HIOKI

INSTRUCTION MANUAL

9331-01

WAVE PROCESSOR

HIOKI E. E. CORPORATION

Contents

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Introduction

Thank you for purchasing this HIOKI "9331-01 WAVE PROCESSOR." To get the maximum performance from the unit, please read this manual first, and keep this at hand.

Notes on Use

The contents of the display screens, operating manual and data conversion methods may be changed without notice.

In order to ensure safe operation and to obtain maximum performance from the unit, observe the cautions listed below.

⚠ CAUTION	• Do not drop or bend floppy disks, or subject them to other strong shocks. • Do not leave floppy disks in direct sunlight, near strong magnetic fields, or close to heating equipment. • Keep water away from the disk. • HIOKI cannot accept responsibility for any incidental problems occurring as a result of use of the software.

The following symbols are used in this Instruction Manual to indicate the relative importance of cautions and warnings.

⚠ CAUTION	Indicates that incorrect operation presents possibility of injury to the user or damage to the equipment.
NOTE	Denotes items of advice related to performance of the equipment or to its correct operation.

Chapter 1 Overview

- Displays data recorded by Memory, Recorder and RMS Recorder functions of the 8806, 8806-01, 8807 and 8808.
- Converts and stores waveform data in text format.
- Generates displayed waveform reports.
- Calculates parameter displayed on MEMORY HiCORDER.
- Prints waveform displayed on MEMORY HiCORDER.

NOTE

- Text data can't be read.
- Harmonic wave analysis data can't be read.
- XY recorder data can't read it.
- Scaling value established by MEMORY HiCORDER itself can't be changed.

Chapter 2 Specifications

2.1 General Specifications

Supply medium	Three 3.5-inch 2HD floppy disks
HIOKI devices supported	8806, 8806-01, 8807, 8808
Operating environment	IBM, PC/AT compatible, Windows95 (SP1 or later), Windows98, WindowsNT 4.0 (SP3 or later) (*1)
Indication language	English
Software supported (After data conversion)	Excel (*1), Lotus 1-2-3 (*2), DADiSP (*3)

(*1) Windows, Excel is a registered trademark of Microsoft Corporation.
(*2) Lotus 1-2-3 is a registered trademark of Lotus Development Corporation.
(*3) DADiSP is a registered trademark of DSP Development Corporation.

2.2 Functional Specifications

Data Display

Waveform Display	Gives an approximate representation of the waveform data being converted
Cursor Calculation Function	A-B cursor time value, voltage calculation
Channels	4 analog channels, 8 logic channels
Loadable Data Formats	The binary data of memory function, recorder function, RMS recorder function

Data Conversion

Applicable Data	All data, data between A-B cursors
Data conversion	Conversion of the waveform data to TEXT format voltage or temperature values Conversion of the logic data to 1 or 0
Channels converted	Converts channels selected for waveform display
Header	Appended
Header content	Trigger times, total number of samples (recording length), sampling interval, Y-axis units, X-axis units, time axis range, comments
Data Storage	Stores all data, display window data, cursor ranges and extraction storage
Preservation form	CSV, DADiSP

Data Print

Applicable Data	All data, data between A-B cursors
Print Format	Without partition, 2, 4 partition
Calculated Level Printing	Prints maximum and minimum levels of each channel together with waveforms
Waveform Data Preview	Select and preview output format, preview screen display
Store and Load Comments	Stores comment information, and loads stored comments
Paper Size	A4 (default)

Report Functions

Format	Template (range, position, upper limit, lower limit, unit, comments, loading cursor time value default), standard
Extras	Templates, lines, comments
Paper Size	A4 (default)

Parameter Processing (Memory function only)

Applicable Data	All figures, figures between A-B cursors
Calculation items	Average value, effective value (RMS), maximum value, minimum value, time to maximum value, time to minimum value, period, frequency, rise time, fall time, standard deviation, area

Chapter 3 9331-01 Installation

Please close any running applications before installing.

9331-01 Setup

For installation of the 9331-01 software, the setup program (SETUP.EXE) is used. This program will install the required files on the hard disk.

Important

The files on the 9331-01 distribution disks are compressed. Simply copying these files to the hard disk using an MS-DOS or Windows copy utility will not result in a usable installation. Be sure to use the setup program, which will decompress the files and install them into the proper directory.

3.1 Before Starting

Before starting the installation procedure, check your hardware and software to see whether the requirements for using 9331-01 software are met.

System configuration requirements

To use the 9331-01 program, the following hardware and software requirements must be met:

- Computer with i486DX4 CPU or higher (Pentium recommended)
- Device that reads recording media
- Available hard disk space approximately 10 MB including installation
- Software running at 800×600 resolution, using the "small font" *1 setting
- 32 MB memory or more
- Mouse or other pointing device
- Microsoft Windows95 (Service Pack 1 or later)
- Printer compatible with Microsoft Windows95

*1: Select Windows settings - Control Panel - Monitor - Display preferences

NOTE

- In Windows95, the printer driver must be set up or an error will occur. Set up the printer before installing the software.
- Select "small font" in display properties.
- Please close any running applications before installing. Other applications running may interfere with setup. (Virus detection and network software, etc.)

3.2 9331-01 Setup

The setup program creates a directory for the 9331-01 software and installs the necessary files.

Starting the setup program

(1) Insert DISK 1 into the floppy disk drive.
(2) Click on the Start button of Windows and select "Run".
(3) Type the full path name of the setup program file (SETUP.EXE) in the dialog box. For example, if the floppy disk is inserted in drive A, type A:setup
(4) Click on "OK" to start SETUP.EXE.

NOTE

The following message may appear during setup because the old system DLL, OLEAUT32.DLL. requires updating.
"Setup can not be executed because a part of system file in the system is not the latest version. Click (OK) if it is OK to update files. Restart system before re-excuting setup. Click (Cancel) to complete setup without updating files."
Be sure to click (OK) to complete setup.
When Internet Explore 3.02 or similar is installed, this message does not appear.

3.3. 9331-01 Uninstallation

(1) Click Start - Settings - Control Panel - Add/Remove Programs.
(2) Select the 9331-01 WAVE PROCESSOR
(3) Execute the uninstaller to delete the 9331-01.

NOTE

Confirm that the file wViewer4.dll has been deleted from the system or system32 directory, and delete it using the Windows Explorer or similar program, if necessary.

When installation has been completed successfully, the 9331-01 utility can be started from the Start menu of Windows.

Chapter 4 Starting and Terminating the 9331-01

4.1 9331-01 Startup

(1) Click on the Start button of Windows, and select "Programs" - "9331-01 WAVE PROCESSOR".
(2) A window with the HIOKI logo appears, and the main screen with the title bar "9331-01 WAVE PROCESSOR" appears.

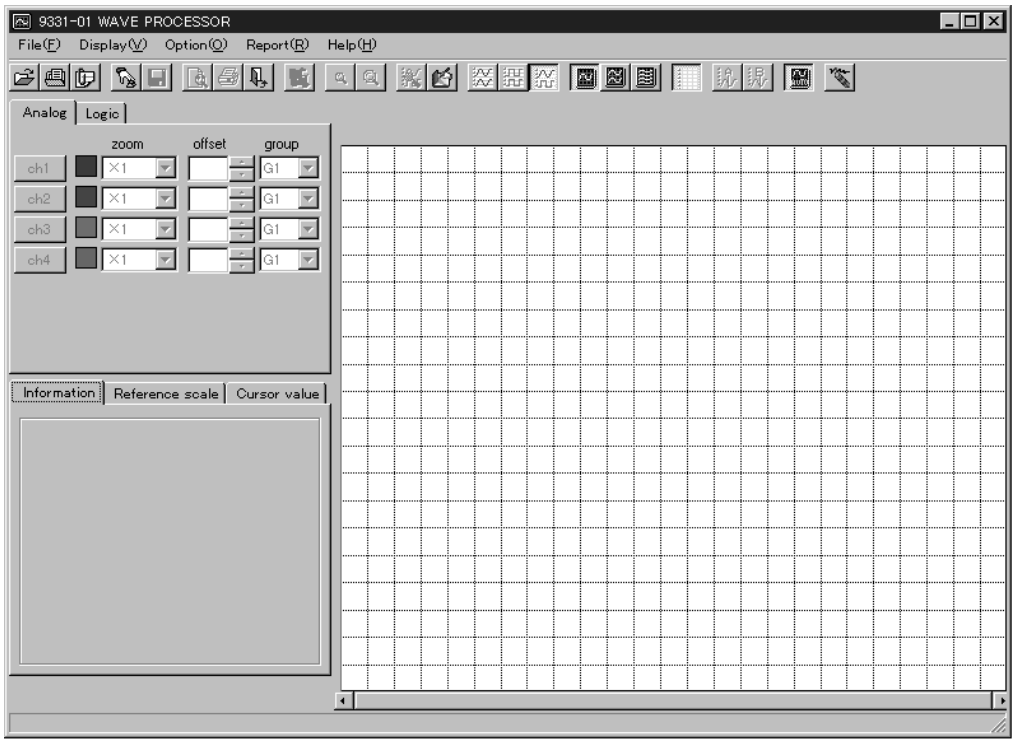
4.2 9331-01 Shutdown

(1) On the main screen, select "File" - "End".
(2) A confirmation message appears while loading waveform data. Click Yes.
(3) The program exits.

Chapter 5 9331-01 Main Window

5.1 The 9331-01 Main Window

Select interface. The main window appears.



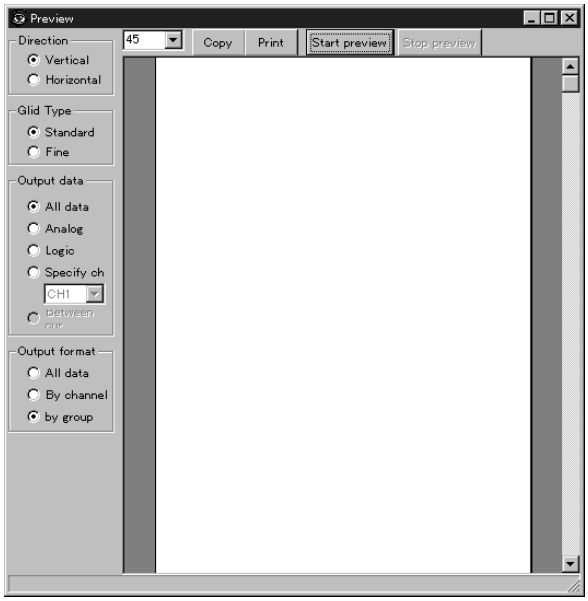
All processing selections can be made from the main window.

The main window provides the following functions:

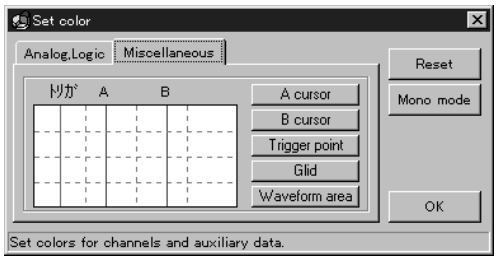
- Function selection by menu bar
- Selection of frequently used functions by toolbar
- Select active channel and specify channel states by Channel Selection tab sheets
- Display waveform information with the Information tab sheet
- Specify reference scale and time axis magnification by Scaling tab sheet
- Display cursor information with the Cursor Level tab sheet
- Display the loaded waveform data in the Waveform window

The following sub windows can be selected from the main window:

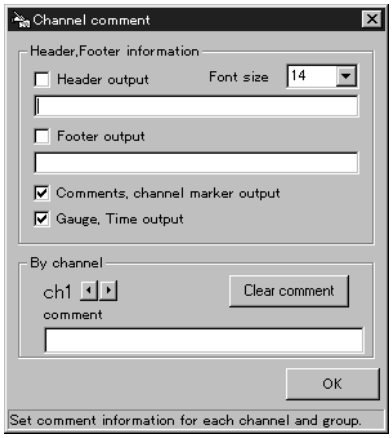
Preview: Loaded waveform print preview image is displayed in the main window. Previewed waveforms can be printed and copied to the clipboard.



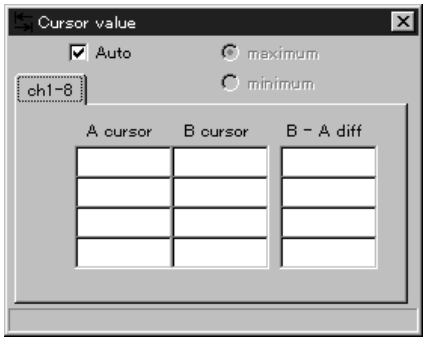
Color Settings: You can specify the color of analog/logic waveforms, and specify the colors of various data display aides such as cursors, grid and background.



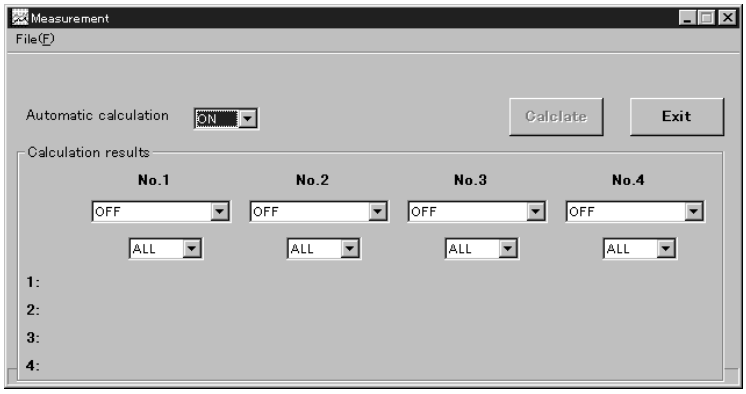
Print Setup Dialog: Headers and footers can be set for printing.
Settings affect the preview window and printing.



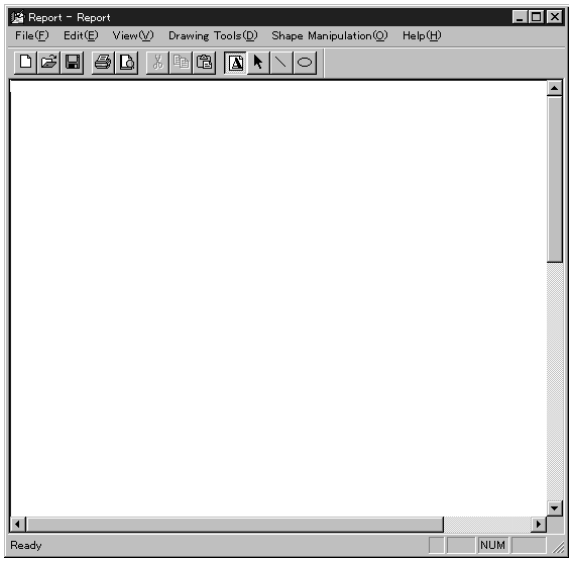
Y axis cursor value: Displays Y axis cursor value.



Parameter processing: Specify the calculation items and channels. Calculates parameter the same as MEMORY HiCORDER.



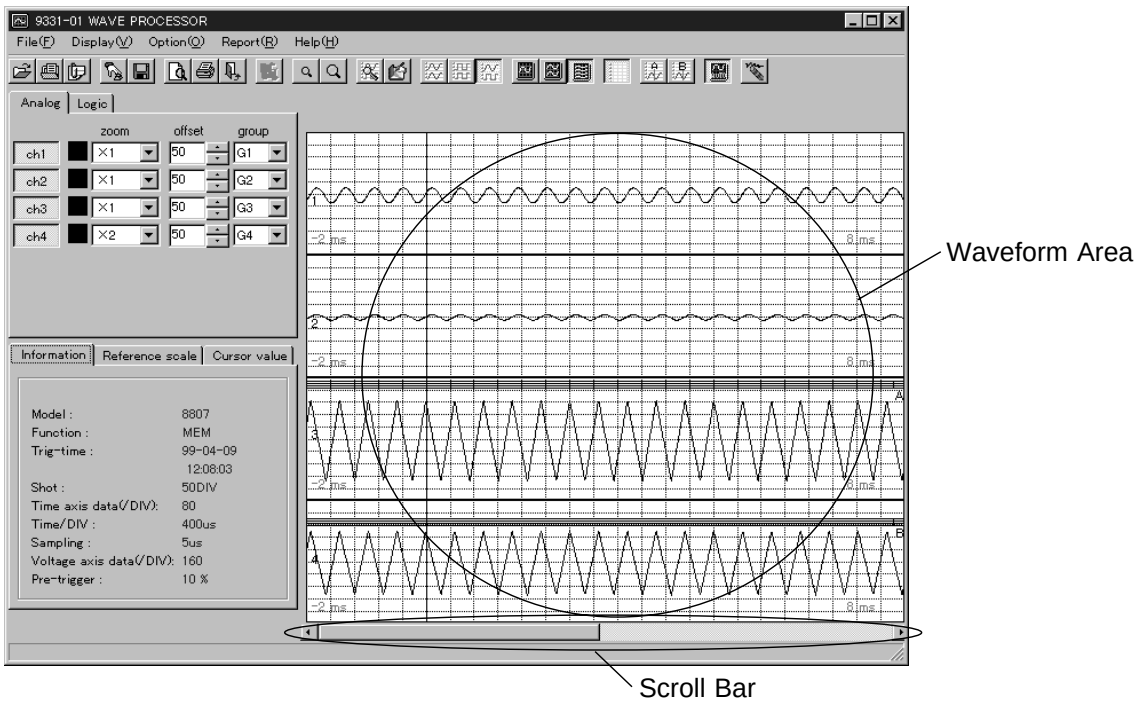
Report: Generates report from data and waveform information in the waveform area displayed in the main window.



5.2 The Waveform Window

This child window within the main window displays loaded waveforms. The waveform window is divided into the following areas:

Waveform Area: Displays analog and logic waveforms.
Scroll Bar: Scrolls displayed waveforms.
Sliders: Position the A/B cursors and the comment cursor.

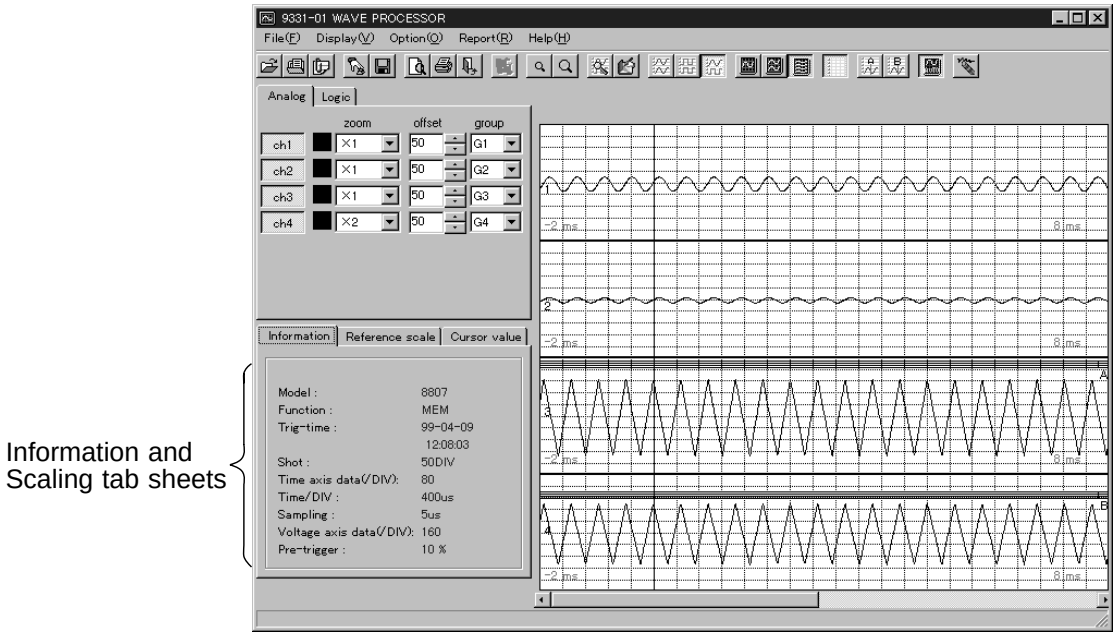


5.3 Loading Waveform Data

Waveform data can be loaded and displayed in the waveform window within the main window.
Waveform data files in memory function data format ('mem' file extension), recorder function data format ('rec' file extension) and RMS recorder function data format ('rms' file extension) can be loaded.

(1) Click File - Open on the menu bar.
(2) The Open File dialog box appears.
(3) Click the waveform file you want to load.

When waveform data has been loaded, the waveforms appears in the waveform window. Additional information about the file appears on the Information and Scaling tab sheets.
To cancel file loading click,
Cancel Loading on the toolbar.
A confirmation message appears. Select Yes to cancel.
The loaded data up to that point will be displayed after canceling loading.



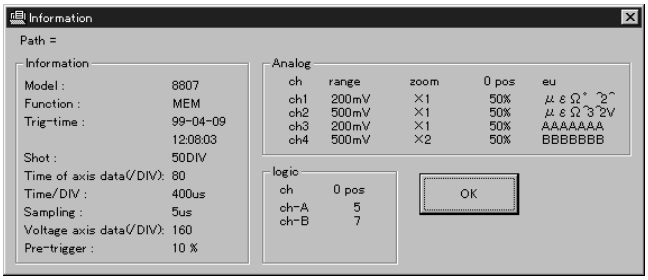
5.4 Viewing 'Open Information' (File Reference Data)

The status of a file is available as 'Open Information'.

(1) Click File - Open Information on the menu bar.
(2) The Open File dialog box appears.
(3) Click the waveform file you want to load.

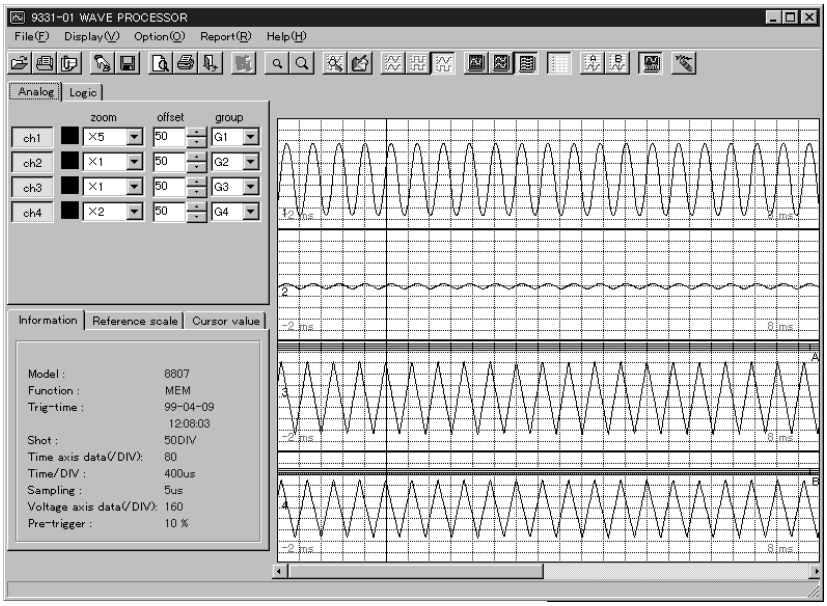
A variety of information about the selected file is displayed in the Information window. The function mode, trigger timing, recording duration, time axis values and ranges, sampling cycles, voltage axis values, pre-trigger, voltage axis ranges and zoom factors, offsets, time axis zoom factors, reference scales and units states are shown in the Information window.

The file information on the Information tab sheet allows highly efficient operation.
If the information window is not closed, operations on other screens cannot be carried out.

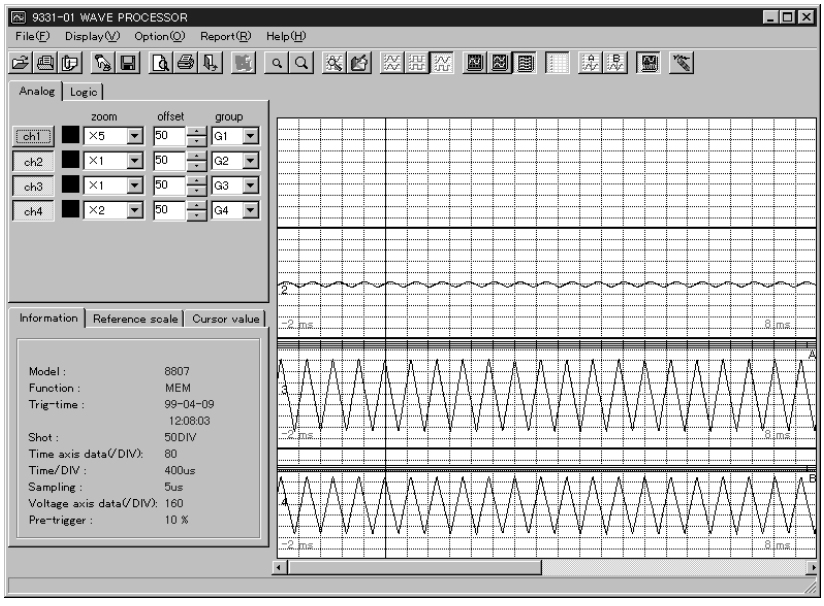


5.5 Channel Selection

Analog (CH1-4) and Logic (CHA-B) channels are selected by the Channel Selection tabs.
The channel settings for each tab can be specified as follows:
Channel ON/OFF: A channel's waveform is displayed by the ON state.
A channel's waveform is not displayed by the OFF state.



Example showing analog waveform CH1



Example showing no analog waveform CH1

Voltage Axis

Zoom Factor: The waveform is zoomed along the voltage axis.

Analog Channel: ×1/10, ×1/5, ×1/2, ×1, ×2, ×5, ×10, ×20, ×50, ×100

Logic Channel: ×1/2, ×1, ×2

Despite the Scaling settings, all channels may not display as desired. In this case, you can adjust the zoom rate of each channel so they appear as required. Zoom adjustments here do not affect data conversion when saved.

Offset: Specifies the waveform display position.

You can specify display of -999 to 999% of analog channels, and display positions 1 through 4 can be specified for logic channels.

Enter by the spin buttons or direct numeric entry.

Display Group: In the DUAL or QUAL display modes, waveforms display in specified graphs, from Graph 1 through Graph 4.

5.6 Scaling Settings

To specify scaling, you can select a channel to serve as a voltage axis reference when monitoring.

Select 'Automatic' to display each waveform according to the voltage range of the corresponding analog signal.

Select 'Specified CH' to display all waveforms according to the voltage range of the analog channel selected in the combo box.

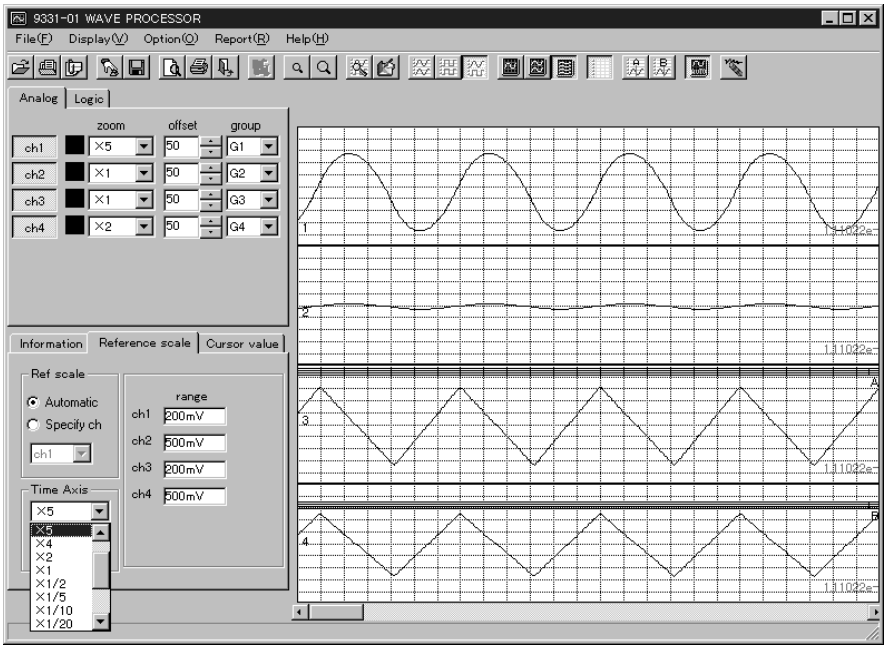
'Automatic' is initially selected by default after loading a waveform.

5.7 Specifying Time Axis Zoom

By changing the time axis zoom, the waveform can be magnified or compressed along the time axis.
By magnifying the waveform, detailed observations can be made.
By compressing the waveform, an entire change can be promptly apprehended.

The following rates can be selected:
×10, ×8, ×5, ×4, ×2, ×1
×1/2, ×1/5, ×1/10, ×1/20, ×1/50, ×1/100, ×1/200, ×1/500, ×1/1000
Depending on the selected zoom, waveform data display, preview and printing are affected.

Selecting Grid display, displays the vertical grid units (one grid square time).



Example of changing the time axis zoom

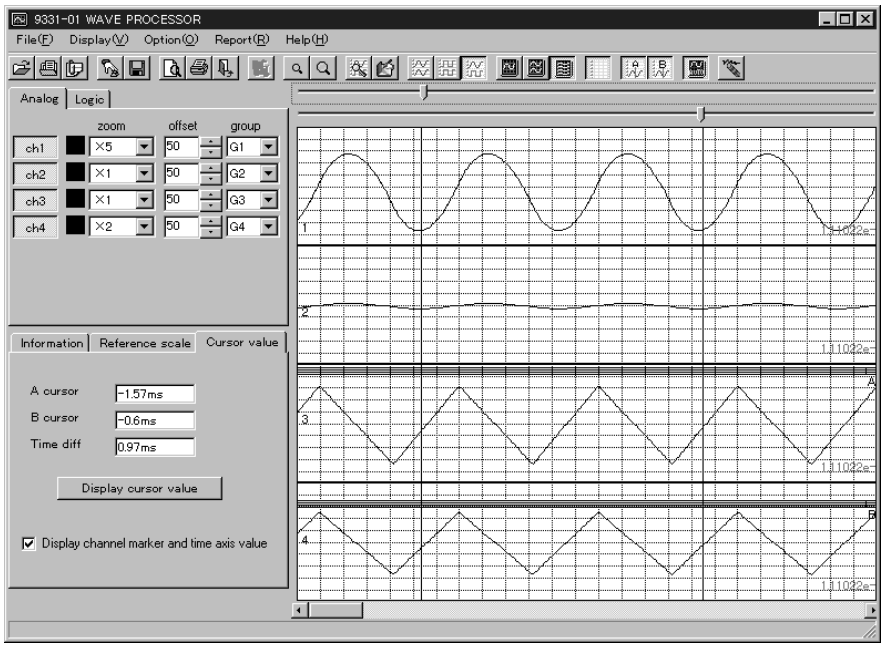
5.8 Waveform Scrolling

Any part of a waveform can be displayed by positioning the scroll bar of the waveform window. By moving the scroll box in the scroll bar or clicking the left and right ends of the scroll bar, the displayed waveform can be scrolled along the time axis.

5.9 Using the Cursors

After loading a waveform, various operations can be performed using the cursors.

Selecting Display - A/B Cursors on the menu bar or selecting a cursor from the toolbar displays a slider at the top of the waveform window to control each cursor. Drag the slider knob or click on either side of the knob to move the cursor to any position.
The cursor can also be moved using the [←], [→], [PageUp] and [PageDown] keys on the keyboard.
The cursor can be positioned on the waveform currently displayed in the waveform window. Within this area, the cursor can be moved by scrolling it or by changing the time axis zoom.



Example of A and B Cursors Display

5.10 Specifying Display Mode

You can select the waveform data to be displayed in the waveform window by clicking Display - Display Mode on the menu bar, or by selecting the display mode on the toolbar.

The following display modes are available:
Analog: Displays only analog waveforms
Logic: Displays only logic waveforms
Analog/Logic: Displays both analog and logic waveforms

5.11 Specifying Screen Division

The waveform window can be divided by clicking Display - Screen Division on the menu bar, or by clicking Screen Division on the toolbar.

The following screen partitioning schemes can be selected:
SINGLE: No screen division. Graph 1 is specified.
DUAL: The waveform window is divided into two. Graph 1 and 2 are specified.
QUAD: The waveform window is divided into four. Graph 1 through Graph 4 are specified.

Window partitions are denoted Graph 1 through Graph 4 from top to bottom. You can specify which channels to display in each graph by Display Graph settings on the Channel Selection tab sheet.

5.12 Grid Display

The grid is displayed by clicking Display - Grid Display on the menu bar, or by clicking Grid Display on the toolbar.

The vertical grid time interval appears in the Scaling tab sheet when the grid is displayed. The channel range in the Scaling tab sheet is the horizontal grid spacing.

Grid is initially displayed after loading waveform.

5.13 Auto Redraw

You can select Display - Auto Redraw on the menu bar, or select Auto Redraw on the toolbar.

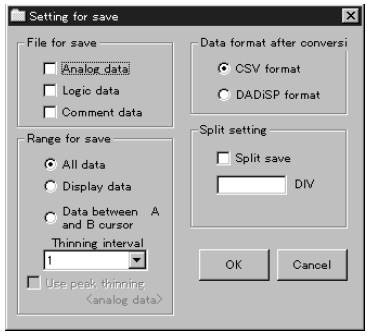
Auto Redraw ON: The waveform window is automatically redrawn when settings are changed.
Auto Redraw OFF: The Screen Update button must be clicked to redraw the waveform window.

Noticeable time may be required to redisplay waveforms that contain a large amount of data or many channels. In such cases, turning Auto Redraw OFF and disabling display of unneeded waveforms can improve operation.

Auto Redraw is ON by default when 9331-01 WAVE PROCESSOR is loaded.

NOTE Switching windows when Auto Redraw is OFF, waveform does not appear in the waveform display area until clicking Screen Update button to execute display waveform.

5.14 Specifying the File Save Format



The Save Settings window is displayed by clicking File - Save Settings on the menu bar, or by clicking Save Settings on the toolbar.
The conversion and save states for loaded waveform data can be specified in the Save settings. Actual file conversion and saving operations are performed by the Save and Save As menu items.
The following states can be specified:

File to Save: Analog data and logic data can be saved in files. Select the type of file you want to save.
Analog data files have a 'txt' extension, and logic data files have 'tx1' extension.

Save Area: Specify the data area to convert and save.
All Data: All loaded waveforms are converted and saved.
Display Data: Data currently displayed in the waveform window is converted and saved.
Cursor Area: Data between the A/B cursors is converted and saved.

Extraction for Space: You can specify an extraction rate for saving data. Usually, 1 is specified to convert and save all data, but if there are many waveforms, the file size can be reduced by increasing the extraction value.

Select peak thinning: Calculates and saves maximum and minimum level in data area. Time value is set at initial level in data area, however is limited to analog data.

Convert and Save To File Format: Specify the data format to convert and save to.
Either CSV or DADiSP format can be selected.
Both are comma-separated-value data formats.

Split save: Divides and saves waveform data in separate files (more than one file). When saving separate waveform data, specify number of DIV. The DIV data is saved per created file. As files are created each file will be numbered.

Split save is not initially selected after loading waveform.

NOTE When using Excel or Lotus 1-2-3, the data processing values are predetermined, so limit the data values by restricting the save area or thinning the data.

5.15 Saving a File

Loaded waveform data is converted and saved as TEXT format data.

The following two methods are available for saving files:

Overwriting Save: The first time data is saved, a dialog box appears for you to specify the directory and file name. Afterwards, selecting Save overwrites the same file.

Save As: The dialog box always appears for you to specify the directory and file name.

NOTE

- The TEXT file resulting from converting binary data requires several times the disk space of the binary file, so you should confirm that enough space is available in the directory where the file is to be saved.
- The time required to convert and save depends on the recording length and number of channels being converted.

Overwriting Save

Click File - Save on the menu bar, or click Save on the toolbar.
If the required state has not been set in Save Settings, the Save Settings dialog appears. Specify the save state here, and click OK to proceed with the save process. Refer to File Saving Format Settings for details of the Save Settings.

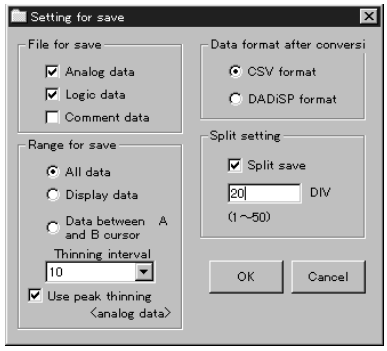
The file name must be specified when saving a file the first time.
When analog/logic data is specified to be saved, a dialog box appears in which to specify the directory and file name. The file name extension for analog data is 'txt', and the extension for logic data is 'tx1'.
Data is saved in the following order: logic and analog data.

Save As

Click File - Save As on the menu bar.
If the required state has not been set in Save Settings, the Save Settings dialog appears. Specify the save state here, and click OK to proceed with the save process. Refer to File Saving Format Settings for details of the Save Settings.

The file name must be specified every time.
When analog/logic data is specified to be saved, a dialog box appears in which to specify the directory and file name. The file name extension for analog data is 'txt', and the extension for logic data is 'tx1'.
Data is saved in the following order: logic and analog data.

5.16 Spliting and Saving



Saves specific areas of 9331-01 data separately. Each file will contain header information.

(1) When clicking the check box on split save, the number of DIV appears. One tenth of the maximum number of DIV is displayed as the default setting.
(2) Select recording length to be divided.
(3) Select File - Save - Save As.

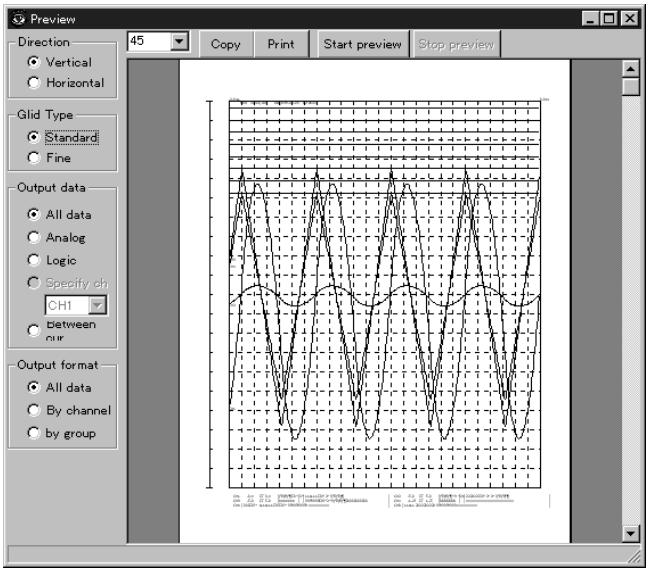
5.17 Displaying Y Axis Cursor Value

The Y axis cursor value is displayed by clicking Options - Y Axis Cursor Value on the menu bar.
From the analog waveform, voltage value of each channel (value of Y axis) is displayed using A and B cursors.
Some variances may occur with calculations made by the MEMORY HiCORDER due to rounding errors.

1. 'Automatic' Selection
When Automatic is checked, calculations follow the A and B cursors.

2. Calculate at Maximum Level/Calculate at Minimum Level
When waveform data is derived from the Recorder or RMS Recorder function, you can select whether to display at maximum or minimum level. This selection is not available for data derived from the Memory function.

Chapter 6 Previewing and Printing



Any waveform data recorded by Memory, Recorder and RMS Recorder functions can be easily previewed and printed.

The area of a waveform to be previewed corresponds with that displayed in the waveform window. By specifying the time axis zoom rate and scrolling to determine the waveform data in the window, any part of a waveform can be previewed.
Each of the following conditions can also be previewed by specifying the scaling, voltage axis zoom rate, offset and display group.
Printing information settings can also previewed once they are set.

6.1 Preview Window Selection

The Preview window is displayed by clicking File - Print Preview on the menu bar, or by clicking Print Preview on the toolbar.

NOTE Print Preview cannot be selected until waveform data has been loaded.

6.2 Specifying Preview Conditions

The following settings determine the data to be previewed and printed:

Output Data: Select the waveform channels to output.
- All Data: All analog and logic waveform data is previewed. Displays Preview between cursors per DIV unit. Position of cursors on preview and screen image may not completely match.
- Analog Data: Only analog waveform data is previewed.
- Logic Data: Only logic waveform data is previewed.
- Specify Channel: Only the analog channel selected in the combo box is previewed.
- Between cursors: Waveform data between cursors is previewed.

Output Format: Specify the output format of the waveform data.
- All Data: All analog and logic waveform data is output together in one aggregate. Select split into 2, 4 partitions to preview. Channels are determined by MEMORY HiCORDER.
- Separated by Channel: Analog channels are output together.
- Separated by Group: Waveform data is output in Groups.

Specified Scaling: Specify the scale of the preview image. Double click Left Mouse button to enlarge image. Right Mouse button to reduce image.

NOTE Preview window initially defaults to the main window setting.

6.3 Displaying the Preview

Clicking the Start Preview button activates the preview according to the preview settings.
Processing time depends on the recording length and number of channels.

6.4 Printing

The image being previewed can be printed directly.

(1) Specify the conditions and open the preview display.
(2) Click the Print button and make the desired printer settings, such as paper size.
(3) Click OK to start printing.

6.5 Copying to the Clipboard

A previewed waveform can be copied to the clipboard and pasted to a text editor for editing.

(1) Specify the conditions and open the preview display.
(2) Click the Copy button to copy the previewed waveform to the clipboard.
(3) Paste the clipboard contents into the editor.

6.6 Closing Preview

Click Close in the Preview window.

6.7 Printing from the Menu Bar

Click File - Print from the menu bar or Print on the toolbar to print directly.

6.8 Specifying Printing Options

The following print options can be specified for Preview Display/Printing. Adding this information can enhance the waveform printouts.

Set Print Information: Set common information such as headers and footers.

This information affects both preview display and printing.

6.9 Set Print Information

The Print Information Settings window is displayed by clicking Options - Print Information Settings on the menu bar.
Here you can set print information.

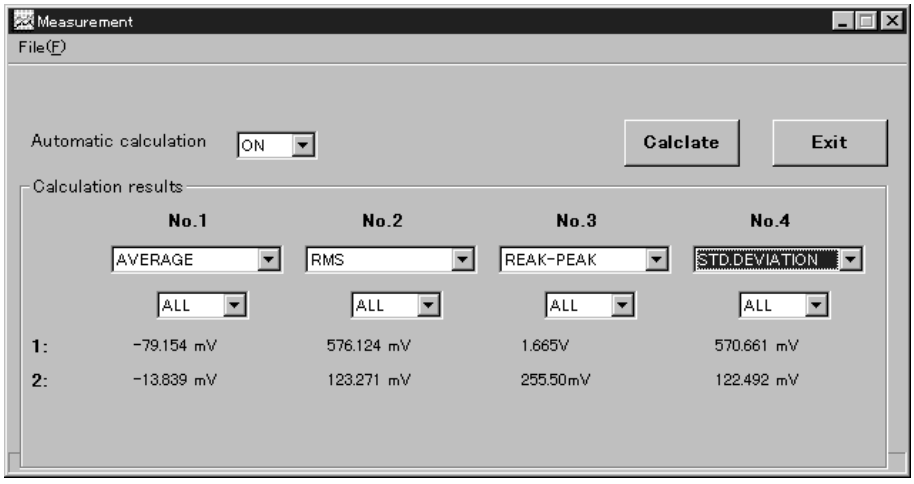
The following items can be specified:

- Specify header output
- Header data
- Specify footer output
- Footer data
- Font size of header/footer
- Comments (each channel)
- Specify Channel comment output
- Specify Channel marker output
- Specify Gauge/Time output

Clearing Comments

Up to forty alphanumeric characters of comments can be printed.
Clicking the Clear Comment button clears any comment for the currently selected channel.

Chapter 7 Parameter Processing (Memory Function Only)



Specify calculation items and calculation channels. Each parameter calculation is processed from the loaded waveform data similar to the MEMORY HiCORDER.

Calculation items

Average Value: Calculates average value of waveform data.

RMS Value: Calculates RMS value of waveform data.

P-P Value: Calculates peak-to-peak value (maximum - minimum) of waveform data.

Maximum Value: Calculates maximum value of waveform data.

Time to Maximum Value: Calculates the time interval from triggering point to maximum value of waveform data.

Minimum Value: Calculates minimum value of waveform data.

Time to Minimum Value: Calculates the time interval from triggering point to minimum value of waveform data.

Period: Calculates middle point of signal waveform and measures interval from point when that level is crossed in rising or falling.

Frequency: Determines middle point of signal waveform and measures interval from point when that level is crossed in rising or falling.

Rise Time: Determines the 10% and 90% level from waveform data and calculates time required to go from 10% to 90%.

Fall Time: Determines the 10% and 90% level from waveform data and calculates time required to go from 90% to 10%.

Standard Deviation: Calculates standard deviation of waveform data.

Area Value: Calculates area bordered by zero position (potential 0 V) and signal waveform.

Processes calculation in specified range of waveform data using A/B cursors.

7.1 Displaying Parameter Processing Window

Select Calculate Parameter on the toolbar. Parameter processing window appears.

NOTE You cannot select "Calculate Parameter" unless the waveform data is loaded.

7.2 Configuring Parameter Processing

Automatic Calculation: When automatic calculation is set to ON, it automatically executes calculation according to the new settings in "Select calculation items" and "Select channels."
To set automatic calculation to OFF, select "Calculate" button.

Switch channels: Specifies range of channels to be displayed on the screen.

Select Calculation Items: Specifies calculation items.

Select Channels: Specifies channel of waveform to calculate. If set to ALL, all channels are selected.

7.3 Starting Parameter Processing

When "Calculate" button is selected, it processes parameter calculation according to parameter processing conditions and displays the calculation result of each item.
Some variances may occur with calculations made by the MEMORY HiCORDER due to rounding errors.

7.4 Loading/Saving Settings and Data

Load Settings and Data: Select File - Load Settings and Data on the menu bar to load data. Specify items in "Calculation items setting" and "Channel setting."

Save Settings and Data: Select File - Save Settings and Data on the menu bar. Settings in "Calculation items setting" and "Channel setting" are saved with calculation results.

Chapter 8 Report

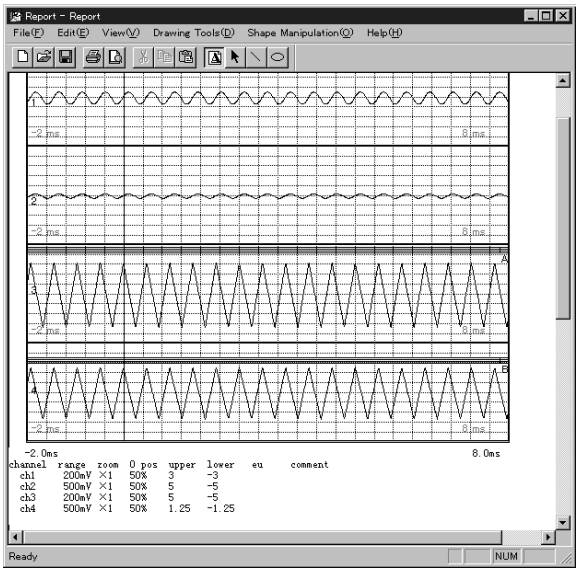
Generates report from waveform data displayed within waveform range.

- Template function enables automatic display and editing of range, magnification, position, upper limit value, lower limit value, unit, comments in the report window.
- You can cut and edit any range on the screen.

8.1 Initializing Report

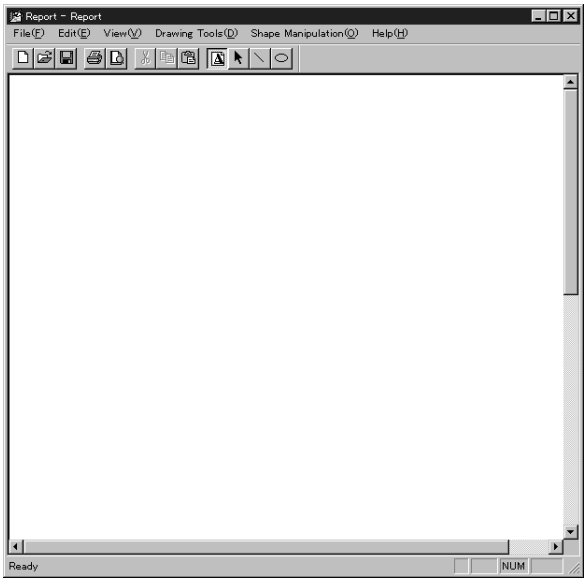
Click Report on the toolbar.
In default "Cut range enable" is set to NO and "Template enable" is selected.
You can specify the range of screen data in the main window to generate report or select the entire screen for cut range.

Using Template



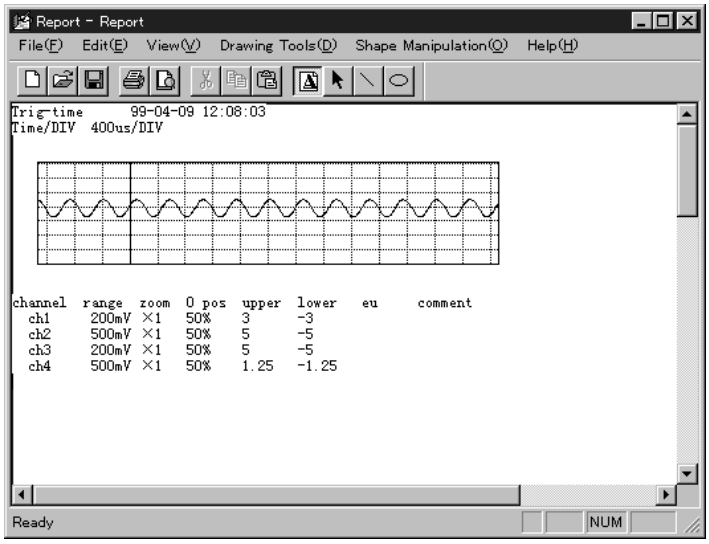
(1) Remove check on Report - Cut Range Enable.
(2) Check on Report - Template Enable.
(3) Click Report on the toolbar.
(4) Report window is displayed.
It automatically pastes value of range, magnification, position, upper limit value, lower limit value, unit, comments of the displayed channel.

Not Using Template



(1) Remove check on Report - Cut Range Enable.
(2) Remove check on Report - Template Enable.
(3) Click Report on the toolbar.
(4) Report window is displayed. Window is displayed with no object.

8.2 When Specifying the Cut Range



(1) Check on Report - Cut Range Enable.
(2) Click Report on the toolbar.
(3) Use Mouse to specify the cut range. Click Left Mouse button on start position of range and release it at end position of range.
(4) When report function is initiated, "It is already active" appears. You can paste cut range in the report window using Edit - Paste. When it is set to "Template enable", each value is also displayed.

8.3 View

Select the following from View on the menu bar.

Toolbar: Specifies Show Toolbar/Hide Toolbar.
Status Bar: Specifies Show Status Bar/Hide Status Bar.
Grid: Specifies Show Grid/Hide Grid.
Object: Specifies Show Object/Hide Object.
Paper color: Specifies background color.
Text format: Changes grid format to show.

When specifying Show Toolbar/Hide Toolbar, it is set to "Show Toolbar" with item checked and to "Hide Toolbar" with item unchecked.

8.4 Drawing Tools

Select from Drawing Tools on the menu bar or the following graphic tools on the toolbar.

Enter text: Enters text.
Select shape: Selects shape (line and circle) and object.
Line: Draws line.
Circle: Draws circle.
Fill: Specifies fill or no fill. (This is not available in version 1.10)

8.5 Shape Manipulation

Select additional graphic tools from the following shape manipulation tools on the menu bar.

Line Color: Changes color of line.
Fill Color: Changes color to fill in shape.
Bring to Front: Brings selected object to front.
Send to Back: Sends selected object to back.
Bring Forward: Brings selected object forward.
Send Backward: Sends selected object backward.

8.6 Opening File

Choose from below to open file.

Open: Select File - Open on the menu bar or select Open on the toolbar. Opens 'rpe' extension file.

8.7 Saving a File

The following two methods are available for saving files:

Overwriting Save: The first time data is saved, a dialog box appears for you to specify the directory and file name. Afterwards, selecting Save overwrites the same file.

Save As: The dialog box always appears for you to specify the directory and file name.

Overwriting Save

Click File - Overwriting Save on the menu bar, or click Save on the toolbar.
The file name must be specified when saving a file the first time.
Saved data has 'rpm' extension.

Save As

Click File - Save As on the menu bar.
The file name must be specified every time.
Saved data has 'rpm' extension.

8.8 Print Preview/Print

Print Preview

Click File - Print Preview on the menu bar or Print Preview on the toolbar.
Print image preview in the report window is displayed.

Print

Click File - Print on the menu bar or Print on the toolbar.
Prints exact print image in the report window according to each printer setting.

MEMO

HIOKI 9331-01 WAVE PROCESSOR

Instruction Manual

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