

INSTRUCTION MANUAL

Management Software

NL-22PB1



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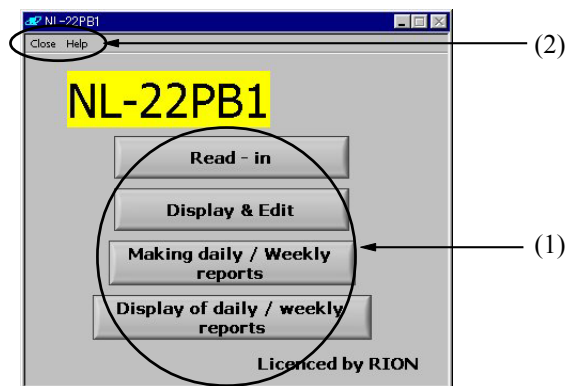
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Main Screen

When this software application is started, the "program startup screen" as shown below appears. The functions of this software are divided into the categories "Read-in", "Display & Edit", "Making Daily/Weekly Reports", and "Display of Daily/Weekly Reports". Select the appropriate function by clicking on one of the buttons (1).

To terminate the program and to access version and help information, use buttons (2).



Data Read-in (Item 2)

Converts stored data of the NL-21, NL-22, NL-31, NL-32, NL-06, or NL-16 into data files usable by the Data Management Software.

Display & Edit (Item 3)

Allows the user to perform various operations on data files, such as arithmetic processing, valid/invalid flagging, and sound file playback.

Making Daily/Weekly Reports (Item 4)

Allows the generation of daily or weekly reports.

Display of Daily/Weekly Reports (Item 5)

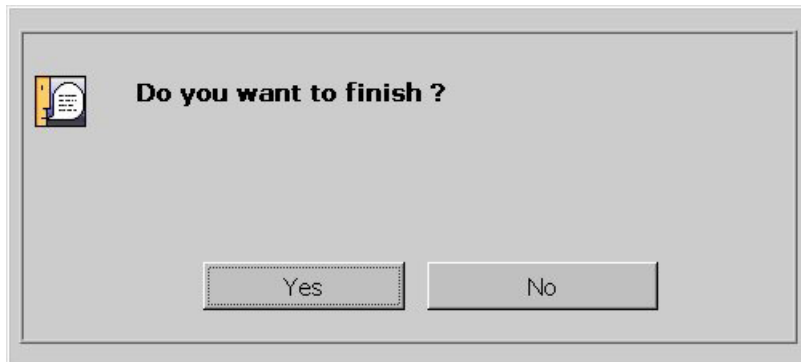
Allows the display of daily or weekly reports and output of summary data.

End

The following message is shown.

[Yes] : The program will terminate.

[No] : The program continues to run.



Version

Shows information about the software version. Click on [OK] to terminate.



Help

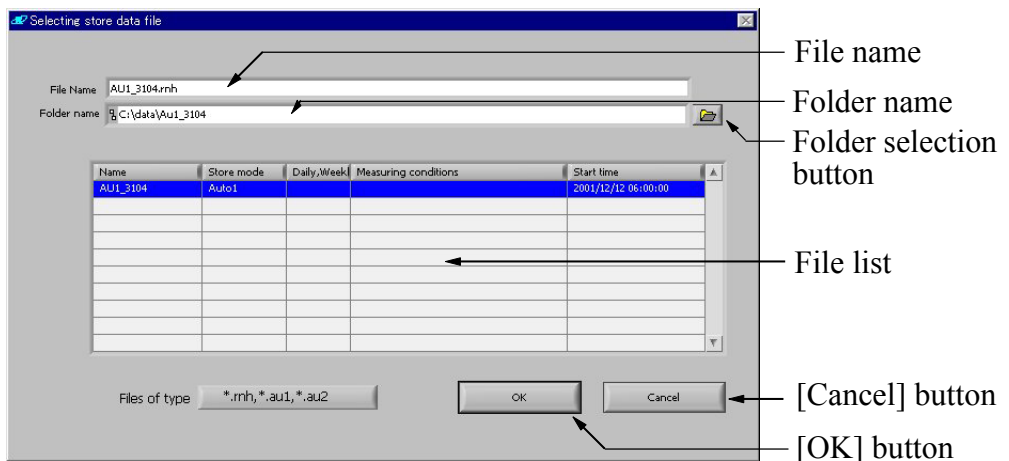
Starts Acrobat Reader and displays the help file.

Data Read-in

Lets you convert stored data of the NL-21, NL-22, NL-31, NL-32, NL-06, or NL-16 into data files usable by the Data Management Software. The screen sequence is as follows: File select screen → Measurement condition input screen → File read-in screen → File name input screen → Converted file write screen.

File Select Screen

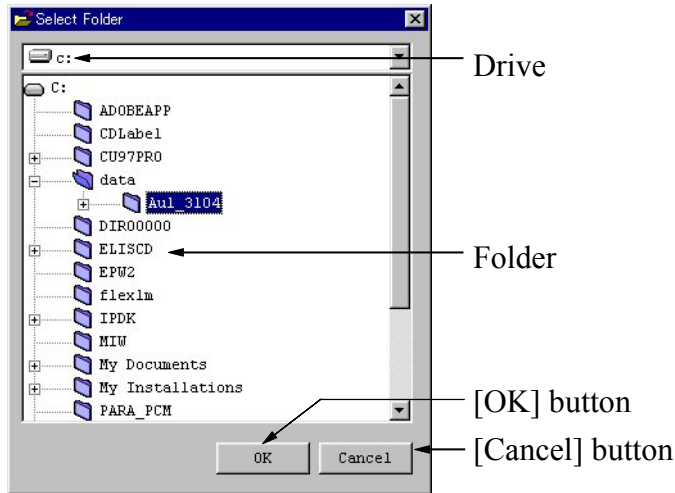
Lets you select a file.



Folder selection button

When you click on folder selection button, a screen such as shown below appears.

Folder screen



Drive

Selects the drive.

Folder

Selects the folder.

Double-click on a folder to open lower-hierarchy folders. If there are no lower-hierarchy folders, double-clicking has the same effect as clicking on the [OK] button.

[OK] button

Makes the currently selected folder active and closes the folder selection screen.

[Cancel] button

Closes the folder selection screen.

Folder name

Shows the name of the currently selected folder.

File list

Lists the files in the currently selected folder and lets the user select a file.

File name

Shows the name of the currently selected file.

[Cancel] button

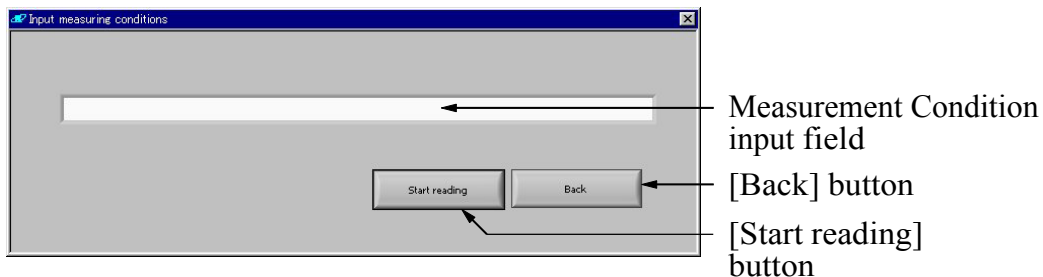
Closes the data read-in screen and returns to the main screen.

[OK] button

Converts the currently selected file into a data file for the Data Management Software. First, the measurement condition input screen appears. See page 6.

Measurement Condition Input

This screen lets you enter information about the measurement conditions (such as measurement location or other relevant information).



Measurement condition input field

Up to 64 characters can be entered here.

[Start reading] button

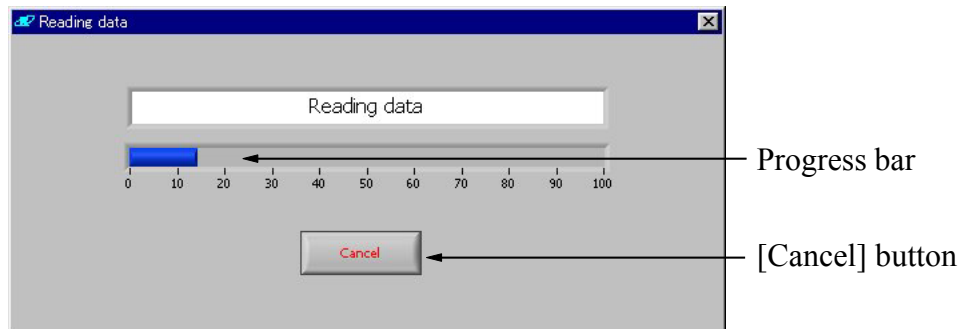
Click here to start the data read-in process. The measurement condition input screen closes and the file read-in screen appears. See page 7.

[Back] button

Closes the measurement condition input screen and returns to the main screen.

File Read-in Screen

This screen is shown while the file selected at the file select screen (page 3) is read. The progress indicator is updated accordingly.



Progress bar

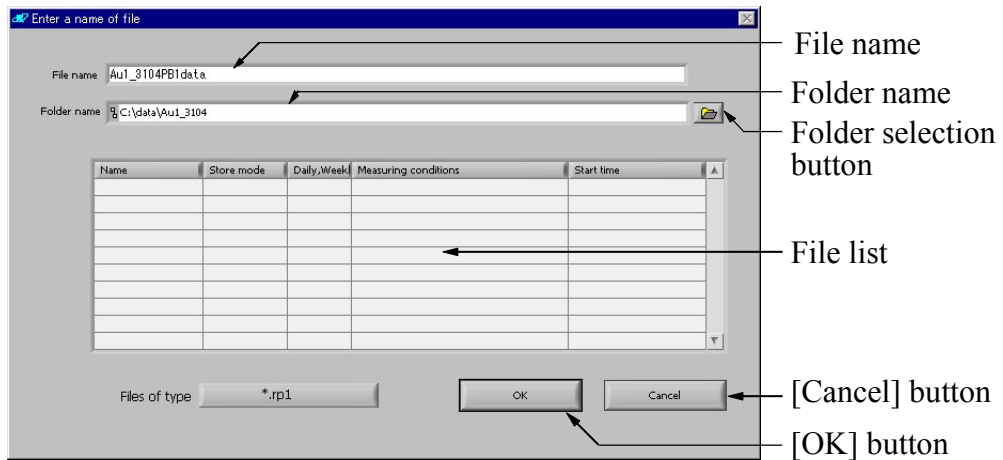
Shows the progress in percent.

[Cancel] button

Closes the file read-in screen and returns to the main screen.

File Name Input Screen

Here you can input a name for the Data Management Software file.



File name

Enter the desired file name here.

Folder name

Shows the currently selected folder.

Folder selection button

See page 4.

File list

Lists previously created files.

[Cancel] button

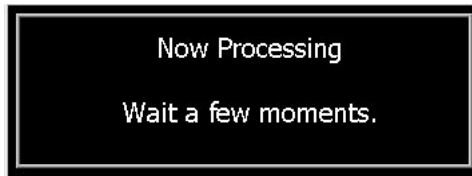
Closes the file read-in screen and returns to the main screen.

[OK] button

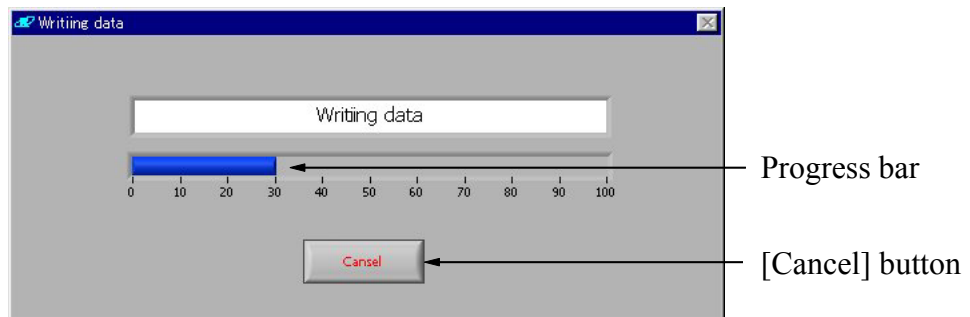
Initiates conversion to a Data Management Software file. See page 9.

Conversion/File Read-in Screen

When this indication is shown, the file selected at the file select screen (page 8) is converted, using the specified file name. During the process, the following message is shown.



If the file is a sound file, a progress indicator is shown.



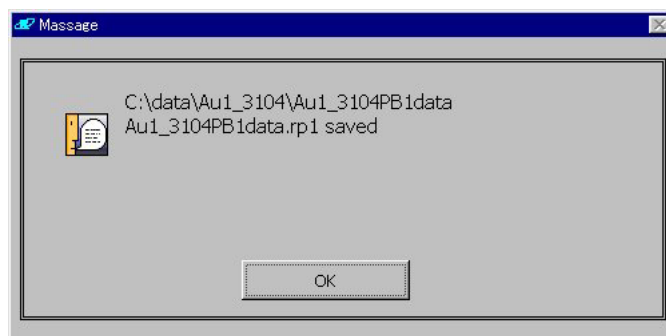
Progress bar

Shows the progress in percent.

[Cancel] button

Closes the file read-in screen and returns to the main screen.

When the process is finished, the following message appears.



Display/Edit

Using the Data Management Software file, this screen allows the user to select various processing functions, specify data validity/invalidity, and play sound files.

When the [Display & Edit] button is clicked, a screen for selecting a file comes up first, and then the display/edit screen opens.

Display/Edit Screen

This screen displays data and allows the user to select various processing functions, specify data validity/invalidity, and play sound files.

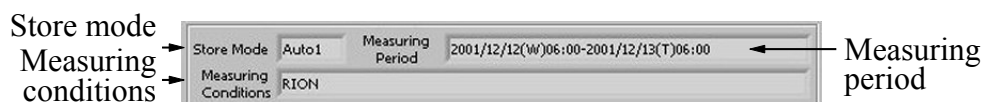
The screenshot shows the 'Edit.Display' software interface with the following components labeled:

- Menu bar:** File, Print, Optional setting, Help
- Information 1:** Store Mode (Auto1), Measuring Period (2001/12/12(W)06:00-2001/12/13(T)06:00), Frequency Weighting (A-Wai), Time Weighting (Fast), Measuring Conditions (RION), Sampling Period (100msec), Filter Frequency
- Information 2:** Observation time (024:00:00), L.E. (024:00:00), Actual M-time (024:00:00), Total Data (00664000), L.L (0.0%), L.50 (492358), L.90 (483358)
- Information 3:** Level-time settings, Level Range (30dB-120dB), Display start time (17:10:35), Time-Axis (1 h 0 m 0 s)
- Graph:** A line graph showing Level (dB) on the y-axis (30.0 to 120.0) and time on the x-axis (17:10:35 to 18:10:35). The graph shows a noisy signal fluctuating between approximately 60 dB and 80 dB. The word 'Reproducing' is displayed at the bottom of the graph area.
- Check box:** Level-time settings (checked)
- Range setting:** Level Range (30dB-120dB), Display start time (17:10:35), Time-Axis (1 h 0 m 0 s)
- Playback settings:** Playback controls (Invalid, Valid, Back, Advance, Play, Stop), File Name (SE0021), Single/Contin (radio buttons), Only Event Rec./Only Interval Rec. (radio buttons), Event Rec. (35 rec., 83 dB, Rec. Time 000:00:17), Interval Rec. (47 rec., 30min, Start Time of Rec. 2001/12/12 17:51:35)
- Period setting:** Period Setting table with columns: Data No., Day Time, Level, Over, Under, Pause, Invalid.

Data No.	Day Time	Level	Over	Under	Pause	Invalid
Cursor1	2001/12/12 06:00:00	63.8 dB	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cursor2	2001/12/12 06:10:00	45.6 dB	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Processing result display:** Results table with columns: Item, Section, Leq, LE, Lmax, Lmin, L05, L10, L50, L90, L95, Over, Under, Pause, Invalid.

Item	Section	Leq	LE	Lmax	Lmin	L05	L10	L50	L90	L95	Over	Under	Pause	Invalid
											<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Information 1



Store mode

Indicates the type of stored data.

Measuring conditions

Shows information about the measurement conditions (as entered when reading in the data).

Measuring period

Shows the start date and end date of the stored data.

Information 2



Frequency weighting

Indicates the type of frequency weighting that was used for the stored data.

Time weighting

Indicates the type of time weighting that was used for the stored data.

Sampling period

Indicates the sampling period that was used for the stored data.

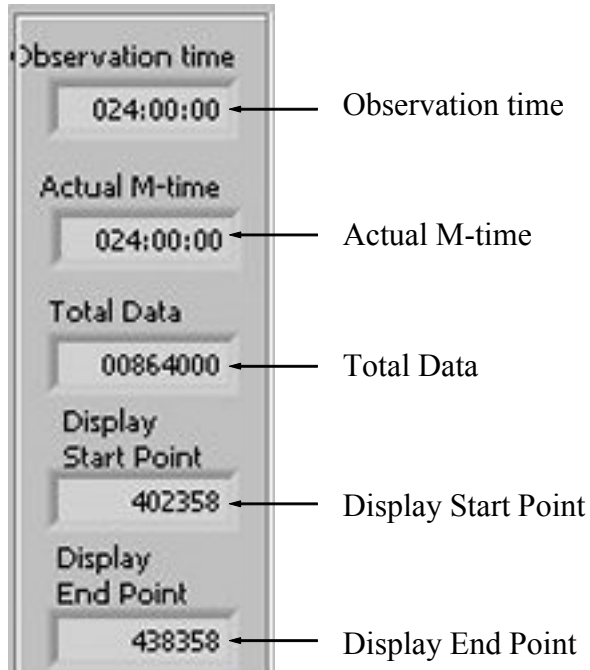
Filter

Indicates the type of filter that was used for the stored data.

Filter frequency

Indicates the frequency of the filter that was used for the stored data.

Information 3



Observation time

Indicates the observation time that was used for the stored data.

Actual M-time

Indicates the actual measurement time that was used for the stored data.

Total Data

Indicates the total number of stored data.

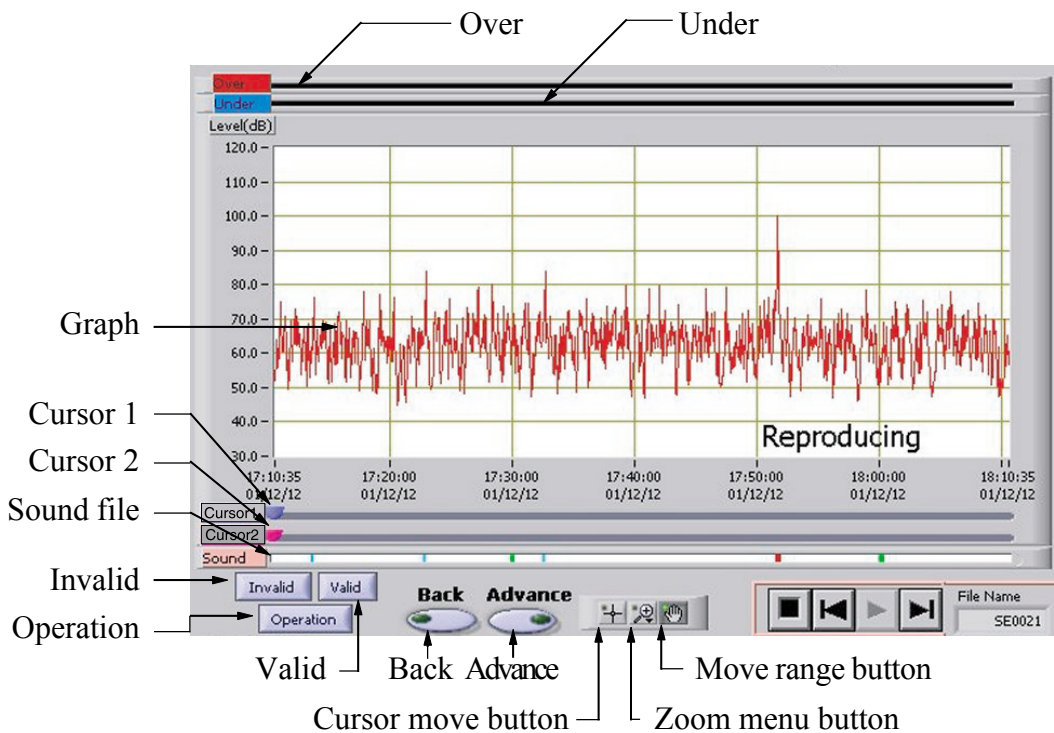
Display Start Point

Indicates the graph display start point.

Display End Point

Indicates the graph display end point.

Graph



Over

If there was an overload condition in the data, this is plotted here.

Under

If there was an under-range condition in the data, this is plotted here.

Graph

Displays a graph of the respective range.

Cursor 1

Indicates the cursor 1 position. The cursor is plotted according to graph.

Cursor 2

Indicates the cursor 2 position. The cursor is plotted according to graph.

Sound file

If there is a sound file for the data, this is plotted here. Clicking on the plotted point starts playback of the sound file.

Invalid

Specifies the interval between cursor 1 and 2 to be invalid.

Because clicking the [Invalid] button causes the data at the cursor to become invalid, one data set to the right of the cursor at the end of the invalid interval will also be grayed out.

Valid

Specifies the interval between cursor 1 and 2 to be valid.

Operation

Causes arithmetic processing to be performed for the interval between cursor 1 and 2.

Back

Moves the graph display back by one screen.

Advance

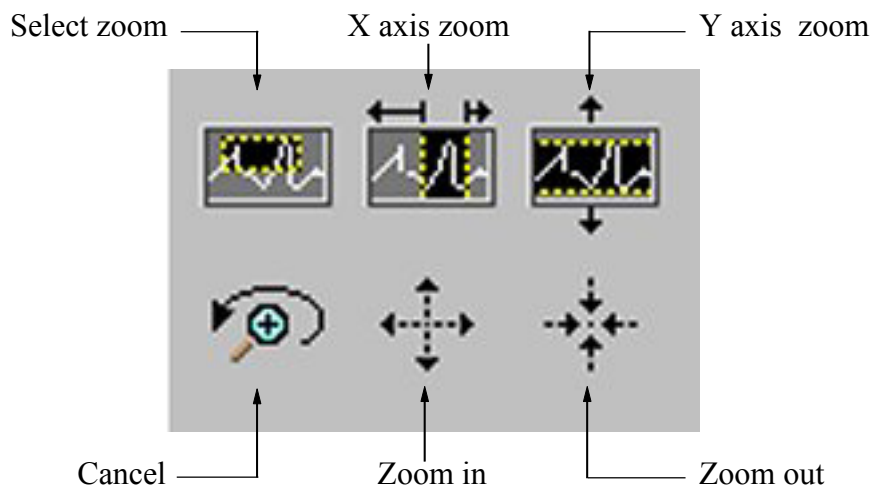
Moves the graph display forward by one screen.

Cursor move button

Sets the cursor in graph to moving mode.

Zoom menu button

Calls up the menu shown below, to set the graph to zoom mode.



Select zoom

Specify the range for zooming.

X axis zoom

Zoom the specified X axis range.

Y axis zoom

Zoom the specified Y axis range.

Cancel

Undo the preceding zoom instruction.

Zoom in

Zoom in from the specified point.

Zoom out

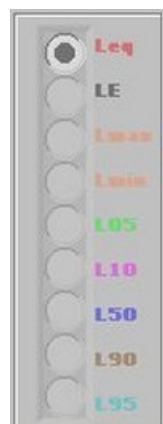
Zoom out from the specified point.

Move range button

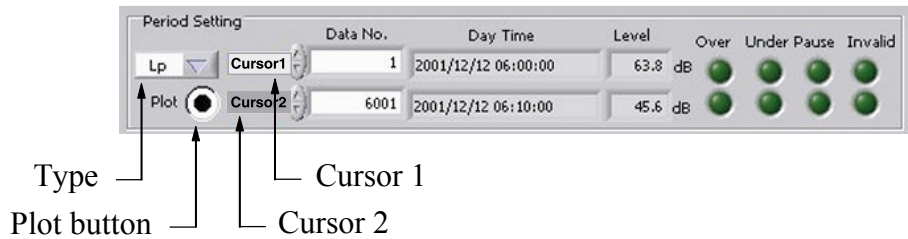
Set graph to moving mode.

Check boxes

The graph will be plotted according to the items checked here. When the data type is AUTO1, there is only one plot type, and the status of the check boxes has no effect.



Period setting



Type

Sets the display type for the cursor information level section in cursor 1 and cursor 2.

Plot button

Turns the display of cursor information in the graph on or off.

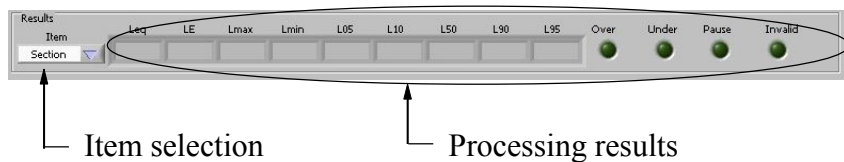
Cursor 1

Shows information for the position of cursor 1.

Cursor 2

Shows information for the position of cursor 2.

Processing result display



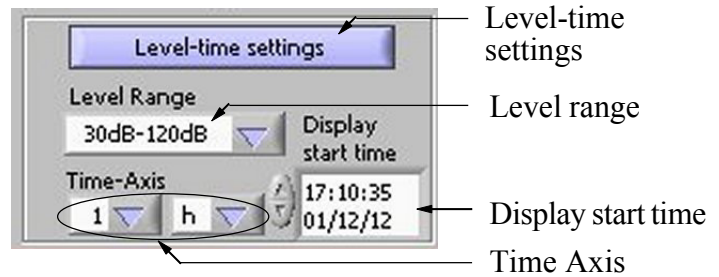
Item selection

Selects cursor 1, cursor 2, or interval (period) processing.

Processing results

Shows the result for the item selected in item selection.

Range setting



Level-time settings

Causes a refresh of the graph display with the current settings.

Level range

Specifies the level range for the graph (Y axis).

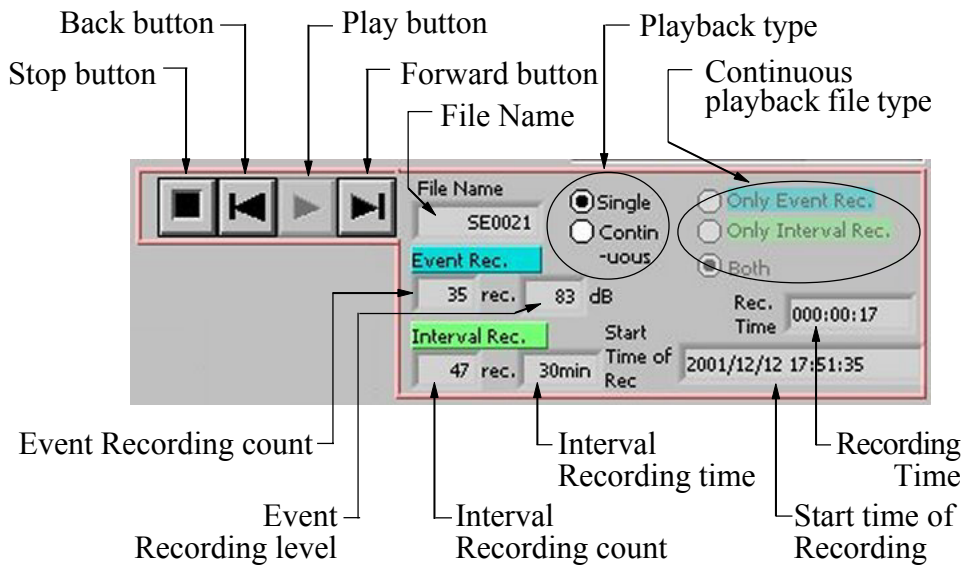
Display start time

Shows the display start time for the graph. Direct input is also possible.

Time Axis

Specifies the display time range for the graph (X axis).

Playback settings



Stop button

Stops sound file playback.

Back button

During stop: Gets information for the preceding file.
During play: Plays the preceding file.

Play button

Starts sound file playback.

Forward button

During stop: Gets information for the next file.
During play: Plays the next file.

File Name

Shows the name of the currently selected file.

Playback type

Switches between single playback and continuous playback.

Continuous playback file type

Selects the file type for continuous playback.

Event Recording count

Shows how many event recordings were carried out.

Event Recording level

Shows the event recording level.

Interval Recording count

Shows how many interval recordings were carried out.

Interval Recording time

Shows the interval recording time.

Start time of Recording

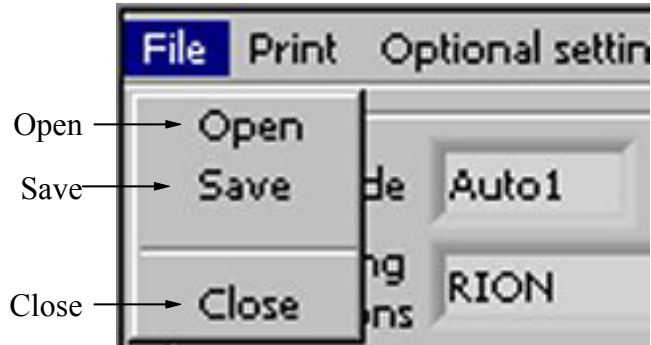
Shows the recording start time of the currently selected file.

Recording Time

Shows the recording time of the currently selected file.

Menu bar

File



Open

Serves to open a file. See page 21.

Save

Serves to save a file. See page 22.

Close

Serves to close a file. See page 23.

Print

Serves for producing a hard copy of the display/edit screen. See page 24.

Optional settings

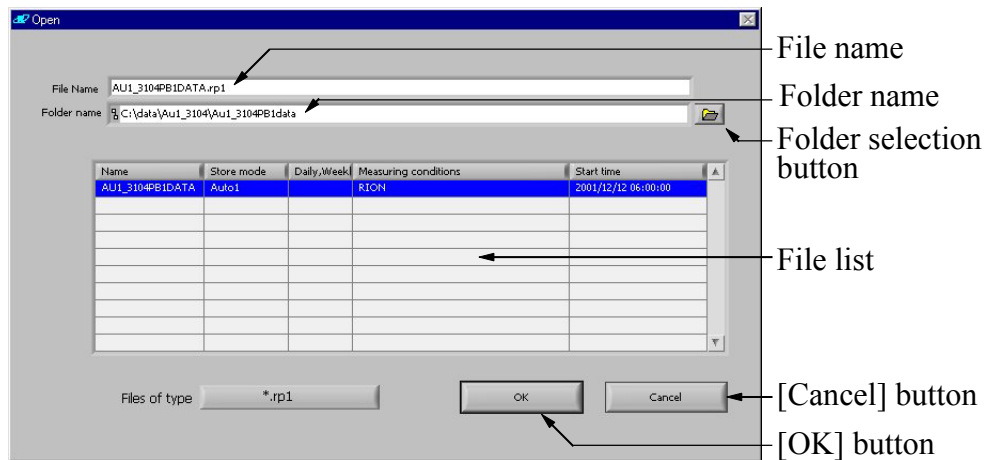
Opens a screen for making settings for the display/edit screen. See page 24.

Help

Displays the help file. See page 25.

File Open

This screen lets you specify the file to be opened.



File name

Shows the name of the currently selected file.

Folder name

Shows the currently selected folder.

Folder selection button

See page 4.

File list

Lists the files in the currently selected folder and lets you select a file.

[Cancel] button

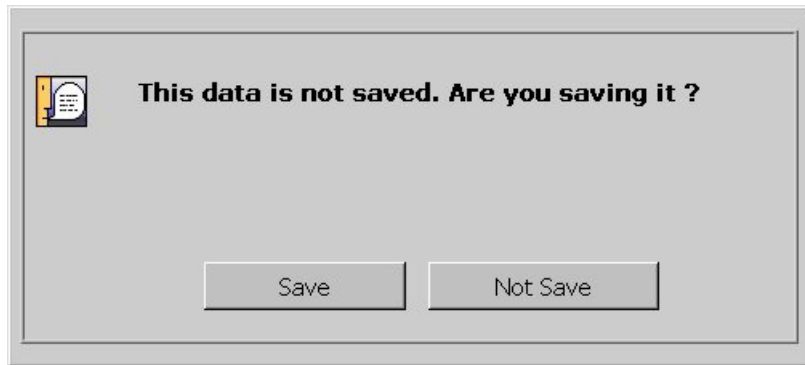
Closes the file open screen and returns to the main screen.

[OK] button

Opens the file. The file open screen disappears, and the display/edit screen is refreshed.

Close

Terminates the display/edit screen. Regardless of whether you have edited the file (specified valid/invalid attributes), the following message appears if the file was not saved. After you select a choice, the display/edit screen closes.



[Save] button

File save (page 22) is carried out, and then the display/edit screen closes.

[Not Save] button

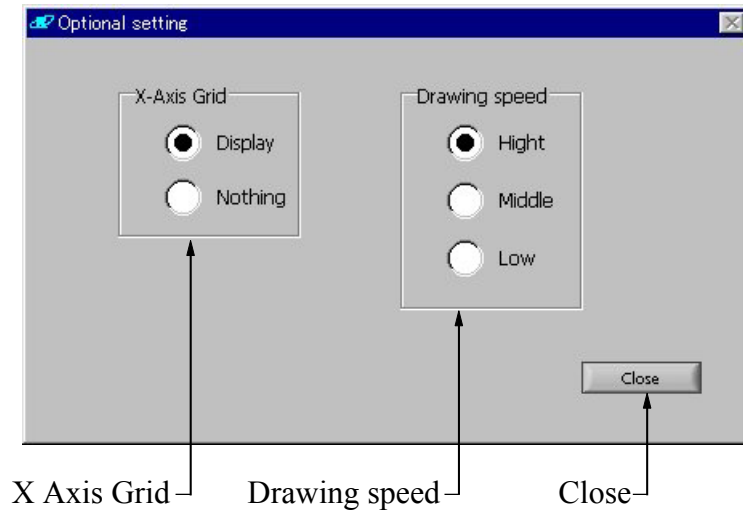
The display/edit screen closes.

Print

This option lets you produce a hard copy of the display/edit screen. Specify the printer and click on OK.

Optional Settings

Lets you specify the following two settings for the display/edit screen.



X Axis Grid

Specifies whether to display an X axis grid or not.

Drawing speed

Selects the speed with which the screen is redrawn.

Close

Closes the Optional Settings screen.

Help

Starts Acrobat Reader and displays the help file.

Other Information

Number of graph plots

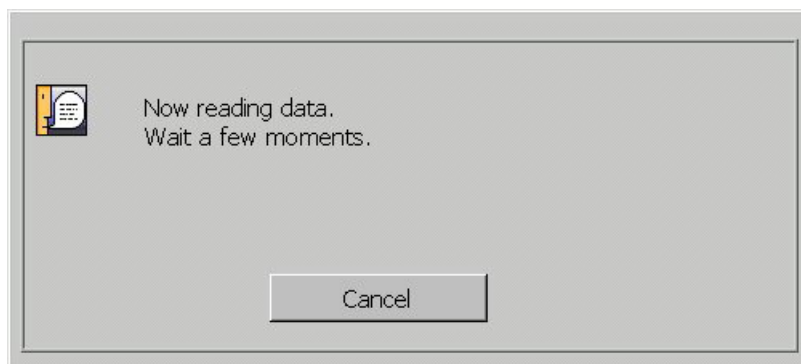
When drawing speed is set to "High", data are decimated for display. Therefore the maximum value or minimum value may not be shown, but the drawing speed increases. If there are less than 9999 data per screen, no decimation is carried out.

Specify the drawing speed as necessary.

Decimation is never carried out for processing, only for display.

Background processing

When a file is selected for opening as described in file open section (page 21), processing may occur in the background if the file contains a large amount of data. In this case, a message such as shown below is displayed until the data are fully read in. Click on the [Cancel] button to return to the display/edit screen.

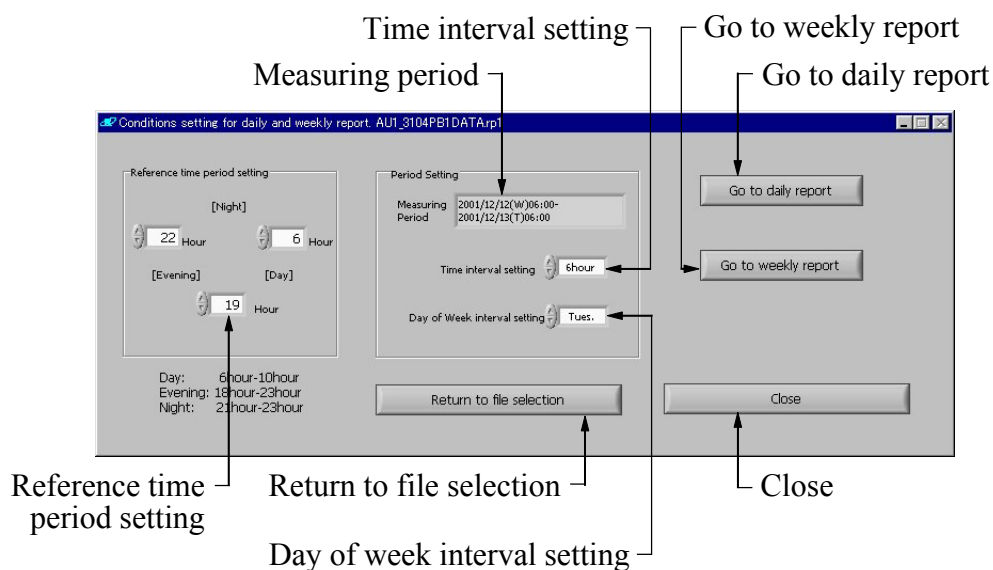


Making Daily/Weekly Reports

The Data Management Software allows you to generate daily and weekly report files from data files that have been read in.

When you select this option, a file select screen appears first, and then the screen for making daily/weekly reports opens.

Daily/Weekly Report Generation Screen



Measuring period

Shows the measuring period of the currently selected file.

Time interval setting

Lets you specify the time interval for separating data. (The daily report file is created using the specified time as demarcation.)

Go to weekly report

Starts processing for weekly report generation. See page 32.

If a file has not yet been read in, file read-in processing (section 4.3) will be carried out first, followed by weekly report processing.

Go to daily report

Starts processing for daily report generation. See page 30.

If a file has not yet been read in, file read-in processing (page 29) will be carried out first, followed by daily report processing.

Reference time period setting

Lets you specify the morning, day, evening, and night periods.

When morning is not required, set it to the same as day.

When evening is not required, set it to the same as night.

Return to file selection

Lets you go back to the file select screen. See page 28.

Day of week interval setting

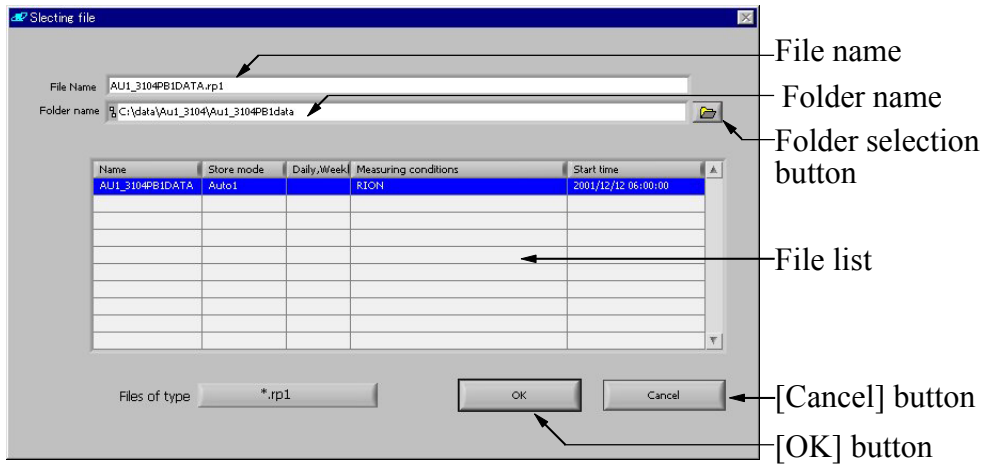
Lets you specify the day of the week for separating data. (The weekly report file is created using the specified day and the time specified with time interval setting as demarcation.)

Close

Closes the screen for making daily/weekly reports.

File Select

This screen lets you specify a file.



File name

Shows the name of the currently selected file.

Folder name

Shows the currently selected folder.

Folder selection button

See page 4.

File list

Lists the files in the currently selected folder and lets you select a file.

[Cancel] button

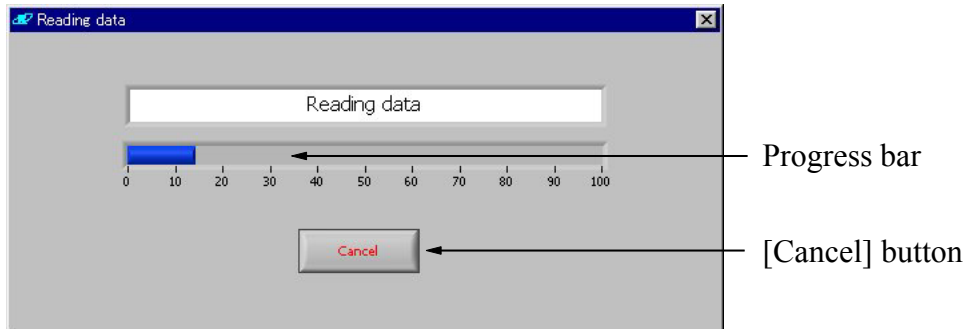
Closes the file select screen.

[OK] button

Selects the file. The file select screen disappears.

File Read-in

This screen is shown while the file is read. The progress indicator is updated accordingly.



Progress bar

Shows the progress in percent.

[Cancel] button

Closes the file read-in screen and aborts the daily/weekly report generation. The screen for making daily/weekly reports appears again.

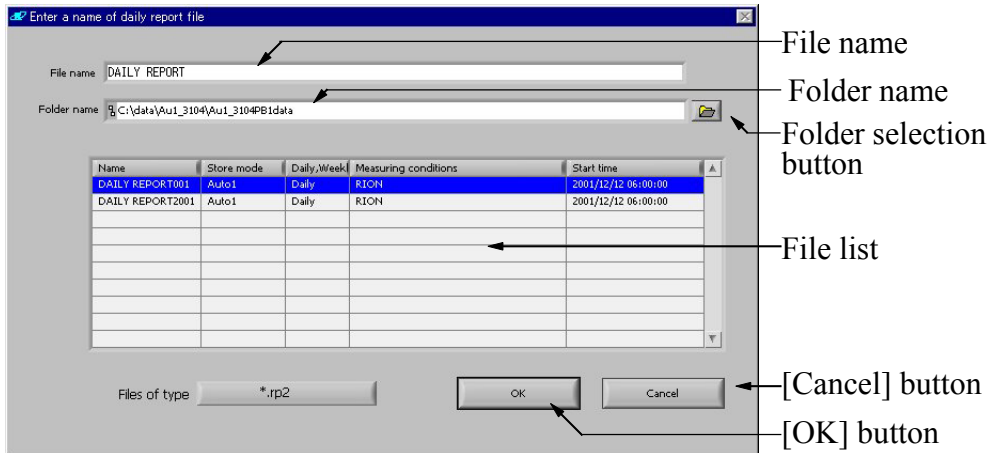
Daily Report

This screen serves for creating the daily report files.

The screen sequence is as follows: Daily report file entry screen → Conversion screen → Conversion completion screen.

Daily Report File Entry

Here you enter a name for the daily report files.



File name

Enter the name of the file here.

Folder name

Shows the currently selected folder.

Folder selection button

See page 4.

File list

Lists the files in the currently selected folder and lets you select a file.

[Cancel] button

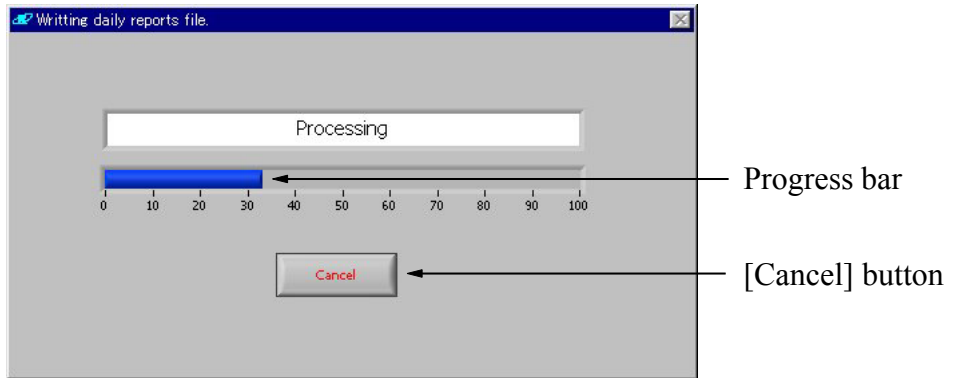
Closes the file entry screen and aborts the daily report generation. The screen for making daily/weekly reports appears again.

[OK] button

Selects the file for conversion. The conversion screen appears.

Conversion

This screen is shown while the file is being converted. The progress indicator is updated accordingly. When the conversion is completed, the conversion completion screen appears.



Progress bar

Shows the progress in percent.

[Cancel] button

Closes the conversion screen and aborts the daily/weekly report generation. The screen for making daily/weekly reports appears again.

Conversion Completion Screen

This screen shows the number of files that were created. (The daily report files are automatically assigned a file name by using the name specified as explained in daily report file entry (page 30) and appending a 3-digit number starting from "001".)



[OK] button

Closes the conversion completion screen. The screen for making daily/weekly reports appears again.

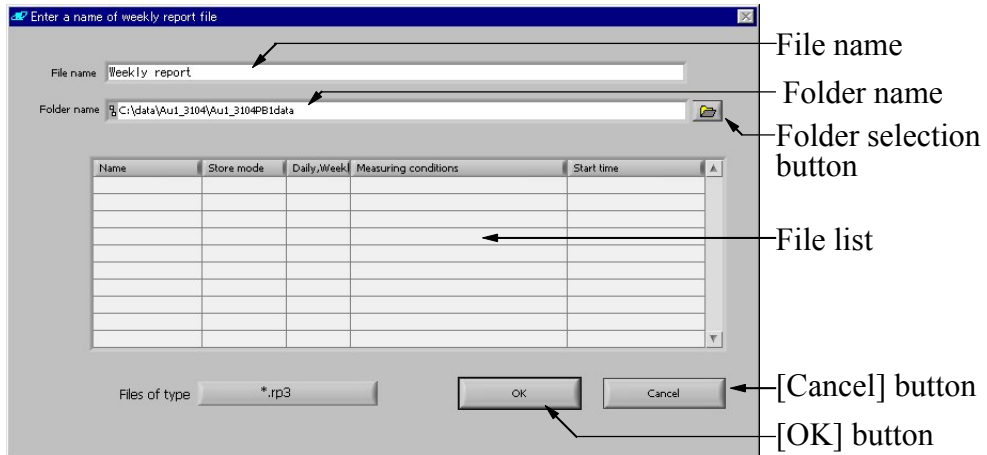
Weekly Report

This screen serves for creating the weekly report files.

The screen sequence is as follows: Weekly report file entry screen → Conversion screen → Conversion completion screen.

Weekly Report File Entry

Here you enter a name for the weekly report files.



Folder selection button

See page 4.

Folder name

Shows the currently selected folder.

File list

Lists the files in the currently selected folder and lets you select a file.

File name

Enter the name of the file here.

[Cancel] button

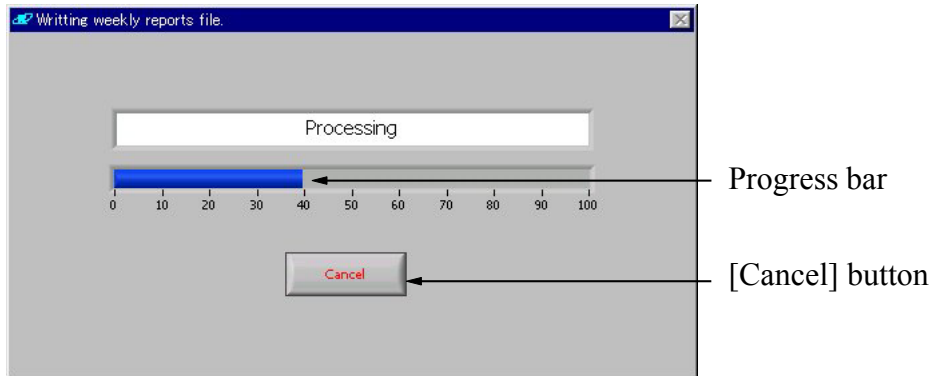
Closes the file entry screen and aborts the weekly report generation. The screen for making daily/weekly reports appears again.

[OK] button

Selects the file for conversion. The conversion screen appears.

Conversion

This screen is shown while the file is being converted. The progress indicator is updated accordingly. When the conversion is completed, the conversion completion screen appears.



Progress bar

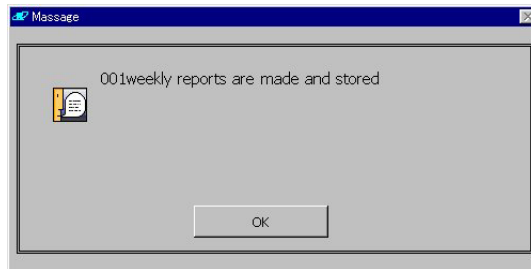
Shows the progress in percent.

[Cancel] button

Closes the conversion screen and aborts the daily/weekly report generation. The screen for making daily/weekly reports appears again.

Conversion Completion Screen

This screen shows the number of files that were created. (The weekly report files are automatically assigned a file name by using the name specified as explained in weekly report file entry (page 32) and appending a 3-digit number starting from "001".)



[OK] button

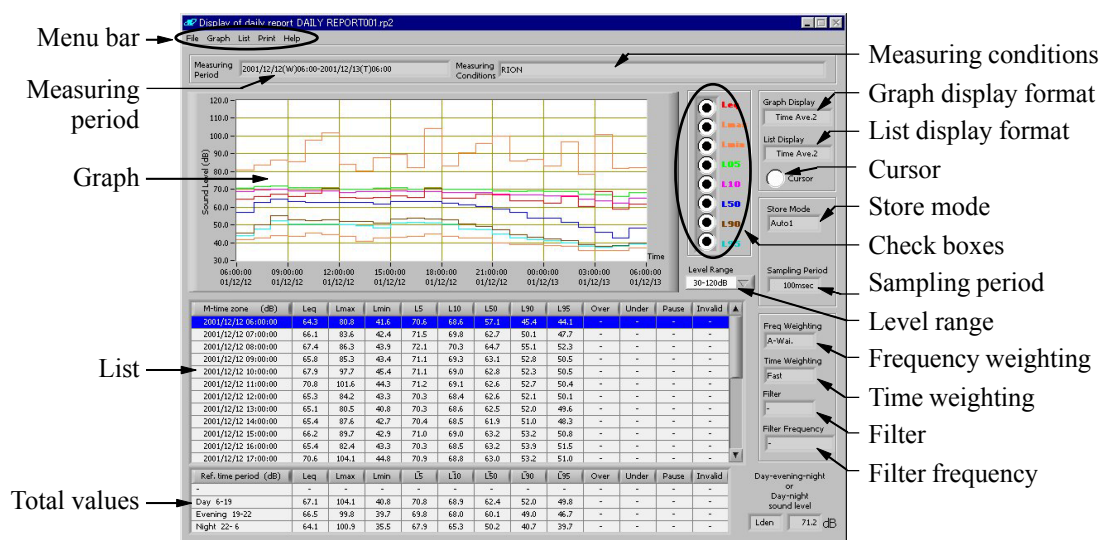
Closes the conversion completion screen. The screen for making daily/weekly reports appears again.

Display of Daily/Weekly Reports

The contents of daily and weekly report files can be shown in graph and list format. Generating a summary data file is also possible.

When you select this option, a file selection screen appears first, and then the screen for displaying daily/weekly reports opens.

Daily/Weekly Report Display Screen



Measuring conditions

Shows information about the measurement conditions.

Graph display format

Shows information about the format of graph display.

List display format

Shows information about the format of list display.

Cursor

This button controls whether a cursor is displayed in the graph or not.

Store mode

Indicates the type of stored data.

Check boxes

These buttons control which functions are plotted in graph.

Sampling period

Shows information about the sampling period used for the measurement.

Level range

Sets the level range (Y axis) of graph.

Frequency weighting

Shows information about the frequency weighting characteristics used for the measurement.

Time weighting

Shows information about the time weighting characteristics used for the measurement.

Filter

Shows information about the filter type used for the measurement.

Filter frequency

Shows information about the filter frequency used for the measurement.

Measuring period

Shows information about the duration of the measurement.

Graph

The graph is displayed according to the selected conditions. The various plot types are enabled or disabled with the check boxes. The cursor position is shown in list display, and cursor display is enabled or disabled with the cursor button.

List

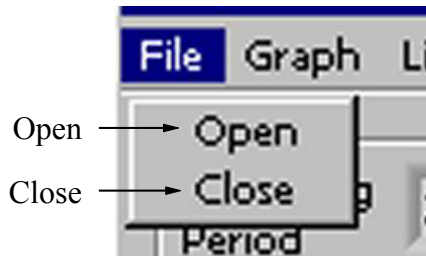
The list is displayed according to the selected conditions, and the position of graph is also displayed.

Total values

The aggregate values are shown here.

Menu bar

File



Open

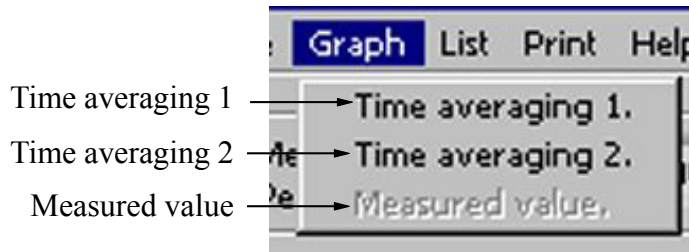
Serves to open a file. See page 40.

Close

Closes the daily/weekly report display screen.

Graph

Serves to set the graph display format.



Time averaging 1

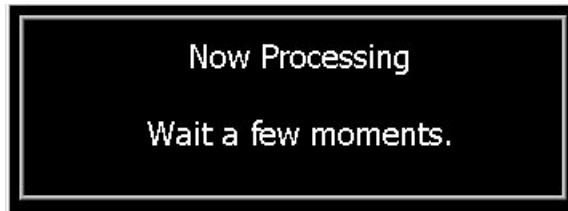
The same time average is shown.

Time averaging 2

The 1 hour average is shown.

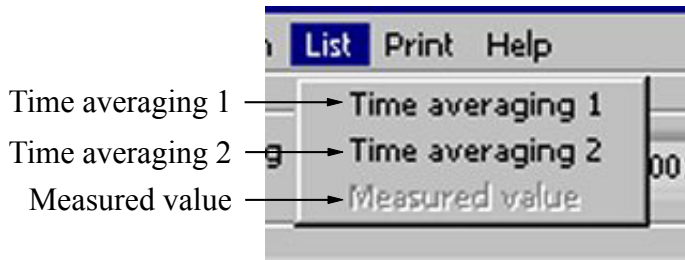
Measured value

The measurement value is shown. If measurement data have not yet been read in, a message such as shown below is displayed until the data are fully read in.



List

Serves to set the list display format.



Time averaging 1

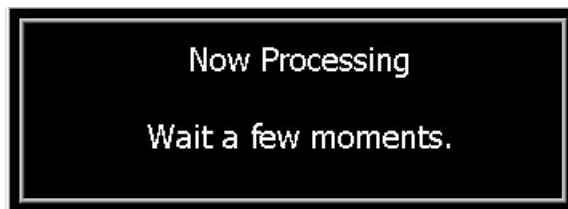
The same time average is shown.

Time averaging 2

The 1 hour average is shown.

Measured value

The measurement value is shown. If measurement data have not yet been read in, a message such as shown below is displayed until the data are fully read in.



Summary data

Outputs summary data. See page 42.

Print

Produces a hard copy of the screen. See page 42.

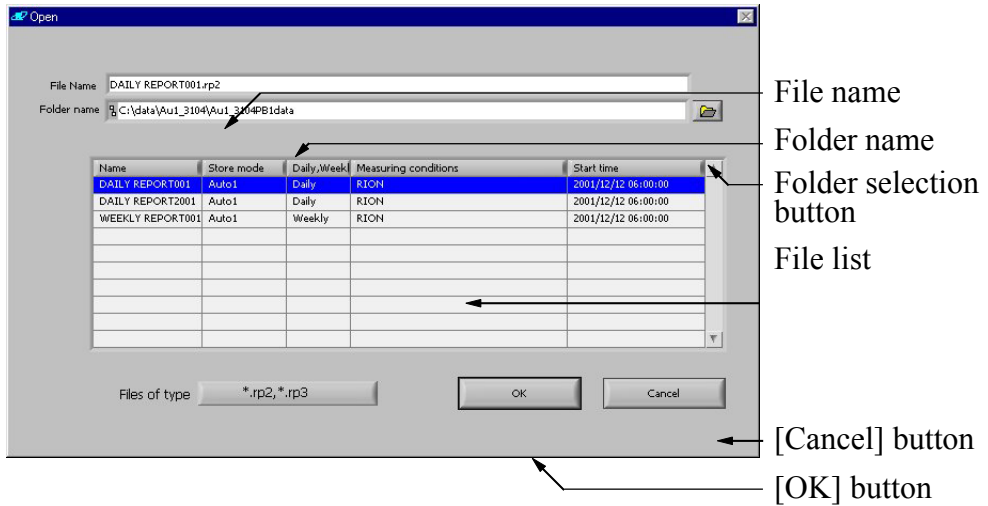
Help

Displays the help file. See page 42.

File Select

This screen serves for selecting a file to open and reading in data. The screen sequence is as follows: File select screen → File read-in screen.

File Select Screen



File name

Shows the name of the selected file.

Folder name

Shows the currently selected folder.

Folder selection button

See section page 4.

File list

Lists the files in the currently selected folder and lets you select a file.

[Cancel] button

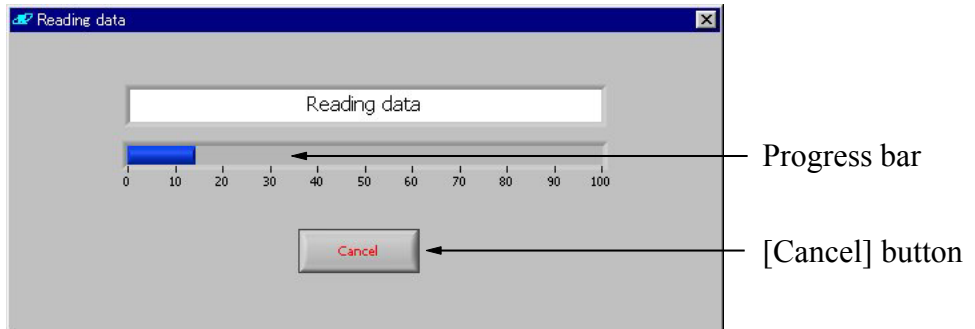
Closes the file entry screen.

[OK] button

Selects the file. The file select screen disappears.

File Read-in

This screen is shown while the file is read. The progress indicator is updated accordingly.



Progress bar

Shows the progress in percent.

[Cancel] button

Closes the file read-in screen and aborts the file read-in process.

Summary Data

This allows you to create a file with summary data. For this purpose, daily/weekly report files (*.rp2, *.rp3) are converted into text files (*.txt).

Folder selection button

See section page 4.

Folder name

Shows the currently selected folder.

File list

Lists the files in the currently selected folder and lets you select a file.

File name

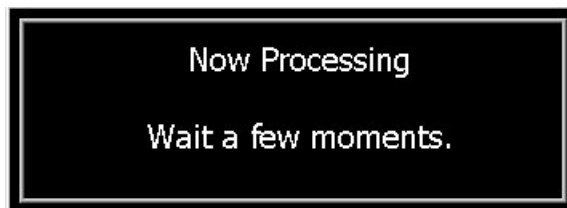
Enter the name of the file here.

[Cancel] button

Closes the summary data file creation screen.

[OK] button

Starts the summary data file creation and then closes the summary data file creation screen. During the process, the following message is shown.



Print

This option lets you produce a hard copy of the display/edit screen. Specify the printer and click on OK.

Help

Starts Acrobat Reader and displays the help file.

