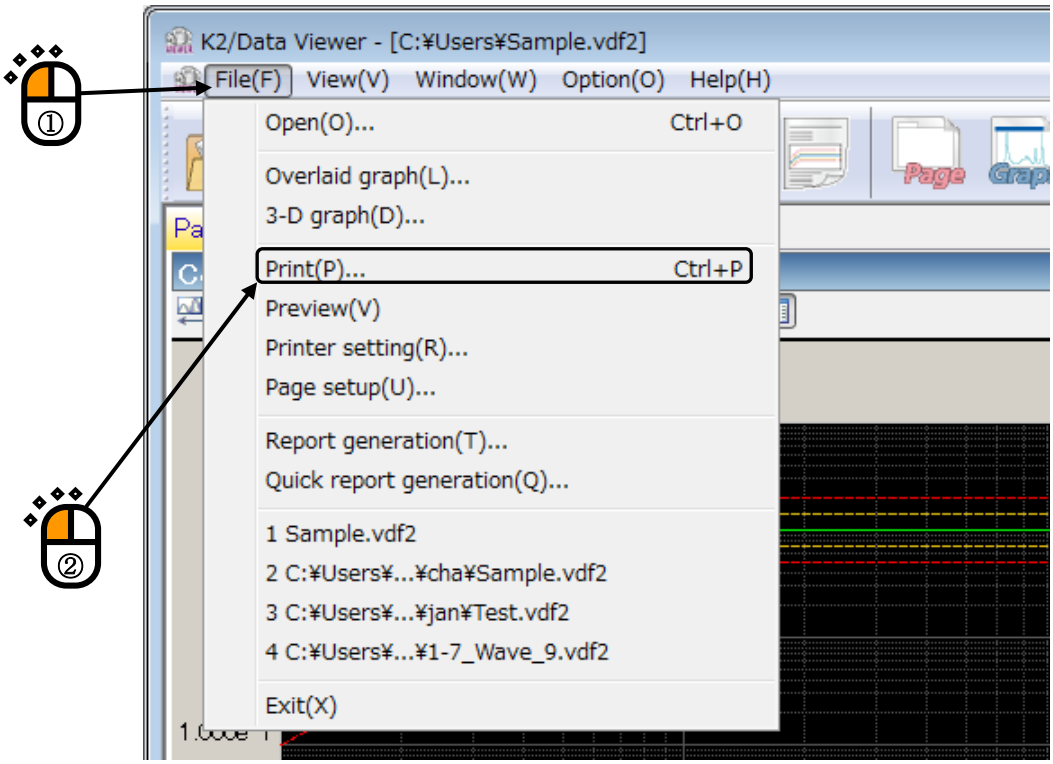
In DATA VIEWER, Test Definition, Graph and Log are printed out mainly by using the function of print executed by selecting [File] – [Print] in the menu bar.

The items to be printed out are available to select by clicking on it.

< Procedures >

< Step1 >

Select “File” on the menu bar and click “Print”, or click the “Print” icon on the tool bar.

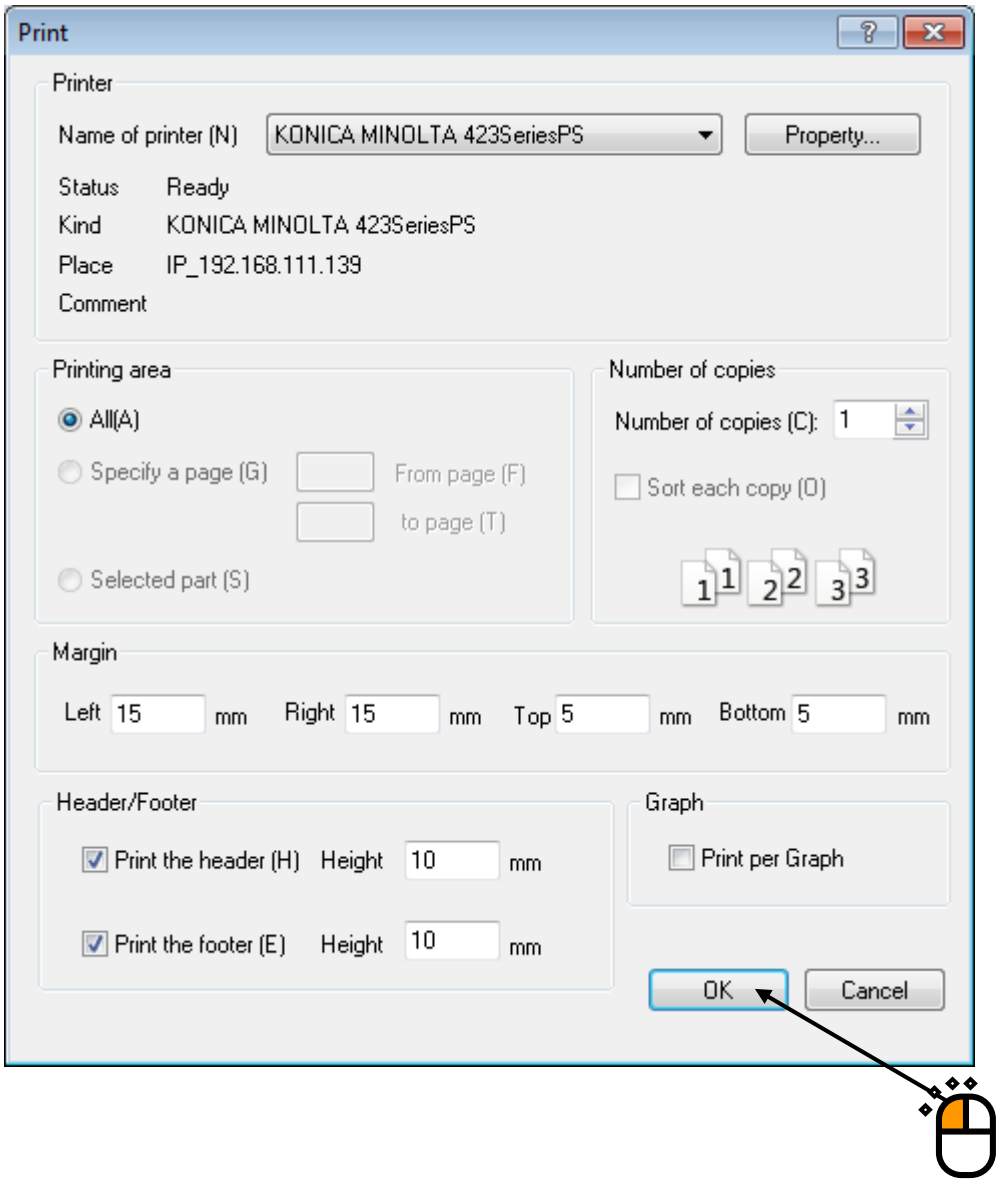


< Step2 >

Select printer and input the setting of ‘Margin Setting’ and ‘Header/Footer’ and press [OK].

Header and footer are printed inside except the margin area. If the number of characters displayed in header and footer are too large and they cannot be displayed completely. In this case, increase the height.

When ‘Print per Graph’ is checked and two or more graphs are printed, one graph per each page is printed. The scale of the printed graph is the same as the scale of the displayed graph.



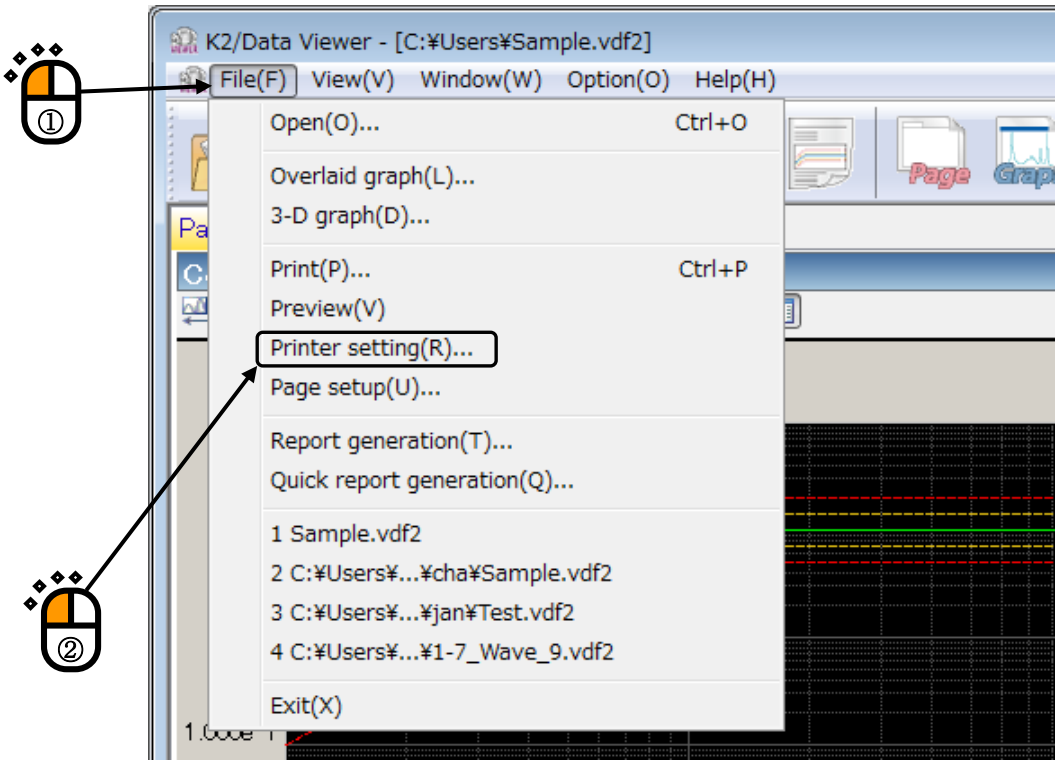
3.4.2 Printer Setting

This item is for defining of margin setting, setting of footer/header and date printing for the printer.

< Procedures >

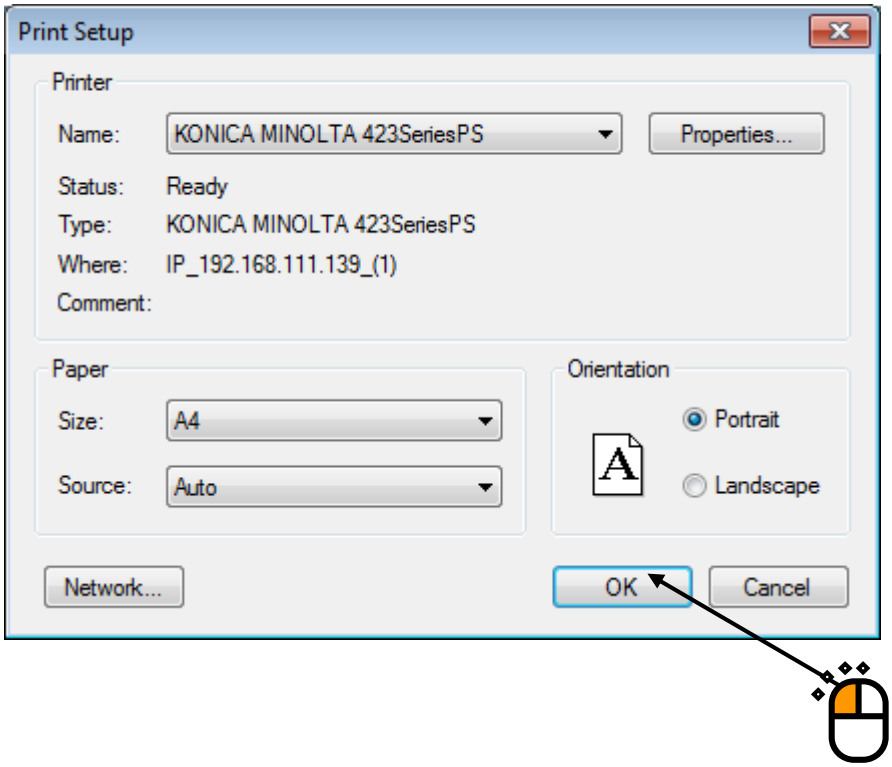
< Step1 >

Select [File] in the menu bar and click 'Printer setting' among the items.



< Step2 >

Select the printer to be used, setup, paper size, and Orientation, and press [OK] button.



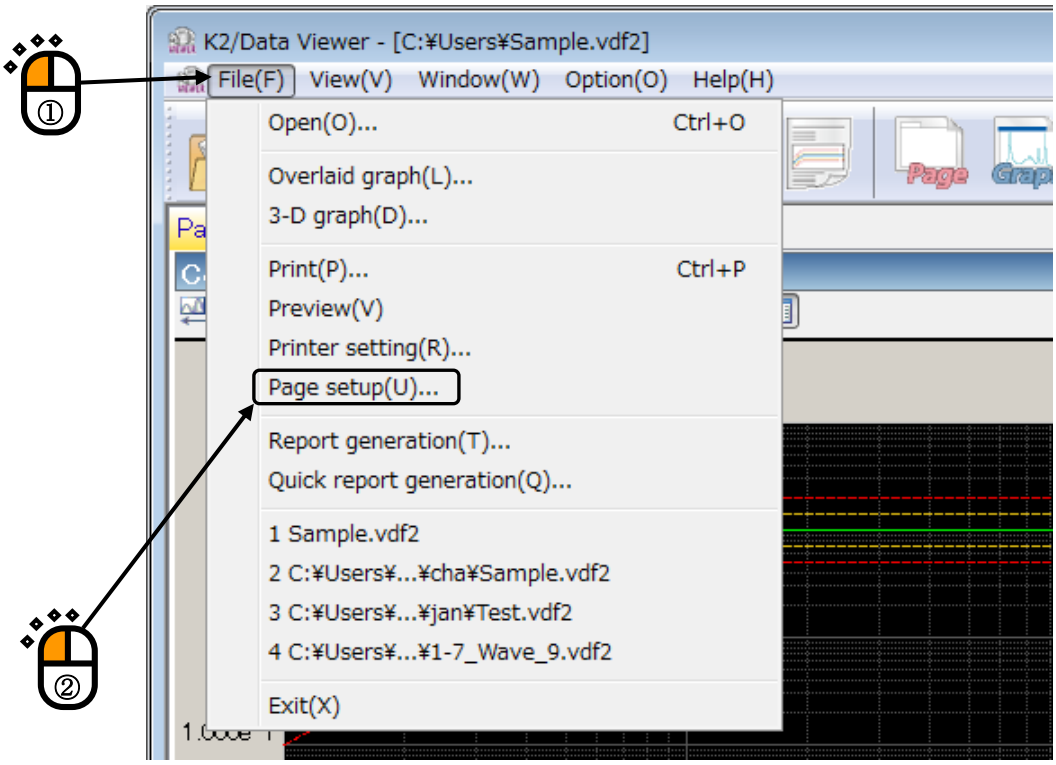
3.4.3 Page Setup

Print margin can be set up.

< Procedures >

< Step1 >

Select [File] in the menu bar and click ‘Page setup’ among the items.

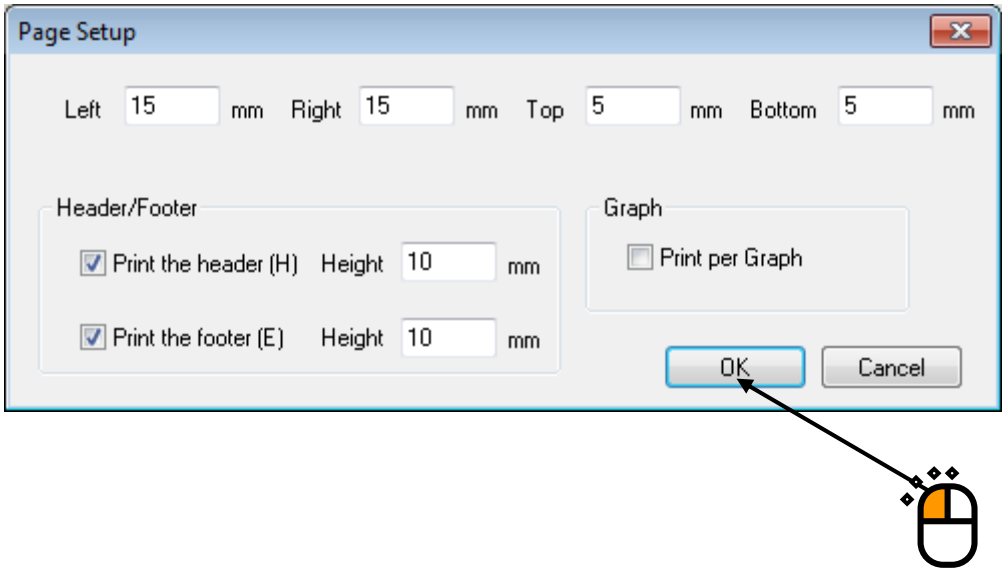


< Step2 >

Input the setting of ‘Margin Setting’ and ‘Header/Footer’ and press [OK].

Header and footer are printed inside except the margin area. If the number of characters displayed in header and footer are too large and they cannot be displayed completely. In this case, increase the height.

When ‘Print per Graph’ is checked and two or more graphs are printed, one graph per each page is printed. The scale of the printed graph is the same as the scale of the displayed graph.



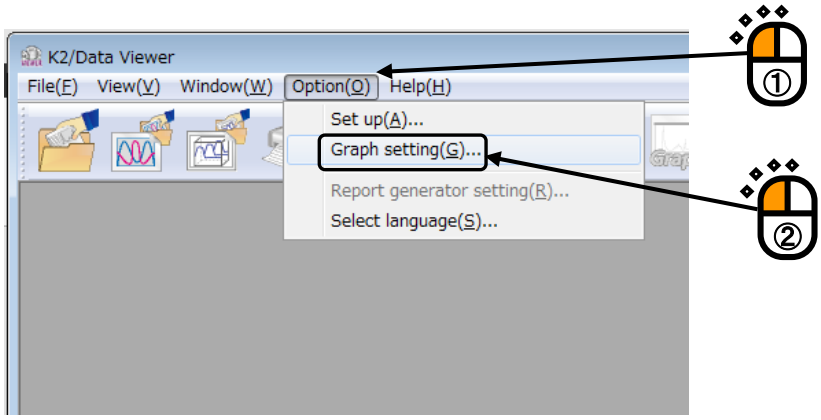
3.4.4 Print Color Setting

This item is for setting of the graph display type of data line, color and mark at printing.

< Procedures >

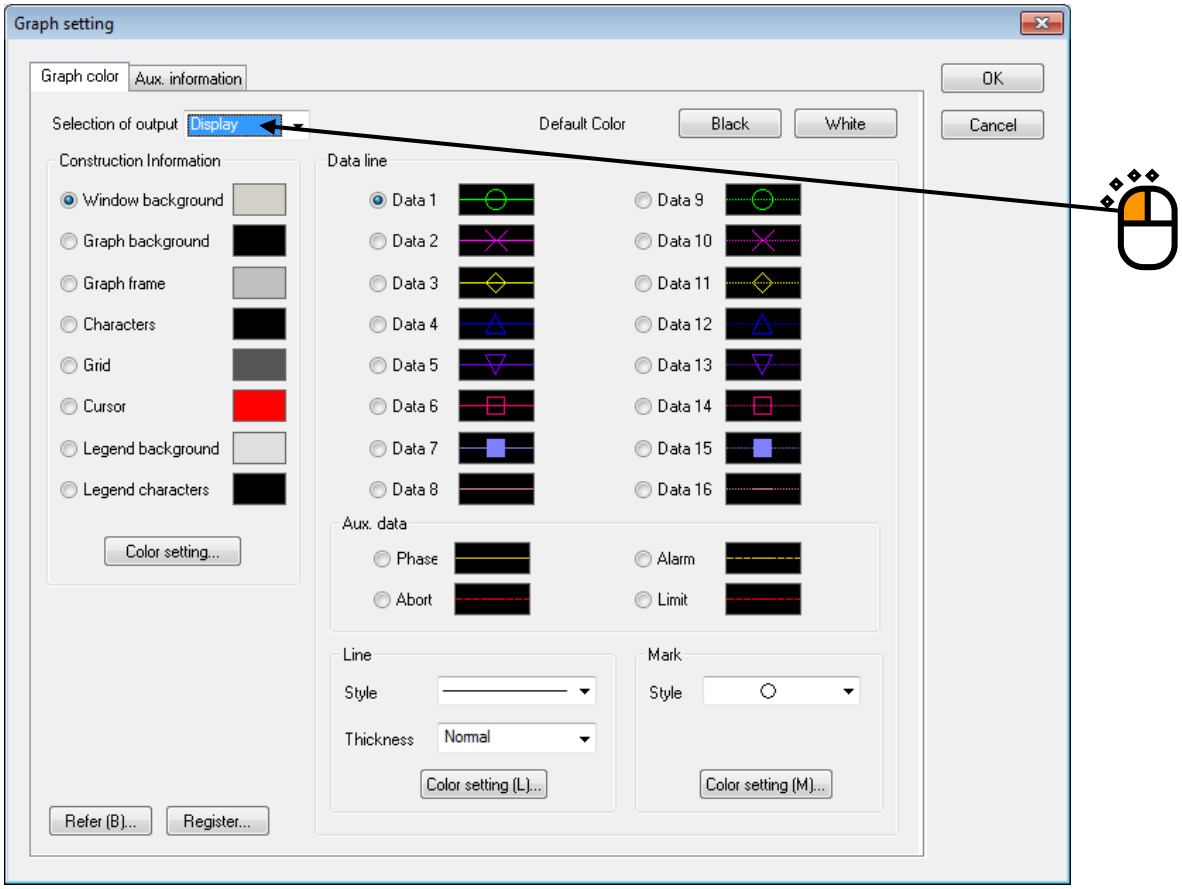
< Step1 >

Select [Option] in the menu bar and click [Graph setting] among the items.



< Step2 >

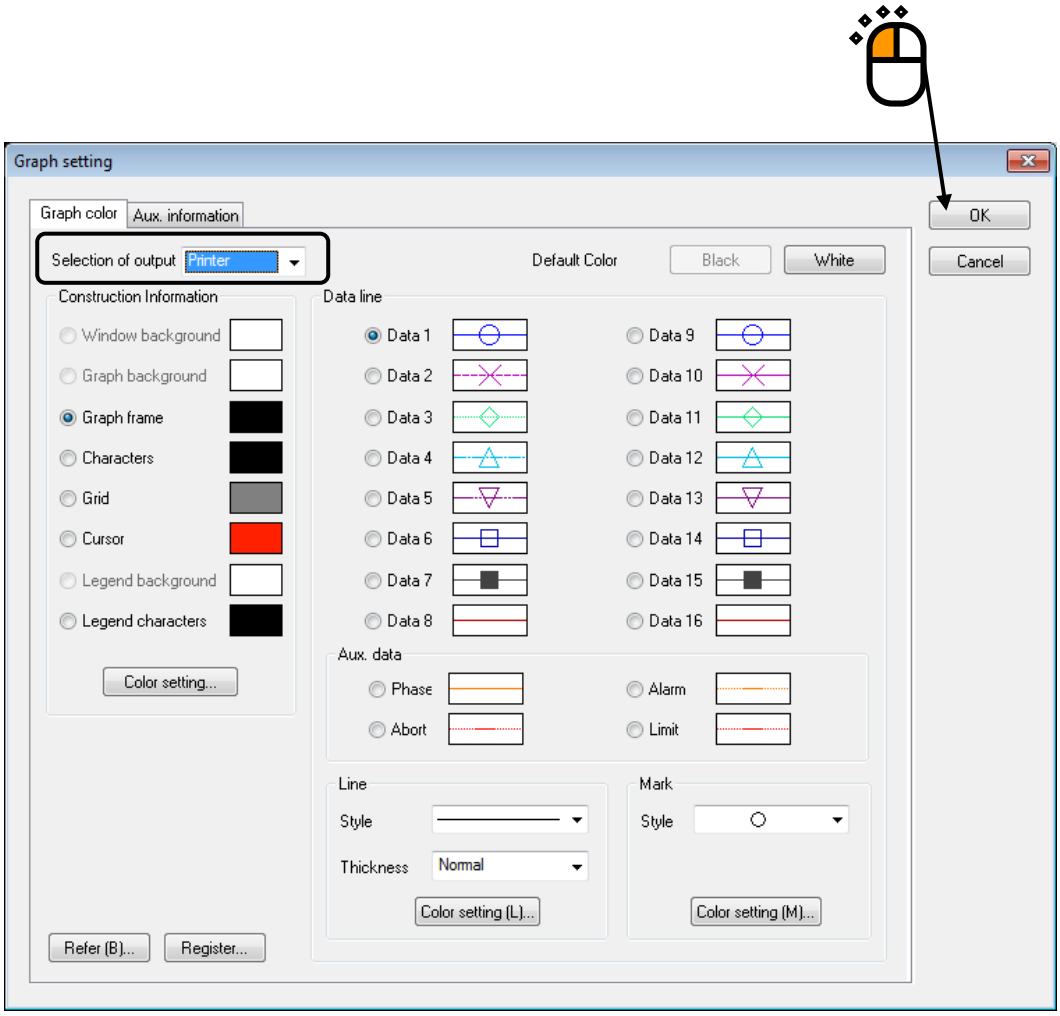
Select 'Printer' from 'Selection of output' in the graph color setting tab.



< Step 3 >

Select the data line and the color etc..

Then press [OK] to complete the setting.



Note) **Printer may not work correctly when the setting of 'Printer type' is not set correctly.**

3.5 File Conversion

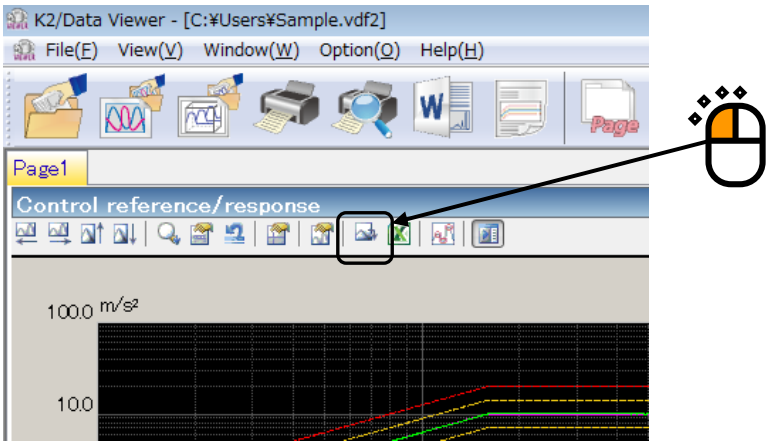
3.5.1 File conversion to CSV

This function is for converting a data file of K2 file format to that of CSV file format.

< Procedures >

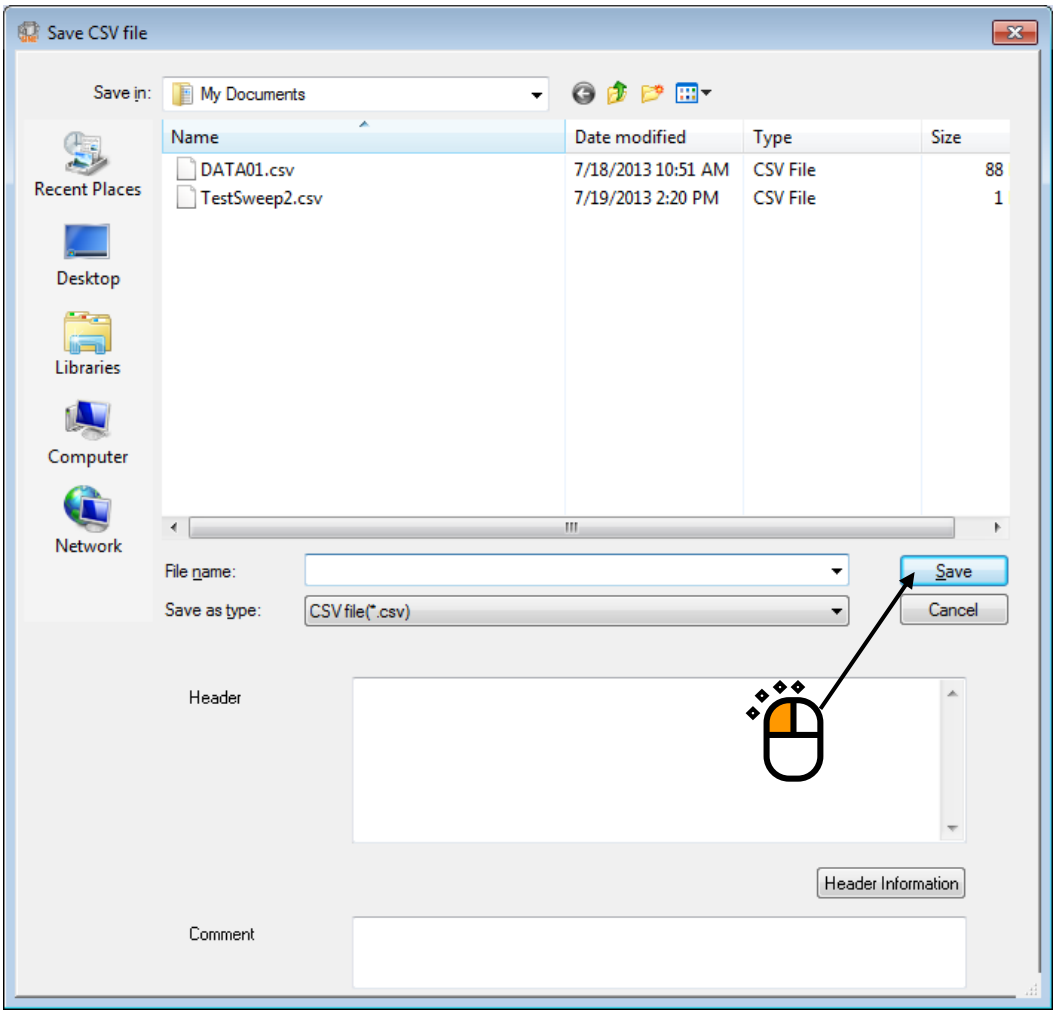
< Step 1>

Click a [Save Data] button on the graph display window.



< Step 2>

Show the Data Save window and Input a file name of CSV and press [Save].



Conversion of SINE Reference/Response Data (with Tolerance)

	1st. column	2nd. column			
1st. line	*Frequency[Hz]*	*Response[unit]*	*Reference[uni]*	*Abort upper limi[uni])*	……
2nd. line	***.***,	***.***,	***.**,	***.**,	……
	.,	***.***,	***.**,	***.**,	……
	.,	***.***,	***.**,	***.**,	……
	:	:	:	:	:
	.,	***.***,	***.***,	***.**,	……

・Fixed characters are written in Italic.

・Data name of graph is substituted for a data name.

・Unit of graph is substituted for a unit.

・Frequency data is substituted in the 1st. column.

・Each data is substituted from the 2nd. column.

Conversion of RANDOM Spectrum Data

	1st. column	2nd. column	3rd. column		
1st. line	*Frequency[Hz]*	Data name 1[unit]	Data name 2[unit]	Data name 3[unit]	……
2nd. line	***.***,	***.***,	***.**,	***.**,	……
	.,	***.***,	***.**,	***.**,	……
	.,	***.***,	***.**,	***.**,	……
	:	:	:	:	:
	.,	***.***,	***.***,	***.**,	……

・Fixed characters are written in Italic.
・Data name of graph is substituted for a data name.
・Unit of graph is substituted for a unit.
・Frequency data is substituted in the 1st. column.
・Spectrum data is sub stituted from the 2nd. column.

Conversion of SHOCK Waveform Data

	1st. column	2nd. column	3rd. column		
1st. line	*Time*[Unit]	Data name 1[unit]	Data name 2[unit]	Data name 3[unit]	……
2nd. line	***.***,	***.***,	***.**,	***.**,	……
	.,	***.***,	***.**,	***.**,	……
	.,	***.***,	***.**,	***.**,	……
	:	:	:	:	:
	.,	***.***,	***.***,	***.**,	……

・Fixed characters are written in Italic.
・Data name of graph is substituted for a data name.
・Unit of graph is substituted for a unit.
・Time data is substituted in the 1st. column.
・Each data is substituted from the 2nd. column.

3.5.2 Graph display on Excel

This function is for displaying graphs on Excel by converting the data file in K2 file format to in the excel file format.

This function requires Microsoft® Excel software installed.

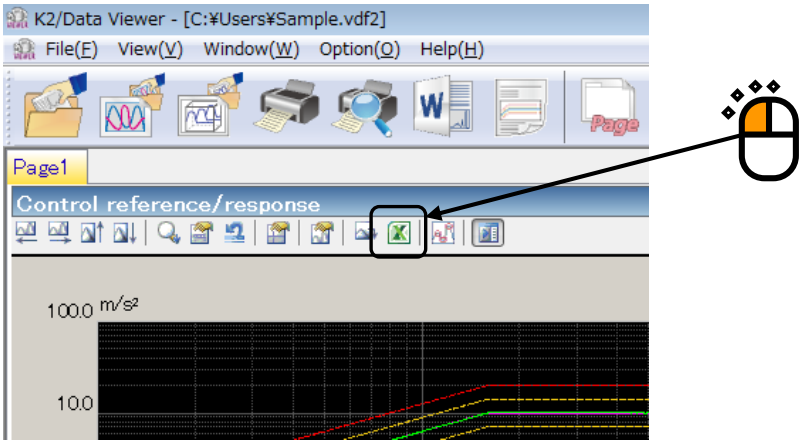
Note) This program supports only for Microsoft® Excel 2007, Microsoft® Excel 2010. and Microsoft® Excel 2013.

< Procedures >

< Step 1 >

Select a graph to be converted and displayed on Excel.

Press the button of [Output the graph to Excel] in the graph display dialog of K2.



Excel software is started up to display the selected graph in the excel format.

3.6 IT Function

3.6.1 Report Generator (Auto-generating function of the testing result report)

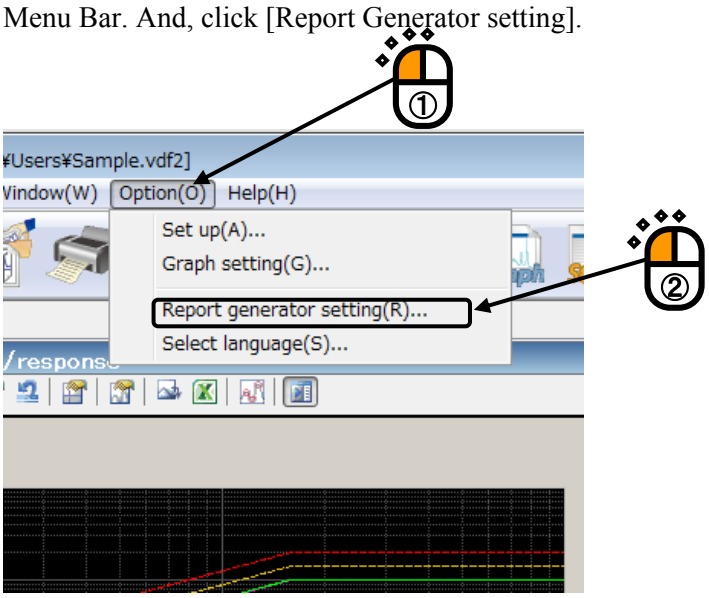
The function of Report Generator is for generating a report of testing result automatically when the test operation is completed.
Usually, it has a lot of trouble in generating the report of testing result for attaching the graphs and adding the description of test information. However, to use the function of Report Generator, the operator may be saved dramatically from the trouble in generating reports and the efficient operation can be realized.

In the DATA VIEWER, the information that is the definition contents, the testing results and the graphs can be used by linking with Bookmarks of Microsoft® Word. The numeral values, the letters and the graphs specified as Bookmarks can be attached to the report automatically when these Bookmarks are described in Template files of Microsoft® Word.
The forms of testing result reports used frequently are recommended to be saved in a Template file of. So that the same forms of testing result reports can easily be made by one-click. Forms of testing result reports can be customized for the operator depending on his purpose by using Microsoft® Word.

Microsoft® Word is required to use this function.

Note) This function supports only for Microsoft® Word 2007, Microsoft® Word 2010 and Microsoft® Word 2013.

＜Procedure (to set Report Generator)＞
＜Step1＞
Select [Option] from the Menu Bar. And, click [Report Generator setting].



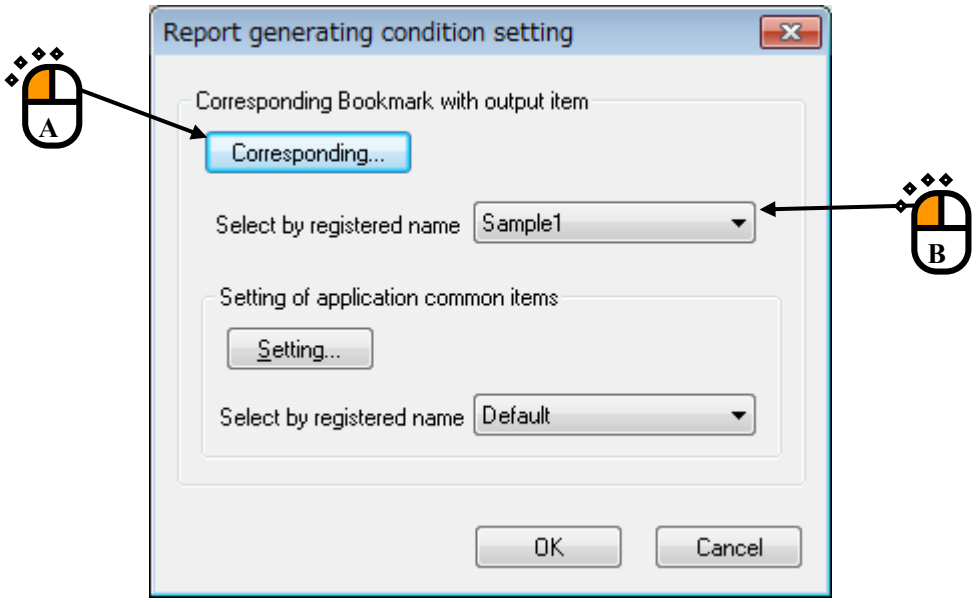
＜Step2＞

A : Press the [Corresponding] button to change the Template file of Microsoft® Word to be used or to make correspondence of the Output Items with Bookmarks newly.

→ Go to ＜Step3＞.

B : Select the registration name in ‘Select by registered name’ to use the Output Items corresponded with Bookmarks that have already been registered.

→ Go to ＜Step7＞



＜Step3＞

Press [Select] to specify a Template file of Microsoft® Word to be used (①).

(The Template file to be used is needed to be made beforehand.)

When the Template file is selected, Bookmarks set in the Template file are listed in 'Correspondence Table'.

Next, the Output Item is to be made correspondence with Bookmarks.

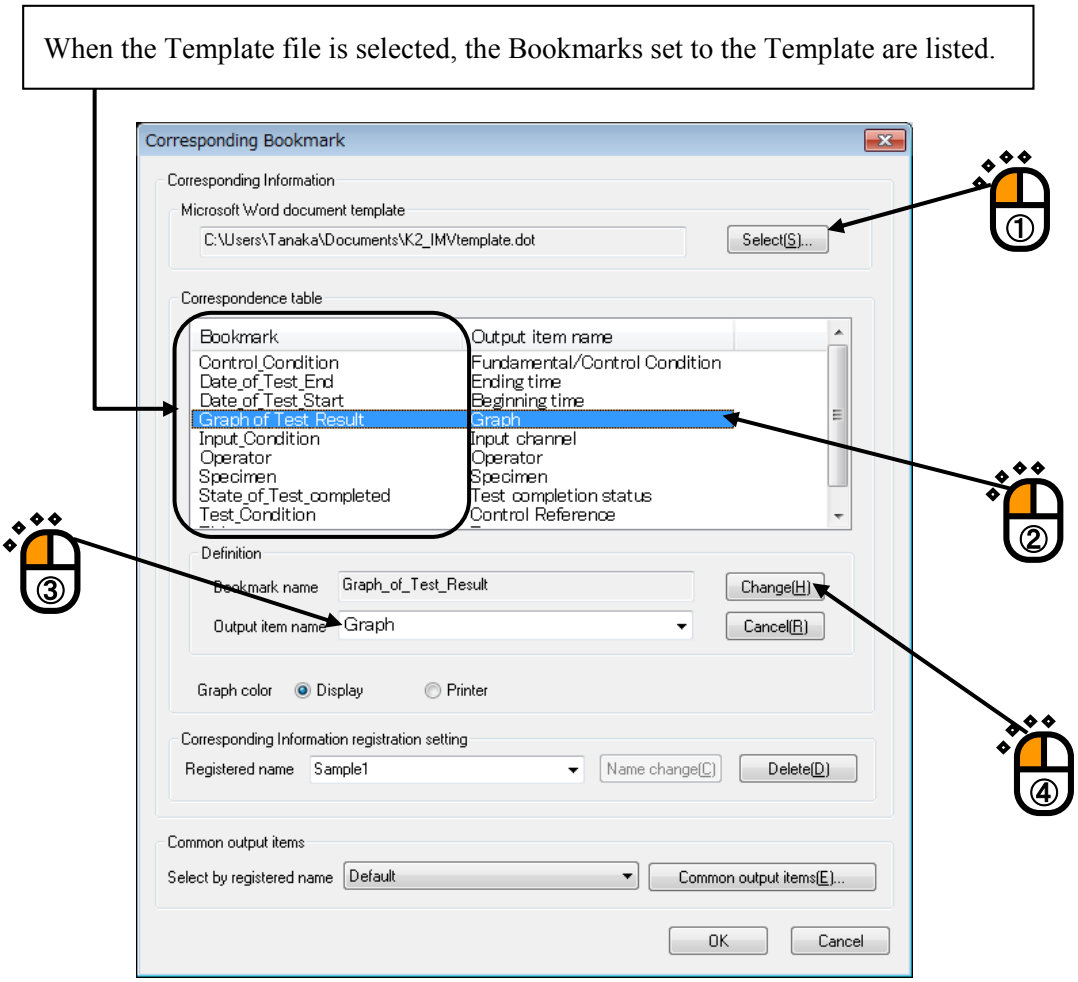
Select a Bookmark name to be set among the list of 'Correspondence Table' (②). And specify an Output Item from the list of 'Output Item name' (③). Press the [Change] button in Correspondence Definition (④).

Available Output Items vary in each applications as SINE/RANDOM.

<Graph Data>

The graphs displayed at generating reports are treated as the objective for 'Graph' among Output Items. When other graph data ('Operation', 'Response', etc.) is specified as output item, the graph data is outputted to the bookmark automatically even if the data is not displayed as a graph.

The setting of color and lines of the graph are selected from the items specified by [Option] → [Graph color setting].



＜Step4＞

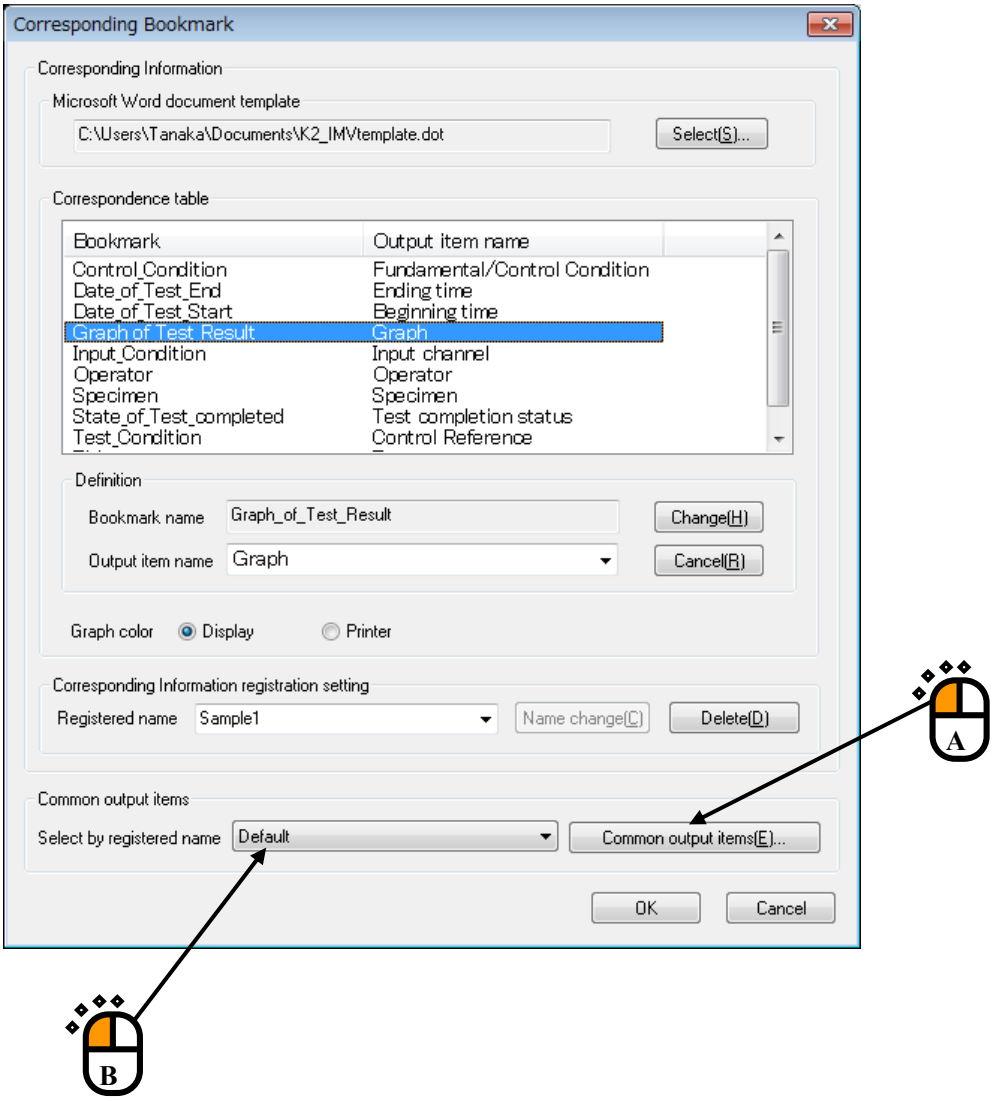
The definition of ‘Common Output Items’ is done if it is necessary.

A : Press the [Common output items] button to change the setting of Common Output Items.

→ Go to ＜Step5＞

B : Specify a registration name in ‘Select by the registeration name’ to use the Common Output Items that have already registered.

→ Go to ＜Step6＞



＜Step5＞

The information specified in Common Output Items is other than the test definitions and the testing results in Output Items displayed in Correspondence Definition.

The contents registered in this item is attached to the Bookmarks corresponded with.

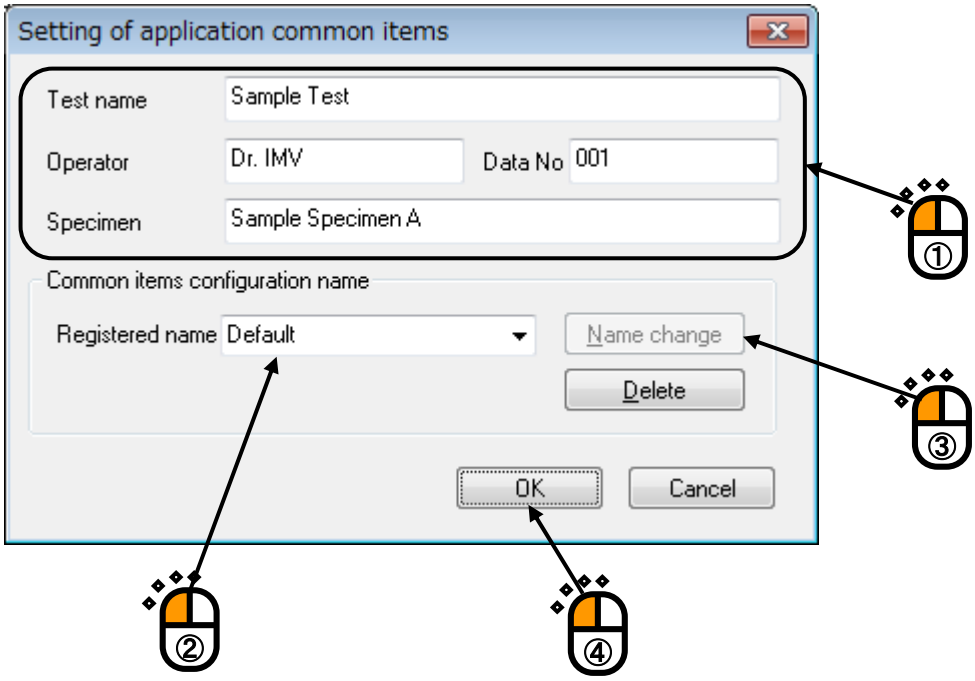
The characters and the numeral values are set to the Output Item to be needed (①).

Specify a registration name of ‘Common Item set’ to register the set Common Output Item (②).

And, press the [Name change] button (③).

When the set Common Output Item is registered in this item, it can be selected in ‘Select by registered name’ at ＜Step 4＞ (or ＜Step 7＞).

Press [OK] after completing of the necessary settings (④).

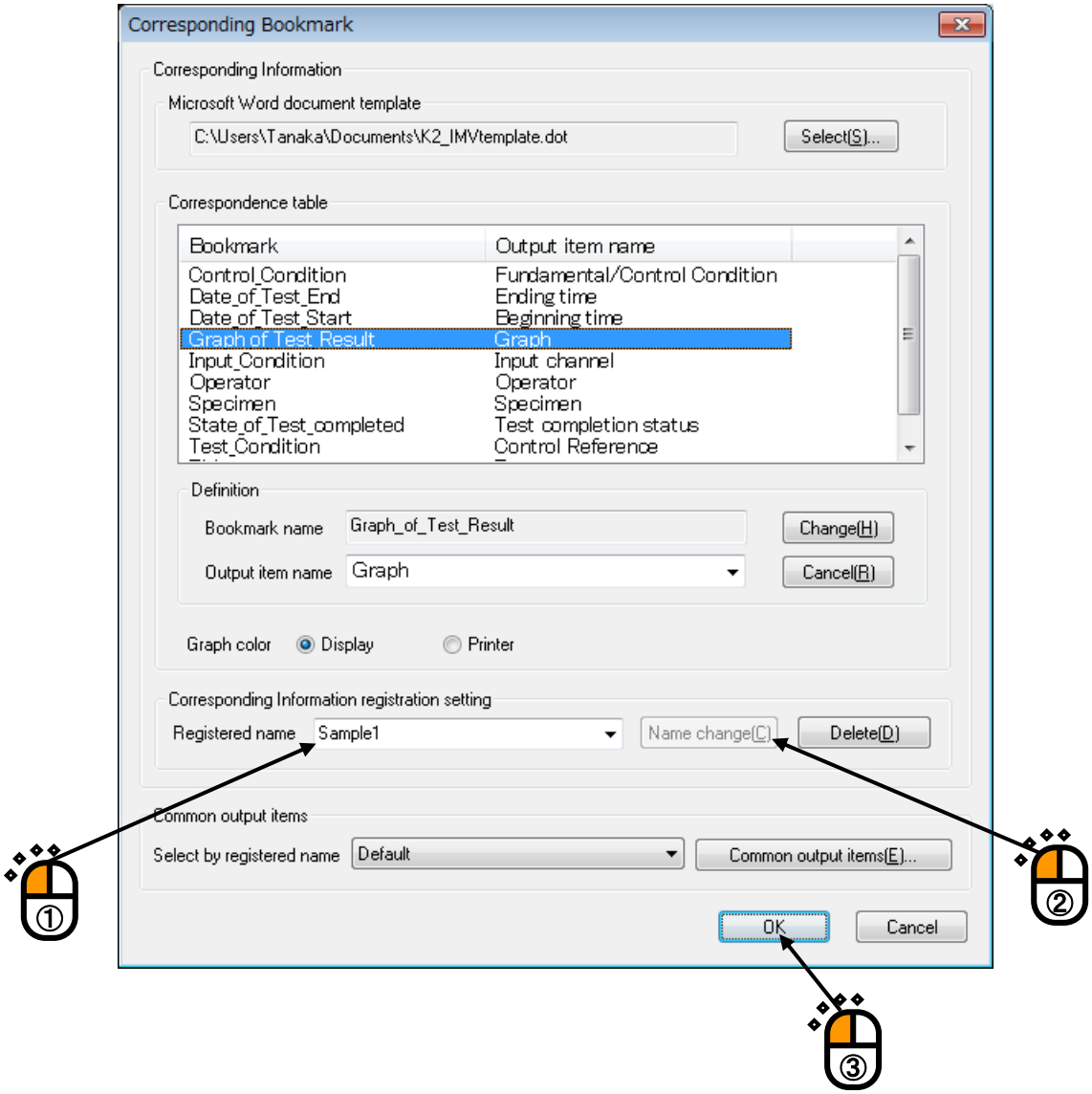


＜Step 6＞

Specify a registration name of ‘Correspondence Definition Registration’ to register the set Correspondence. And, press the [Name change] button.

When the set Correspondence Item is registered in this item, it can be selected in ‘Select by registered name’ at ＜Step 2＞.

Press [OK] after completing of the necessary settings (④).



＜Step7＞

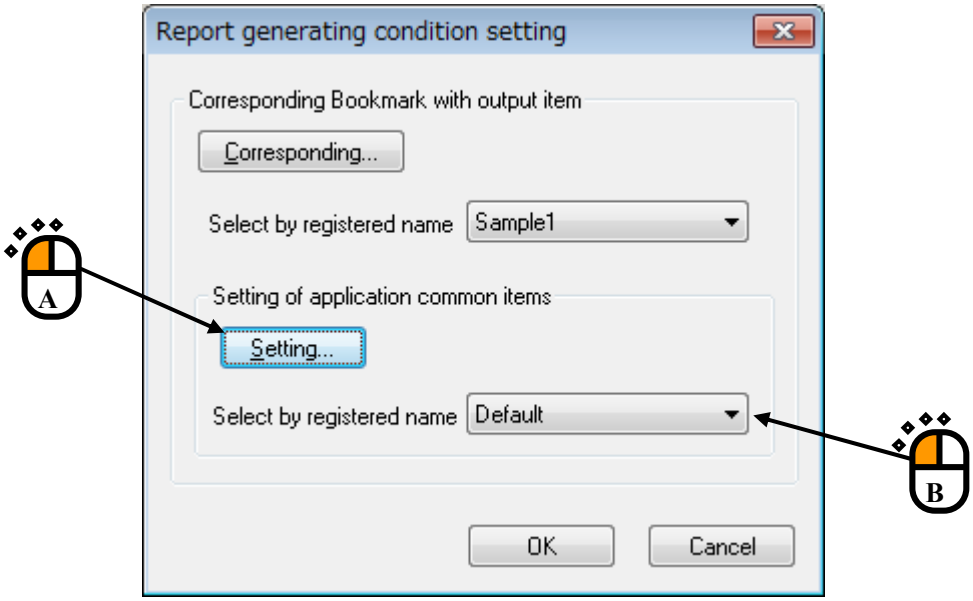
The definition of ‘Common Output Items’ is done if it is necessary.

A : Press the [Setting] button to change the setting of Common Output Items.

→ Go to ＜Step8＞

B : Specify a registration name in ‘Select by the registeration name’ to use the Common Output Items that have already registered.

→ Go to ＜Step9＞



＜Step8＞

The information specified in Common Output Items is other than the test definitions and the testing results in Output Items displayed in ‘Correspondence Table’.

The contents registered in this item is attached to the Bookmarks corresponded with.

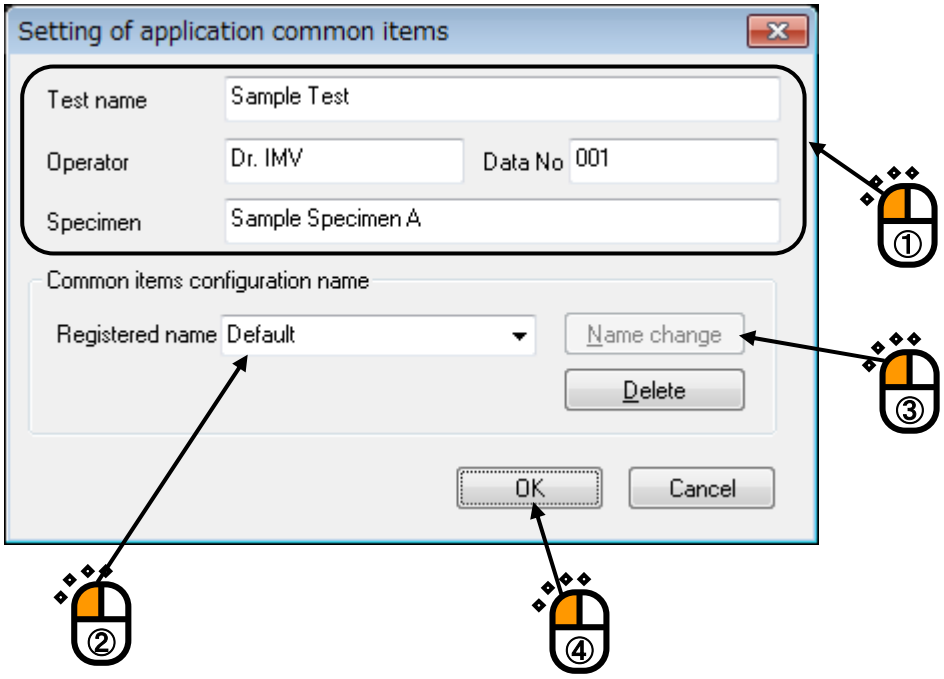
The characters and the numeral values are set to the Output Item to be needed (①).

Specify a registration name of ‘Common Item Set’ to register the set Common Output Item (②).

And, press the [Name change] button (③)

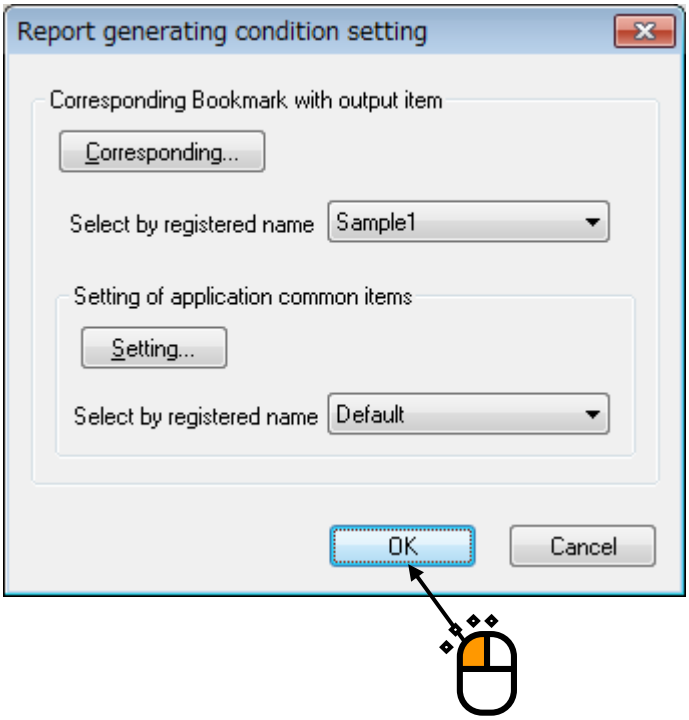
When the set Common Output Item is registered in this item, it can be selected in ‘Select by registered name’ at ＜Step7＞ (or ＜Step4＞).

Press [OK] after completing of the necessary settings (④).



＜Step 9＞

Press [OK] after completing of the necessary settings.



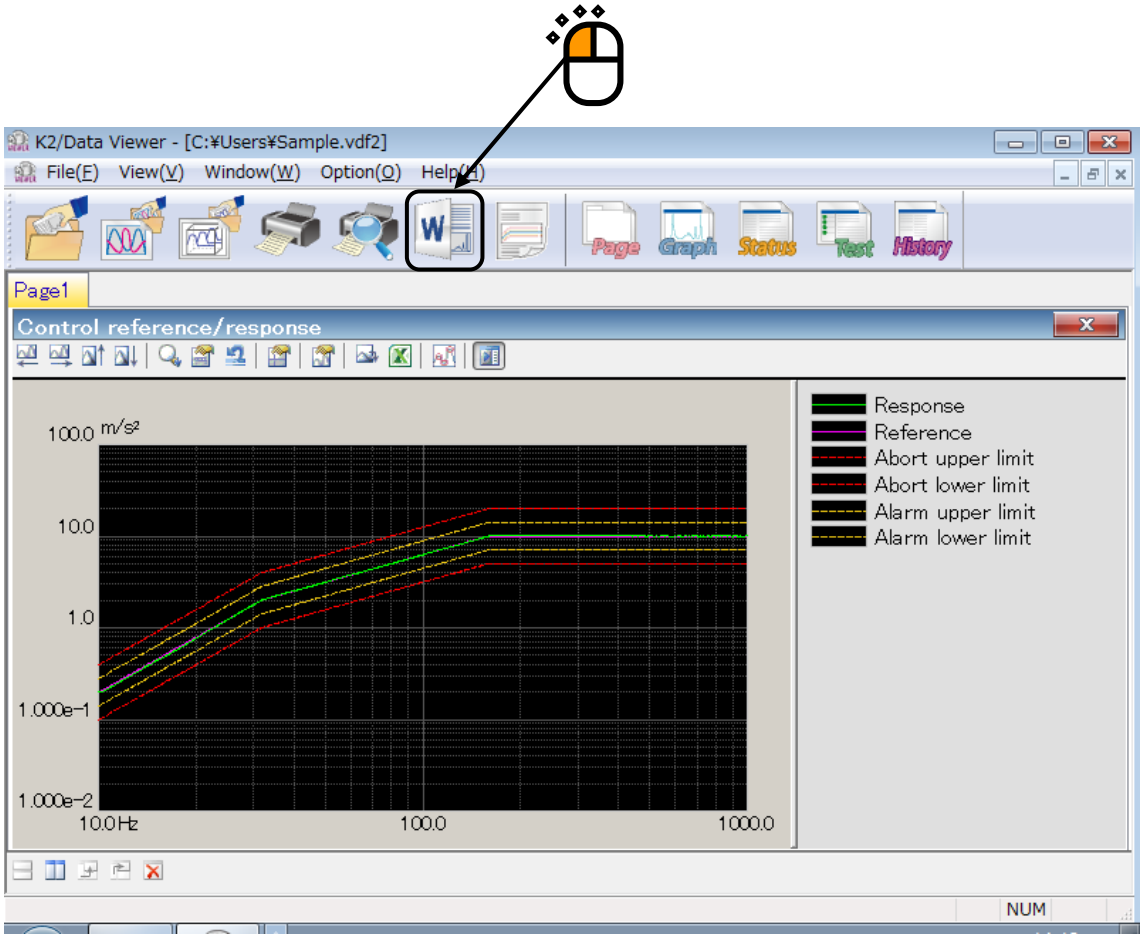
＜Procedure(to Report)＞

Press the [Report generation] button in the state of Test completed.

When the [Report generation] button is pressed, a WORD file according to the setting of Report Generator is generated automatically.

The graphs displayed at pressing the [Report generation] button are treated as the objective for 'Graph' of Output Items.

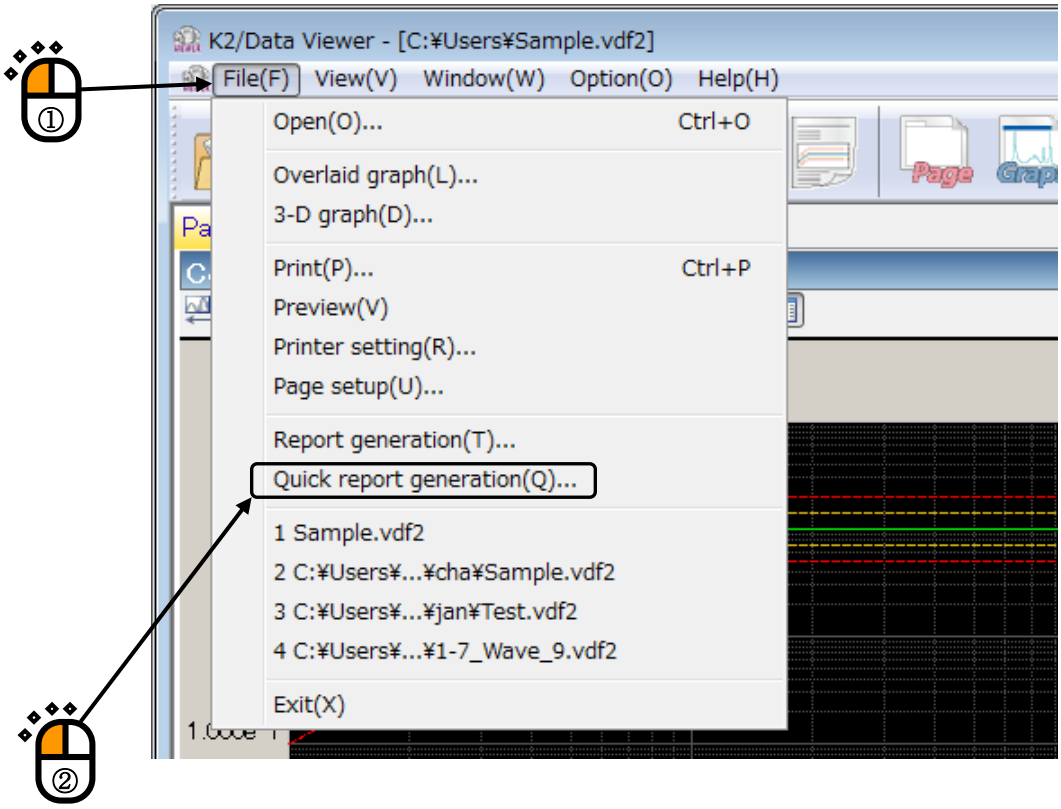
The description in the next page is an example of the report of testing result generated by Report Generator.



3.6.2 Quick Report

The function of Quick Report is for writing the testing result through a web browser or Microsoft® Word after a test is finished, in a similar manner to the Report Generator. It features easier setting than the Report Generator and non-necessity of Microsoft® Word. On the other hand, it does not allow fine position adjustment. Use the functions appropriately for your purpose.
If you choose Microsoft® Word as the destination of the result with this function, the corresponding version is the same as that of the Report Generator.

＜Procedures (Selection of output items)＞
＜Step1＞
After a test is finished, select [File] in the menu bar and click [Quick report generation].

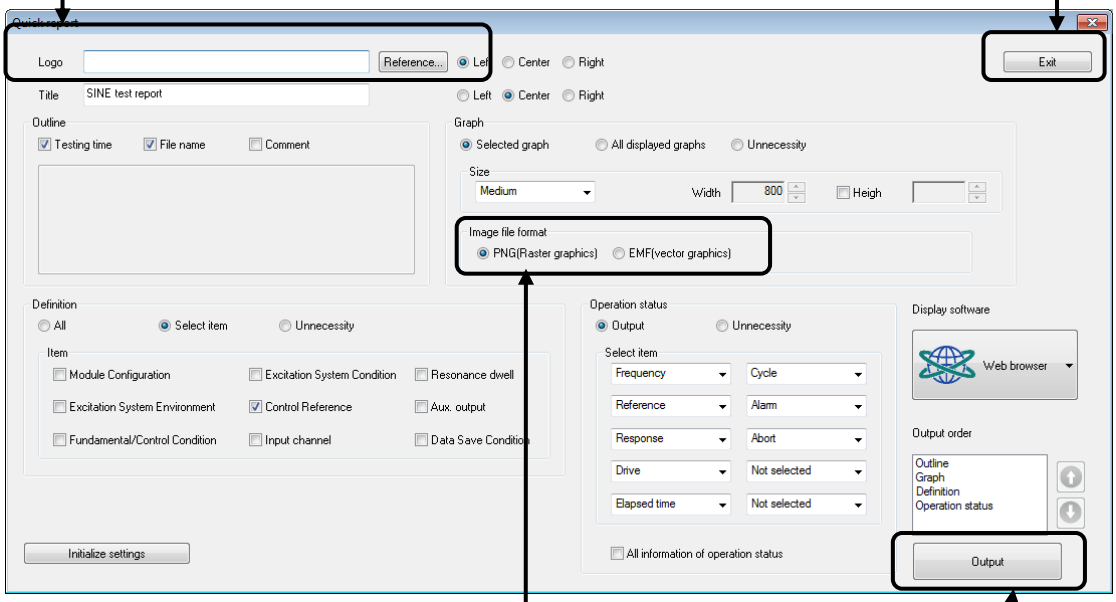


＜Step2＞

The dialog to select the item to be output to a quick report opens.

To add a logo, input or select the path to the target image file.

Saves the status selected at ending.



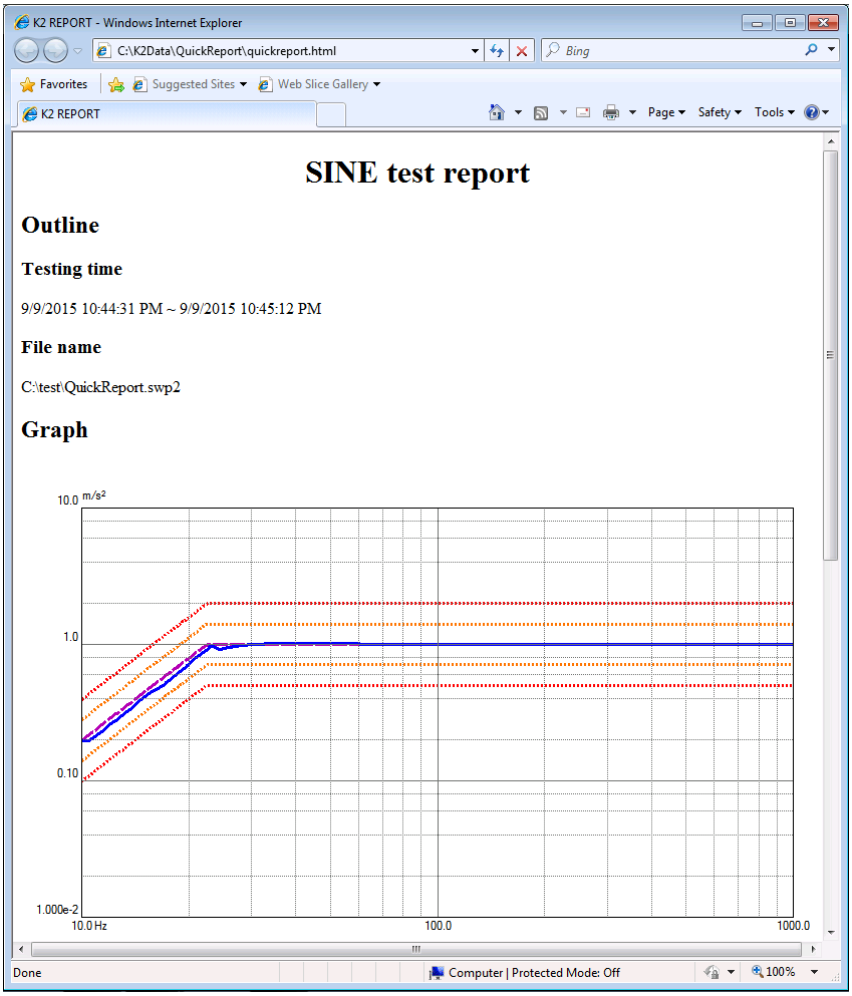
Either PNG (raster type) or EMF (vector type) graphic image type can be selected. In the EMF, images do not get rough even figures are enlarged. However, figures cannot displayed through any browser other than Internet Explorer.

This dialog is of SINE. Selection items vary slightly depending on the application.

Click [Output] button.

＜Step3＞

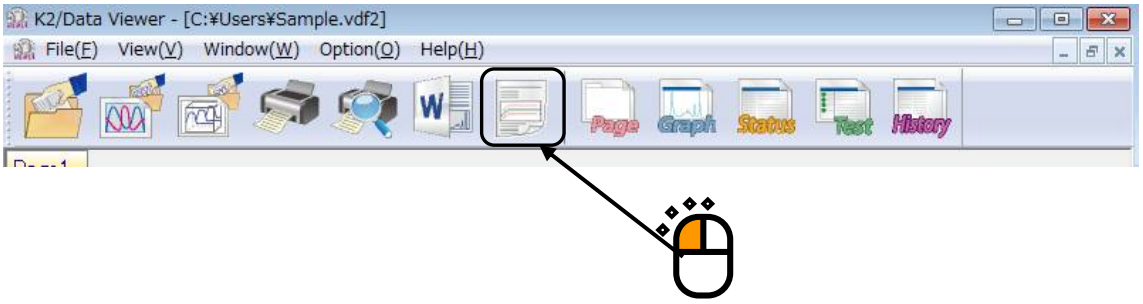
Quick report is generated through the selected display software.



＜Procedures (Generation of quick report with button operation)＞

When a test is finished, press [Quick] button.

When the [Quick] button is pressed, a quick report is generated through the display software. Items to be output are the last settings that the quick report is generated by [Quick report generation] in the menu bar.

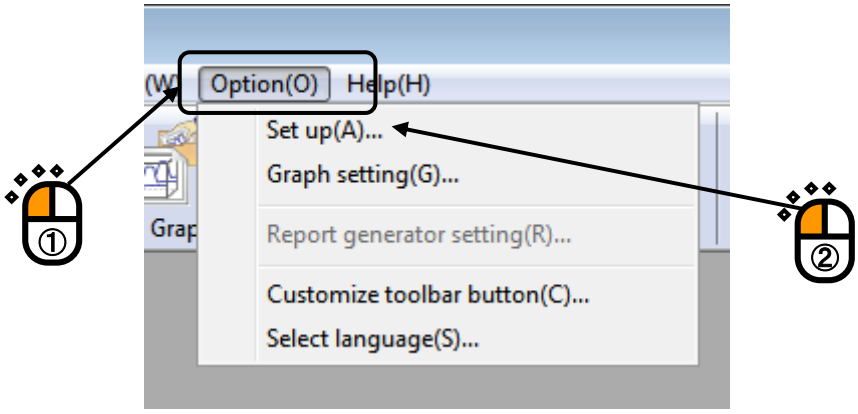


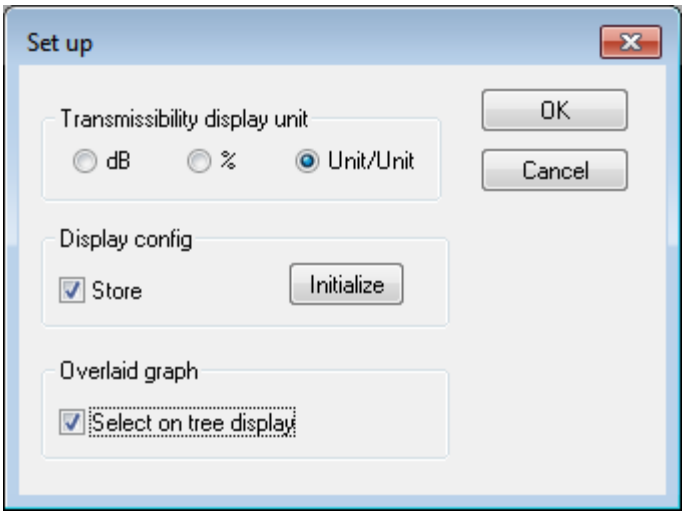
3.7 Supplemental Explanation

3.7.1 Set Up

<Procedure>

Select [Option] in the menu bar and click [Set up]. A dialog of ‘Set up’ appears.





＜Transmissibility display unit＞

This item is for selecting the display unit of amplitude value in Transmissibility Graph.

This unit selected in this item is valid only for the transmissibility graphs calculated from the two data giving the same unit.

In case that the transmissibility graph is calculated from the two data having different units, the display unit of amplitude always appears as ‘Unit/Unit’.

＜Display config.＞

・‘Store’ check box

Check ‘Store’ to store the display configuration. Display configuration is stored for each test type.

If data file of the test type including the stored display configuration information is selected, graph selection dialogue is not displayed, but graphs are automatically displayed with the stored display configuration.

The display configuration information is updated when the display conditions including graph

scales are modified.

Uncheck ‘Store’ not to store the display configuration modified thereafter.

・[Initialize] button

Select ‘Initialize’ to format the display configuration.

If it is initialized, the screen configuration information of all the test types is initialized. When graph is displayed at the next time, the graph selection dialogue is displayed after data file is selected.

＜Overlaid graph＞

・‘Select on tree display’ check box

Select it to choose data file in a tree display.

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