User's Manual

CW500Viewer

Thank you for purchasing the CW500 Power Quality Analyzer. This manual explains the operating procedures of CW500Viewer, a software application included with the CW500. To ensure correct use, please read this manual thoroughly before beginning operation. Keep this manual in a safe place for quick reference in the event that a question arises. The following manuals, including this one, are provided as manuals for the CW500. Please read all manuals.

Manual Title	Manual No.	Description
CW500 Power Quality Analyzer User's Manual	IM CW500-01EN	The supplied CD contains the PDF file of this manual. This manual explains the CW500's standard features and how to use these features.
CW500 Power Quality Analyzer Getting Started Guide	IM CW500-02EN	The guide explains the handling precautions and basic operations of the CW500 and provides a list of specifications.
CW500Viewer User's Manual	IM CW500-61EN	This manual. The supplied CD contains the PDF file of this manual. This manual explains how to use CW500Viewer.
CW500Viewer Installation Manual	IM CW500-62EN	This manual explains how to install CW500Viewer.
CW500 Power Quality Analyzer User's Manual	IM CW500-92Z1	Chinese document
Safety Instruction Manual	IM 00C01C01-01Z1	Safety manual (European languages)

Notes

- The contents of this manual are subject to change without prior notice as a result of improvements to the product's performance and functionality. Refer to our website to view our latest manuals.
- The figures given in this manual may differ from those that actually appear on your screen.
- Every effort has been made in the preparation of this manual to ensure the accuracy of its contents. However, should you have any questions or find any errors, please contact your nearest YOKOGAWA dealer.
- Copying or reproducing all or any part of the contents of this manual without the permission of YOKOGAWA is strictly prohibited.

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Revisions

- September 2015   1st Edition
- October 2017   2nd Edition
- August 2024   3rd Edition

Contents

1   Operating Environment

PC System Requirements

- Operating system: Windows 10, Windows 11
- CD or DVD drive: Required to install the software

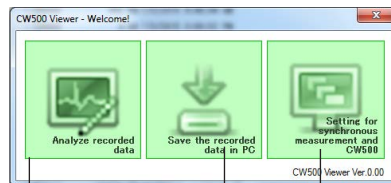# 2 Starting CW500Viewer

When Using the Viewer on the PC by Itself

Data can be analyzed.

1 Double-click the shortcut icon on the desktop.

Or, click **Start**, **Programs**, **Yokogawa**, **CW500Viewer**, and then **CW500Viewer**.

The CW500Viewer menu appears.

Analyze measured data.

Configure real-time measurement and CW500.
(available when the PC and the CW500 are connected)

Save measured data to the PC.
(available when the PC and the CW500 are connected)

When Using the Viewer by Connecting the CW500 to the PC

1. Turn the CW500 on.

2. Connect the CW500 to the PC through USB.

3. Double-click the shortcut icon on the desktop.

Or, click **Start**, **Programs**, **Yokogawa**, **CW500Viewer**, and then **CW500Viewer**.

The CW500Viewer menu appears.

Note

- To connect the CW500 to the PC using the optional Bluetooth, enable the CW500 Bluetooth function.
- Start CW500Viewer after Bluetooth pairing is complete.
  From Devices and Printers on the PC, select the CW500 you want to pair with, and click Add a device.
  For details, see the PC or Bluetooth Receiver User's Manual.
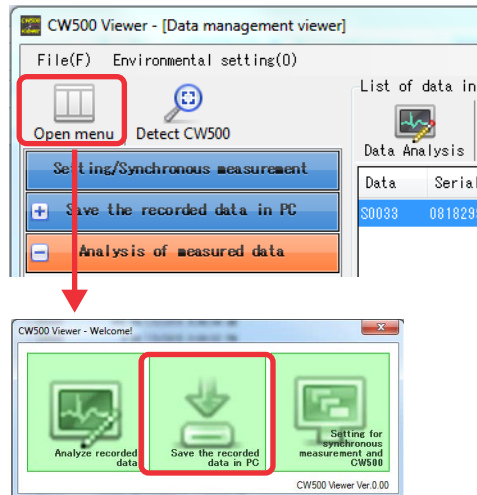- CW500 device name is "CW500-xxxxxxxx" (where xxxxxxxx is the serial number).

3   Saving Recorded Data to a PC

Saving Recorded Data to the PC by Connecting the CW500 to the PC

1   On CW500Viewer, click **Open menu**.

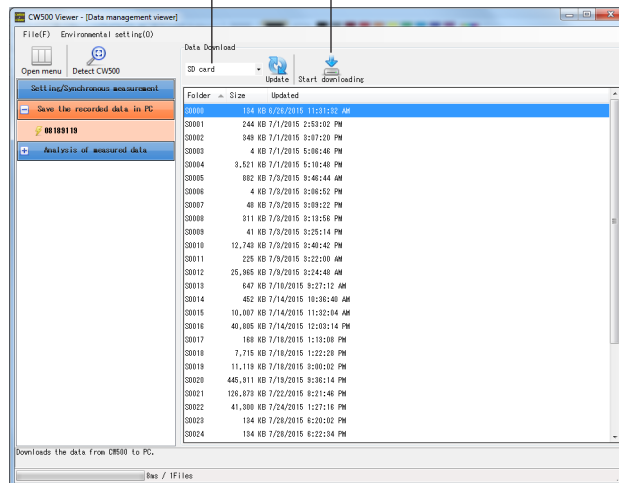On the menu, click **Save the recorded data in PC**.

A screen for loading data appears.

2.   Select Internal memory or SD memory card.

A list of recorded data saved in the selected medium appears.

3.   From the list, select a recorded data file to save to the PC, and click **Start downloading**. Saving to the PC starts.

Select internal memory or SD memory card.

Save recorded data to the PC.

When saving to the PC is complete, a recorded data analysis window appears.

The data is saved in
C:\Users\xxxxx\Documents\Yokogawa\CW500Viewer\PcData (where xxxxx is the user name).
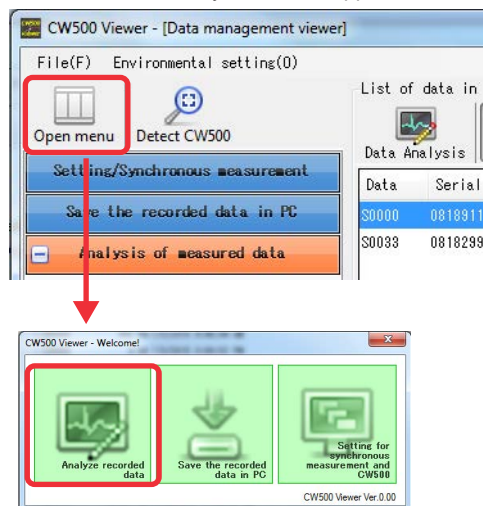
Saving Recorded Data to the PC without Connecting the CW500 to the PC

You can insert an SD memory card containing CW500 recorded data into the PC and save the recorded data to the PC.

1 Insert an SD memory card containing CW500 recorded data into the PC.
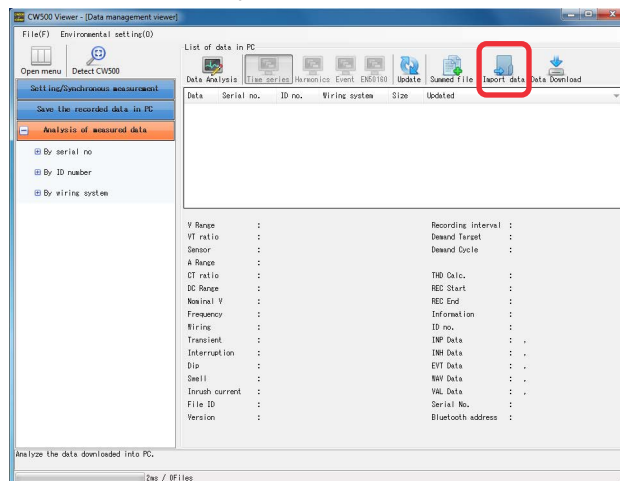
2. On CW500Viewer, click **Open menu**.

On the menu, click **Analyze recorded data**.

A recorded data analysis window appears.

3. Click **Import data**. A file selection window appears.

Select the SD memory card drive, and select the file to load into the PC.
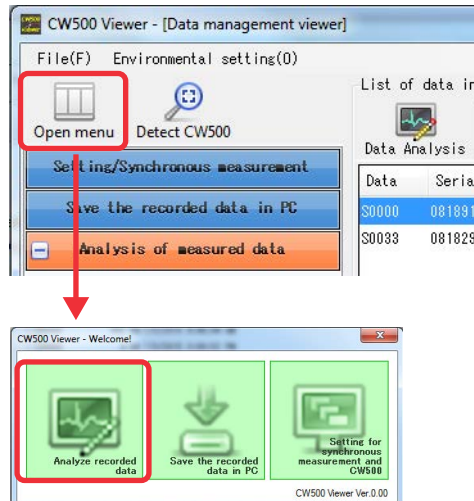
4 Analyzing Data (Power)
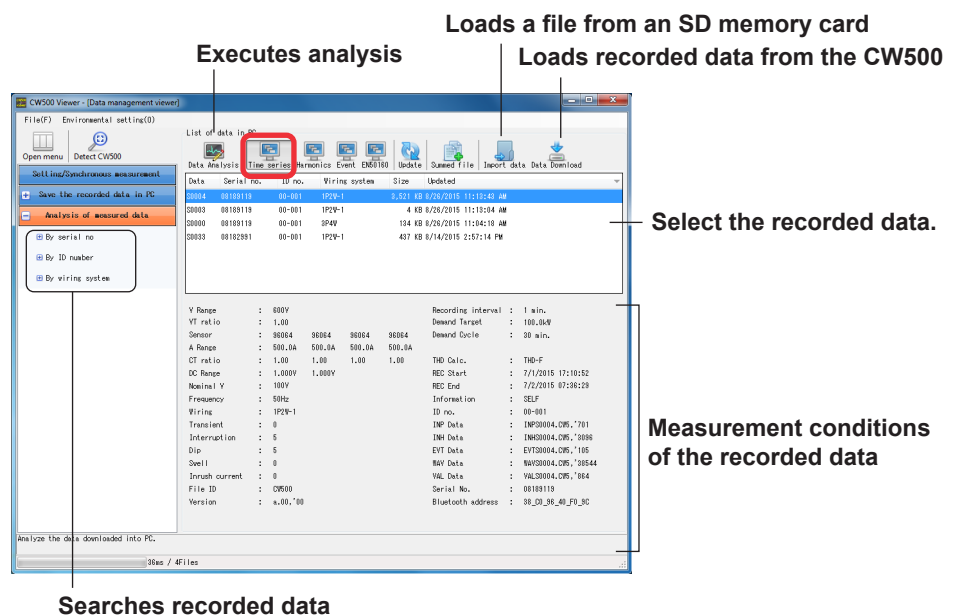
Selecting the Recorded Data to Analyze

1 On CW500Viewer, click **Open menu**.

On the menu, click **Analyze recorded data**.

A recorded data analysis window appears.

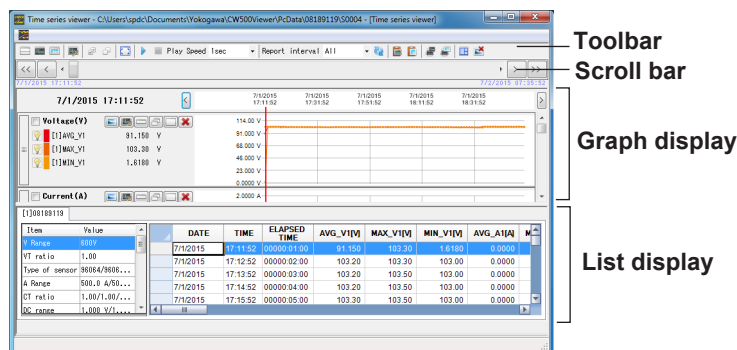**2.** Click the recorded data to analyze, and click **Time series**.

3. Click **Data Analysis**.

Power parameters appear.

By clicking Import data or Data download, you can move to a window for saving data from an SD memory card connected to the PC or from the CW500 to the PC. For the save procedure, see "Saving Recorded Data to a PC."
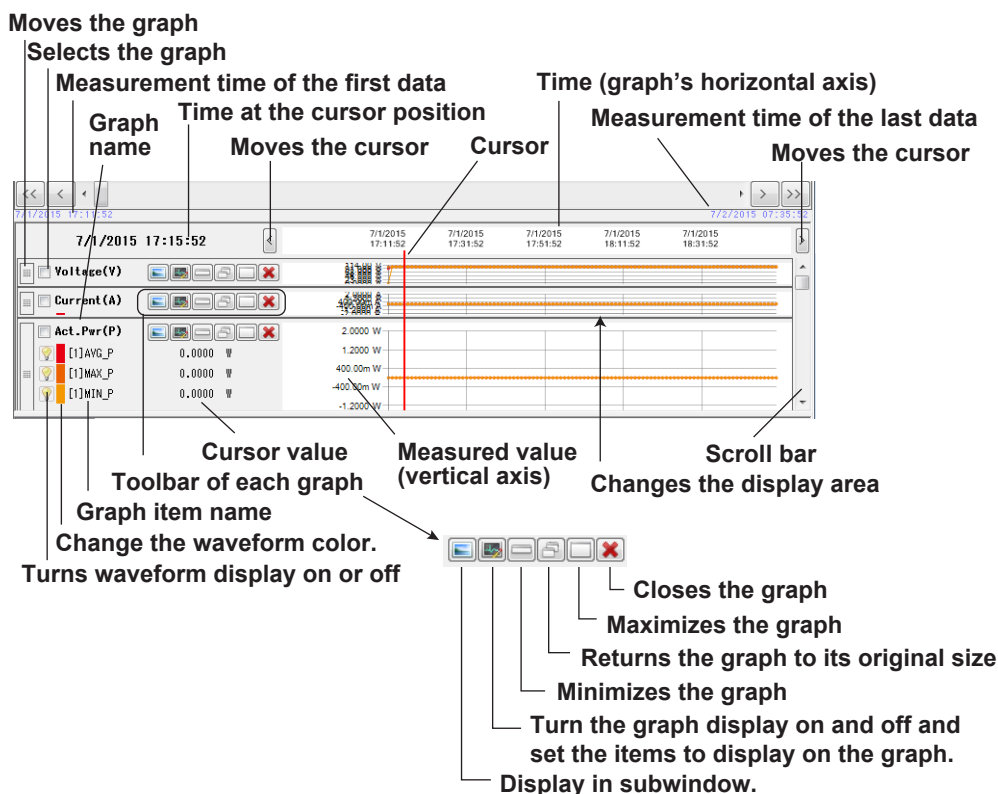
Toolbar
Scroll bar
Graph display
List display

Note

- By moving the mouse pointer over a window boundary or a table row or column boundary and dragging when the pointer changes to an arrow, you can change the size of the window, row, or column.
- On the default window, up to 100 data values are displayed in the graph or list display area. If there is more data, the 101st and later data values can be displayed by using the scroll bar below the toolbar (such as by clicking the right arrow button).

Graph Display

Moves the graph
Selects the graph
Measurement time of the first data
Time (graph's horizontal axis)
Graph name
Time at the cursor position
Moves the cursor
Cursor
Measurement time of the last data
Moves the cursor

Cursor value
Measured value (vertical axis)
Scroll bar
Toolbar of each graph
Changes the display area
Graph item name
Change the waveform color.
Turns waveform display on or off

Closes the graph
Maximizes the graph
Returns the graph to its original size
Minimizes the graph
Turn the graph display on and off and set the items to display on the graph.
Display in subwindow.

Moving the Graph
Drag the bar at the left edge of the graph to change the display position.

Selecting Graphs
Select the check boxes to the right of the graph names. The selected graphs can be controlled using the toolbar of each graph. The display of multiple graphs can be changed collectively.

Changing the Graph Colors
Clicking the color bar to the left of an item name opens a color setting window.

Turning Waveform Display On and Off

Clicking the light bulb icon next to an item name shows or hides the waveform.

Zooming the Graphs

Zooming Horizontally

The pointer changes into a left and right arrow (◀•▶) near the graph's horizontal scale. Drag to the right to zoom in; drag to the left to zoom out.

Zooming Vertically

The pointer changes into an up and down arrow (⬍) near the graph's vertical scale. The dragged area is zoomed, and a scroll bar and an undo button appear. You can change the display position using the scroll bar. To return to the original size, click the undo button.
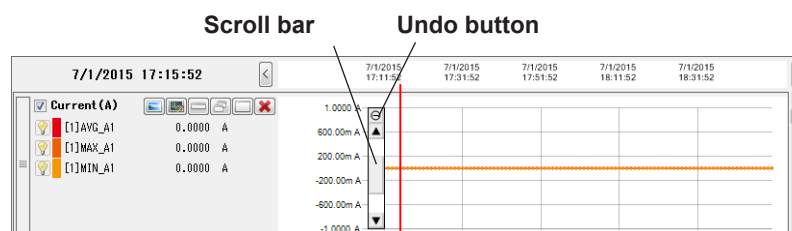
Scroll bar　　　　**Undo button**

Subwindow Display (Toolbar of each graph)

Click the **Sub-graph display** icon on the toolbar displayed for each graph.

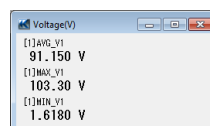The measured values at the cursor position are displayed in a subwindow.

The voltage phase angle and current phase angle are displayed in a vector diagram using rms values and phase angles at the cursor position.

For items other than the voltage phase angle and current phase angle, measured values at the cursor position are displayed numerically.
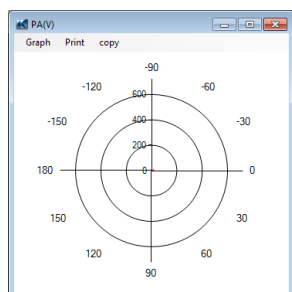
Vector diagram　　　　　　**Values**

List Display

Serial number of the CW500 that made the measurement

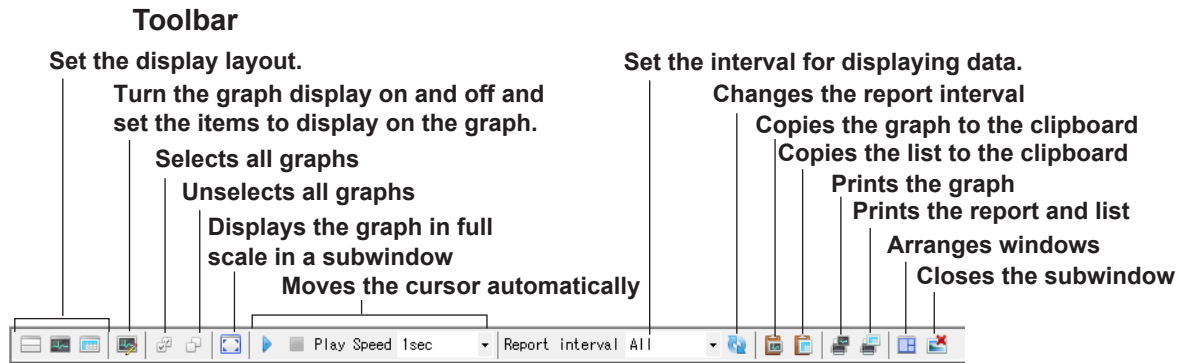Scroll bar　　　　Data at the graph's cursor position
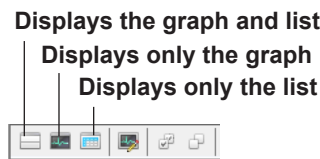

Measurement conditions　　　List display　　　Scroll bar

Note

In the list display, you may see rows with only the date, time, and character string. The meaning of these rows is as follows: SDIN: date and time the SD card was inserted, PWOF: date and time the power was turned off, PWON: date and time the instrument was restarted, LWBT: date and time Lo_Batt was detected, TZBG: date and time when time zone recording was started, TZED: date and time when time zone recording was stopped.
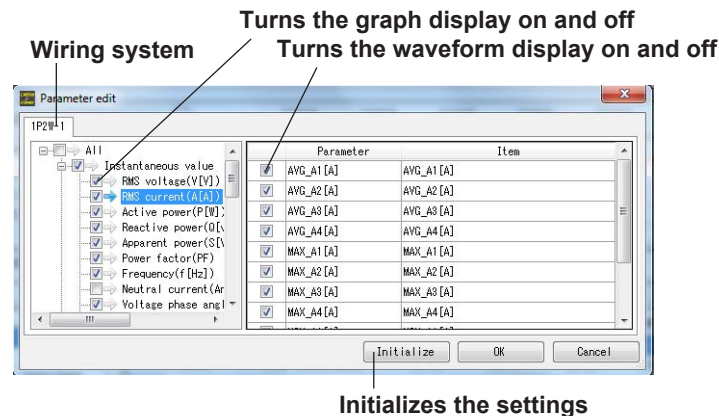
Toolbar

Set the display layout.

Turn the graph display on and off and
set the items to display on the graph.

Selects all graphs

Unselects all graphs

Displays the graph in full
scale in a subwindow

Moves the cursor automatically

Set the interval for displaying data.

Changes the report interval

Copies the graph to the clipboard

Copies the list to the clipboard

Prints the graph

Prints the report and list

Arranges windows

Closes the subwindow

Setting the Display Layout

Displays the graph and list

Displays only the graph

Displays only the list

**Turning the Graph Display On and Off and Setting the Items to Display on
the Graph**

On the toolbar, click the **Parameter edit** icon.

You can turn the entire graph display on and off and the waveform display of each graph
on and off.

Items whose check boxes are selected are displayed.

The entire graph can be turned on and off for instantaneous value, integrated value
(harmonics), demand, and flicker separately.

Turns the graph display on and off

Wiring system   Turns the waveform display on and off

Initializes the settings

Selecting or Unselecting All Graphs

On the toolbar, click the **Select all** or **Deselect** icon.

Graphs are selected or unselected collectively. The selected graph names' check boxes
become selected (see "Graph Display").

The selected graphs can be controlled using the toolbar of each graph.

Full Scale Display

On the toolbar, click the **Full scale display** icon.

The graph is displayed in full scale in a subwindow.

Auto Cursor Movement (Autoplay)

The cursor on the graph can be moved automatically.

The cursor position in the list moves in sync with this cursor.

You can also set the time (playback time) for the cursor to move to the next data value.

Starts cursor movement (play)

Stops cursor movement

Select the time (playback time) for the cursor to move.

Play Speed 1sec
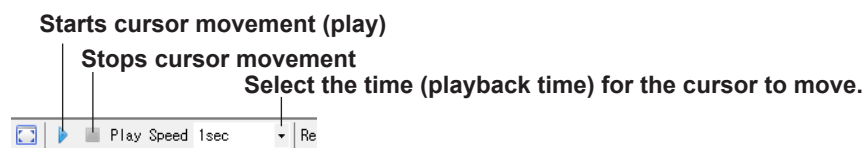
Setting the Data Display Interval (Report interval)

On the toolbar, select the interval from the **Report interval** list.

Set the time interval for the data displayed on the graph and list.

Clicking the report interval change icon displays data using the specified time interval on the graph and list.

Copying the Graph and List to the Clipboard

On the toolbar, click the **Copy graph** or **Copy list** icon.

For the graph, the entire graph is copied as image data to the clipboard. For the list, tab delimited text data with item names added in the header is copied to the clipboard.

You can paste the data in documents, such as Word and Excel.

Printing Graphs

On the toolbar, click the **Print graph** icon. All the displayed graphs are printed.

Report and List Output

On the toolbar, click the **Report/list output** icon.

Set the currency (report).

Set the time for nighttime rates (report).

Set the weekends (report).

Set the power prefix (report).

Set the output range (report/list).

Set the power unit price (report).
Set the nighttime and weekend rates.

Shows the report preview

Saves CSV data

Set the parameters to output in reports.

Shows the list preview

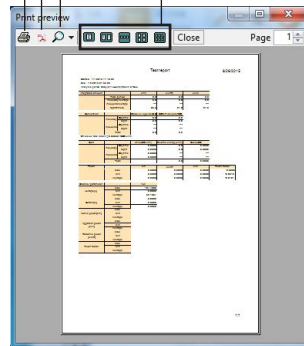**Set the header and footer (report/list).**
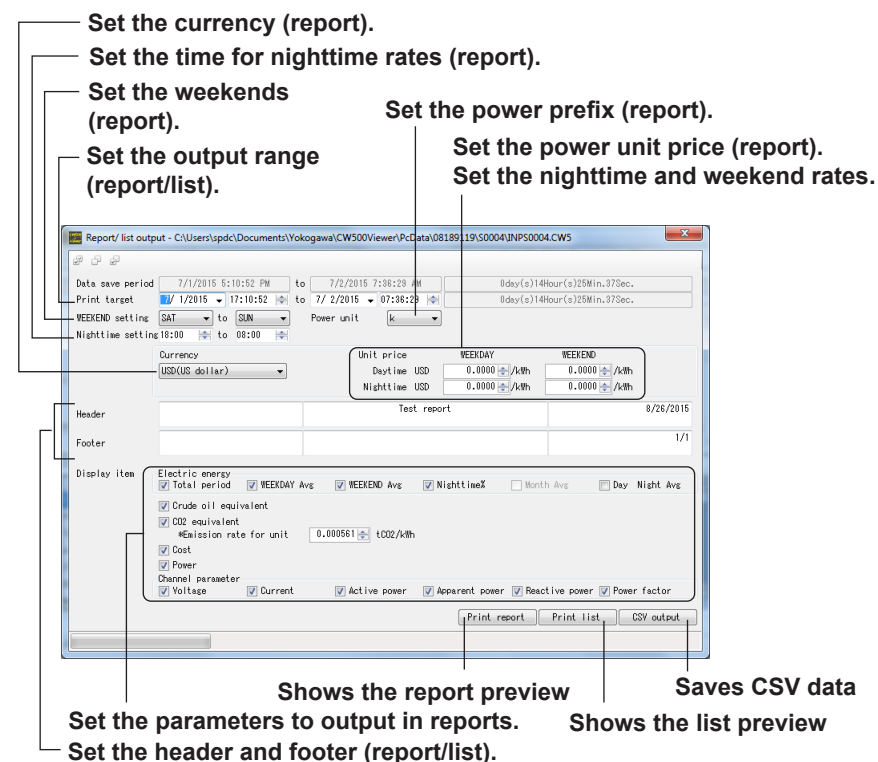
Clicking **Print report** or **Print list** displays a preview window.

Shows the print window
Saves as PDF data
Zooms the preview
      Changes the preview format

Report output

    Prints a report of the power consumption.

    The power and power charge for the specified time period are printed in a report or saved as PDF data.

List output

    The data of the listed items for the specified time period are printed or saved as PDF or CSV data.

Note

To print page numbers in the header or footer, enter "1/1."

5   Analyzing Data (Harmonics)

Selecting the Recorded Data to Analyze

1 On CW500Viewer, click **Open menu**.

On the menu, click **Analyze recorded data**.

A recorded data analysis window appears.
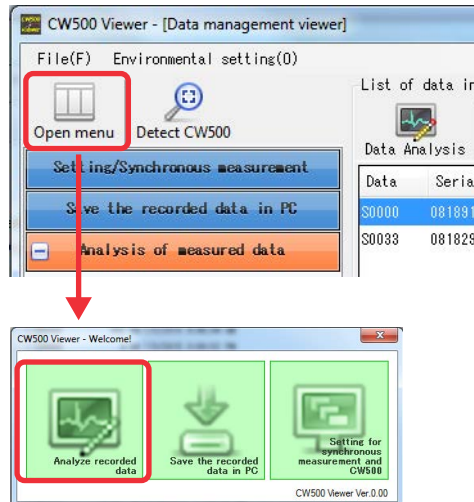
2. Click the recorded data to analyze, and click **Harmonics**.

Loads a file from an SD memory card
Loads recorded data from the CW500
Executes analysis
Select the recorded data.
Measurement conditions of the recorded data
Searches recorded data
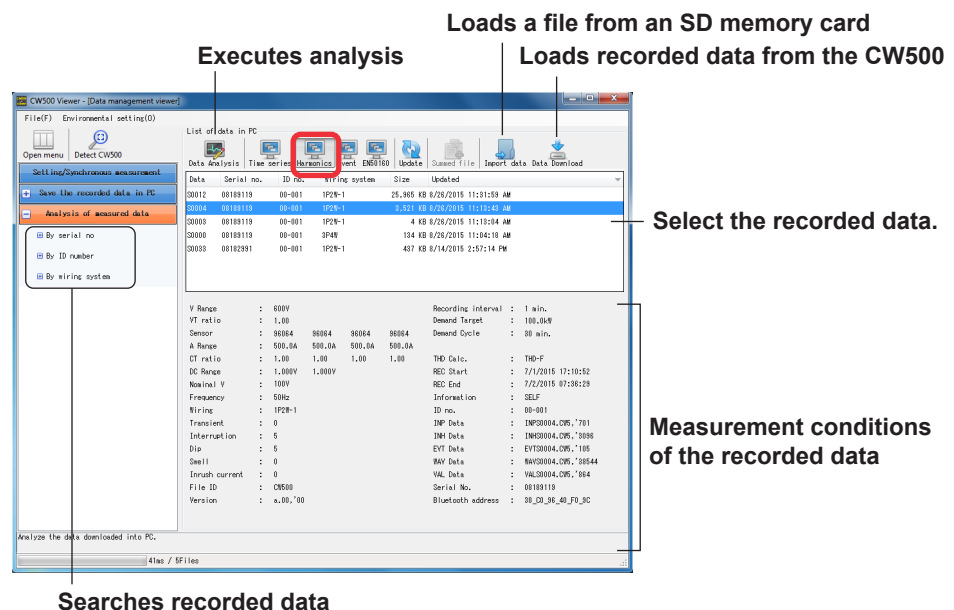
3. Click **Data Analysis**.

A graph and list of each measurement item are displayed.

By clicking Import data or Data download, you can move to a window for saving data from an SD memory card connected to the PC or from the CW500 to the PC. For the save procedure, see "Saving Recorded Data to a PC."

Toolbar
Scroll bar
Graph display
List display

Select the channels to display in the list.
Select the items to list.

The operating procedures for the toolbar, graph display, and list display not explained here are the same as those for time series analysis. See chapter 4, "Analyzing Data (Power)."

Note

- By moving the mouse pointer over a window boundary or a table row or column boundary and dragging when the pointer changes to an arrow, you can change the size of the window, row, or column.
- On the default window, up to 100 data values are displayed in the graph or list display area. If there is more data, the 101st and later data values can be displayed by using the scroll bar below the toolbar (such as by clicking the right arrow button).

Subwindow Display (Toolbar of each graph)
Click the **Sub-graph display** icon on the toolbar displayed for each graph.
The measured values at the cursor position are displayed in a subwindow.
The voltage phase angle and current phase angle are displayed in a vector diagram for each harmonic using rms values and phase angles at the cursor position.
Rms voltage, rms current, and harmonic power are displayed in a bar graph for each harmonic using the rms values at the cursor position.
Voltage-current phase difference is displayed in a bar graph of each harmonic using the voltage-current phase difference at the cursor position.
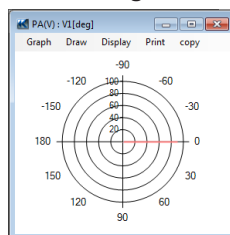
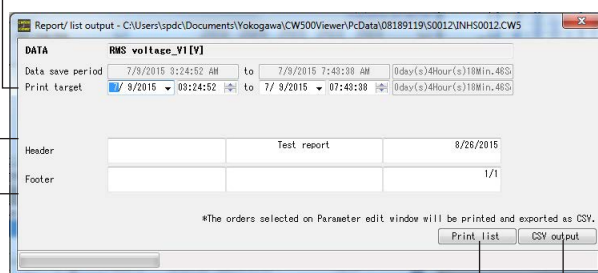**Vector diagram**   **Bar graph of each harmonic (rms value)**
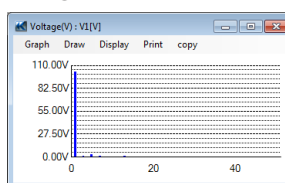
Bar graph of each harmonic (voltage-current phase difference)
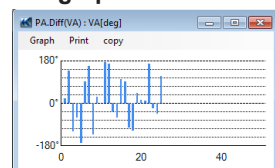
List output

On the toolbar, click the **List output** icon.

Set the output range

Set the header and footer.

Saves CSV data
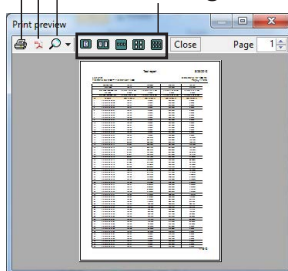
Shows the list preview

Clicking **Print list** displays a preview window.

Shows the print window
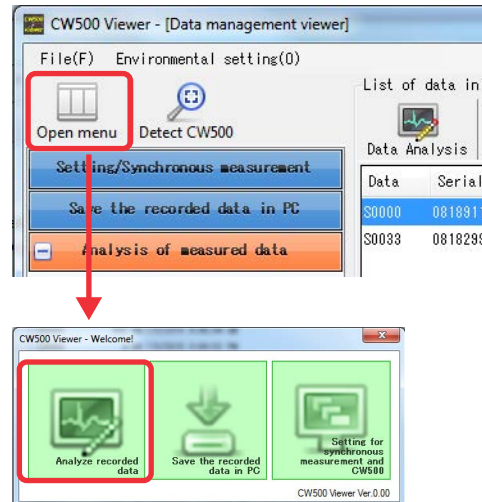**Saves as PDF data**
Zooms the preview
Changes the preview format
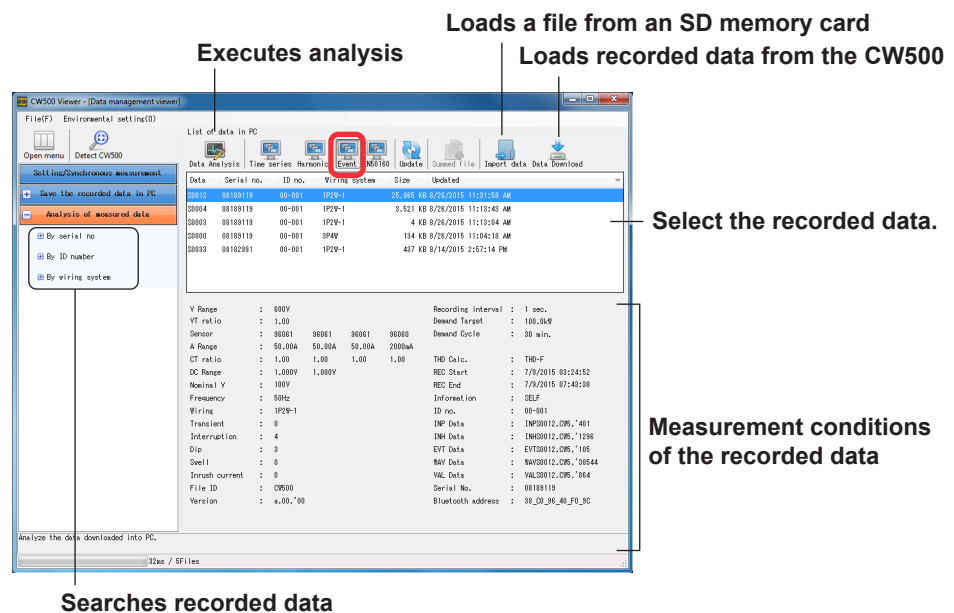
6 Analyzing Data (Event)

Selecting the Recorded Data to Analyze

1 On CW500Viewer, click **Open menu**.

On the menu, click **Analyze recorded data**.
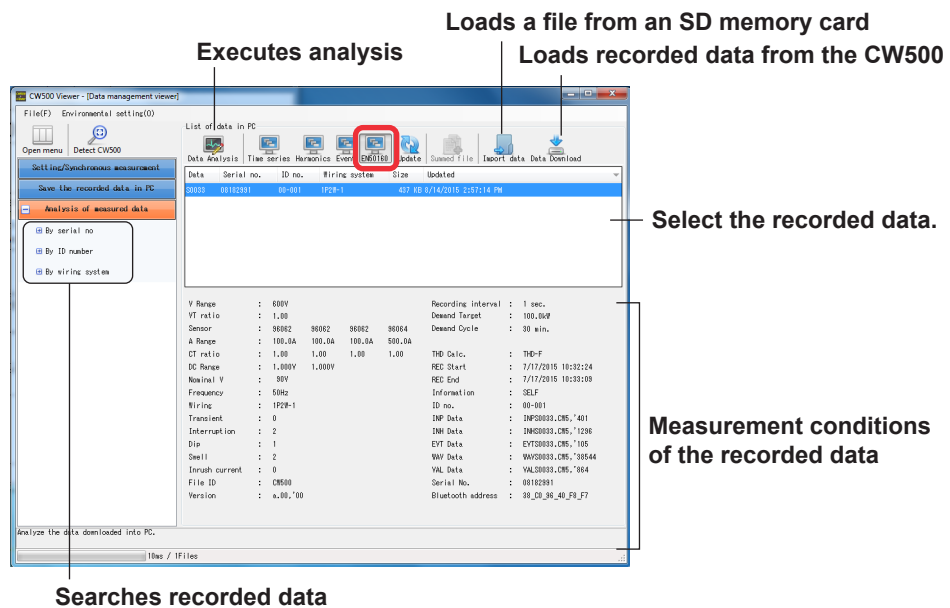A recorded data analysis window appears.

2. Click the recorded data to analyze, and click **Event**.

Loads a file from an SD memory card
Loads recorded data from the CW500

Executes analysis

Select the recorded data.

Measurement conditions of the recorded data

Searches recorded data

3. Click **Data Analysis**.
The voltage and current waveforms and event identification graph are displayed.

By clicking Import data or Data download, you can move to a window for saving data from an SD memory card connected to the PC or from the CW500 to the PC. For the save procedure, see "Saving Recorded Data to a PC."

Toolbar   Scroll bar

Rms voltage

Rms current

Event type

Event

Detailed event data   Full scale display

Graph display

The operating procedures for the toolbar and graph display not explained here are the same as those for time series analysis. See chapter 4, "Analyzing Data (Power)."

Note

- By moving the mouse pointer over a window boundary or a table row or column boundary and dragging when the pointer changes to an arrow, you can change the size of the window, row, or column.
- On the default window, up to 100 data values are displayed in the graph display area. If there is more data, the 101st and later data values can be displayed by using the scroll bar below the toolbar (such as by clicking the right arrow button).

Graph Display

Rms voltage, rms current, and event type are displayed on a time series graph

Detailed Event Data

The number of event occurrences and list of occurred events are displayed.
Use the tabs to switch between event list and measured data list.
For details on the measured data list display, see chapter 4, "Analyzing Data (Power)."

Date of event occurrence
Time of event occurrence
Type of occurred events
Start and end of events

Rms value display after the occurrence of the selected event

Waveform display after the occurrence of the selected event

Number of occurred events
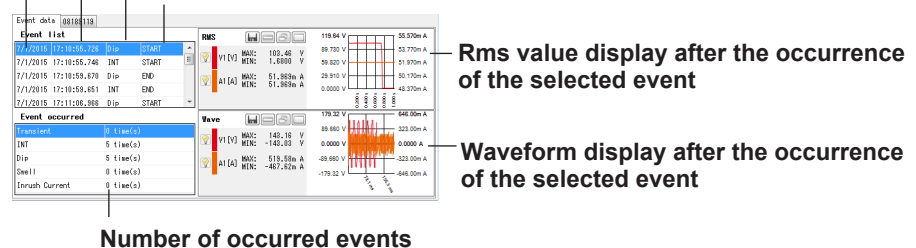
If you select an event from the event list, the rms values and waveform from the selected event are displayed.

7 Outputting Voltage Quality Reports

Selecting the Recorded Data to Output

1 On CW500Viewer, click **Open menu**.

On the menu, click **Analyze recorded data**.
A recorded data analysis window appears.
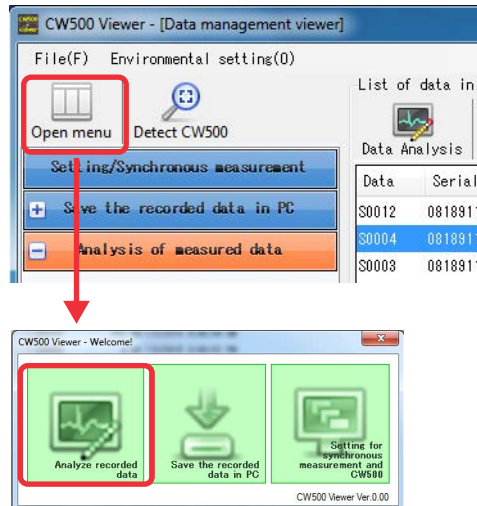
2. Click the recorded data to output in a report, and click **EN50160**.

3. Click **Data Analysis**.

The first time you select the recorded data to output in a voltage quality report, a Report parameter setting window appears.

If you selected recorded data that was output in a voltage quality report in the past, proceed to step 6.

Select all

Includes measured values during event occurrence

Unselect all

Switches the settings

Initializes parameter settings

Exports parameter settings

Imports parameter settings

Select the parameters that you want to output in reports

4. Set the report parameters.

Check the test site, operator, note, and output items, and set the parameters.

During the period in which swell, dip, or interruption events are occurring, the reliability of other measured values (e.g., frequency) may be lost. Clearing the including the event duration period check box excludes measured values during the period in which events are occurring, which enables highly reliable statistical results to be obtained.

Setting Event Data

To set event data, click the **Event data** tab, and click **Edit** of the item to set.

Adds an event (when there is blank space)
Edit the selected event.
Deletes the selected event

Discards the settings and closes the window
Applies the settings and closes the window

5. Click **OK**. An EN50160 Report window appears.

Displays the summary and details of the test results
Displays only the summary of the test results
Displays only the details of the test results
Change the report parameters.
Report output

Test results
　Pass
　Fail

Test result summary

Switches the
displayed test item

Test result details

6. To print the report or save it as PDF data, click the **Report output** icon. A print window appears.

Set the header and footer.　　　　　Displays a print preview

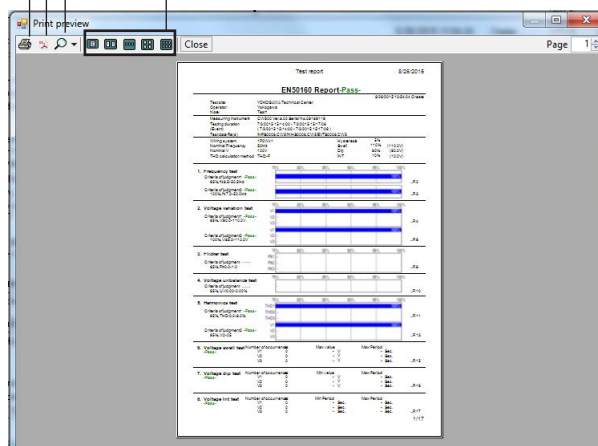**7.** Set the header or footer, and click **OK**.

A print preview appears.

Shows the print window
Saves as PDF data
Zooms the preview
Changes the preview format

8. Click the print icon or PDF output icon. A window for setting print conditions or PDF output conditions appears.

9. Set the conditions, and click **Print** or **PDF output**. The report is printed or output to a PDF file.

EN50160 Report Output Conditions

Setting	Value
Record items	Power + harmonics + events
Record method	Manual or continuous measurement

Recording Interval and Test Items That Can Be Output

| Test item	Recording interval	
	10 s or less	15 s or more
Frequency test	Yes	No
Voltage variation test	Yes	No
Flicker test	Yes	No
Voltage unbalance test	Yes	No
Harmonics test	Yes	Yes
Voltage swell test	Yes	Yes
Voltage dip test	Yes	Yes
Voltage interruption text	Yes	Yes

8   Configuring the CW500 from a PC

Displaying the Setting Window

1   On CW500Viewer, click **Open menu**.

On the menu, click **Setting for synchronous measurement and CW500**.
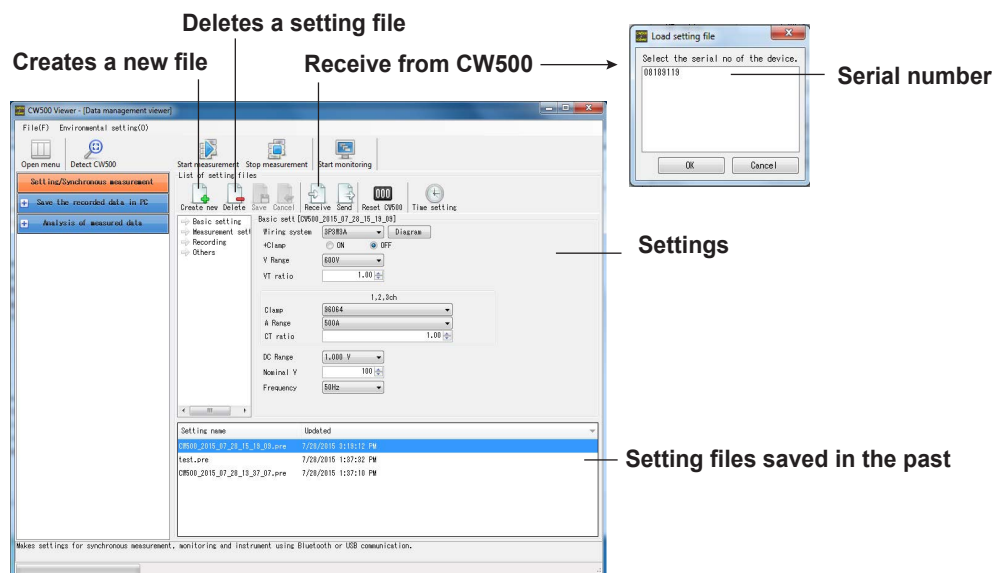
The CW500 setting data creation window appears.
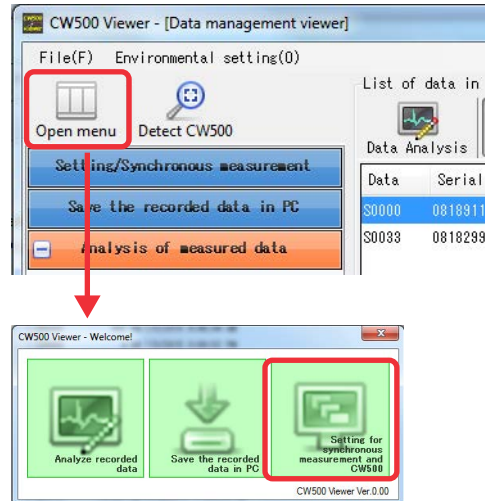
Creating Setting Data

2.   To create new setting data, click the **Create new** icon.

To load setting data from the CW500 that the PC is connected to, click the **Receive** icon. A window for selecting the target CW500 will appear. Select the appropriate CW500 serial number, and click **OK**.

To change or use setting data that you created in the past, click a file shown in the setting data list.

Deletes a setting file

Creates a new file

Receive from CW500

Serial number

Settings
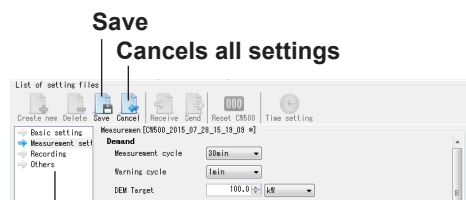
Setting files saved in the past

3. Specify the settings.

   Select the Basic setting, Measurement setting, Recording, and Others categories, and specify the settings in each category.

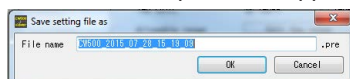   For details on the settings, see the CW500 manual in the accompanying CD.

   Once you start changing the settings, only the Save and Cancel icons will be available.

   Save
   Cancels all settings

   Select the setting category.

4. When you finish specifying the settings, click the **Save** icon.

   A file name setup window appears.

5. Set the file name.

   The default file name is CW500_year_month_day_hour_minute_second.pre. Click **OK** to save the file.

Deleting Files

6. From the setup file list, select the file you want to delete, and click the **Delete** icon.

   The selected file is deleted.

Configuring the CW500

Send

Initializes the CW500

Set the clock.

File name of the data to be sent
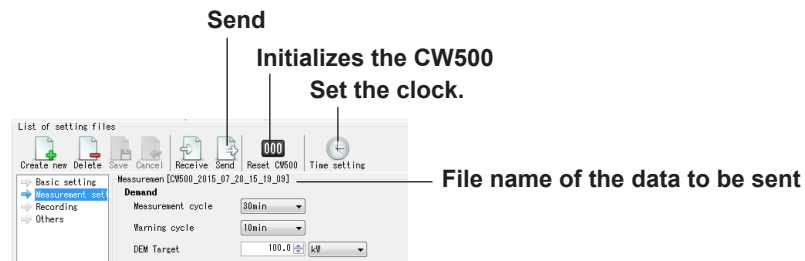
7. Click **Send**.

   A CW500 selection window appears.

8. Select the appropriate CW500 serial number, and click **OK**.

   The setting data is sent to the CW500 and applied.

9. Click the **Time setting** icon.

   A CW500 selection window appears. Like step 8, select the target CW500. The PC time settings are applied to the CW500.

   Initializing the CW500

10. Click the **Reset CW500** icon.

    A CW500 selection window appears. Like step 8, select the target CW500. The CW500 settings are initialized.

9 Starting and Stopping CW500 Measurement from the PC

Displaying the Setting Window

1 On CW500Viewer, click **Open menu**.

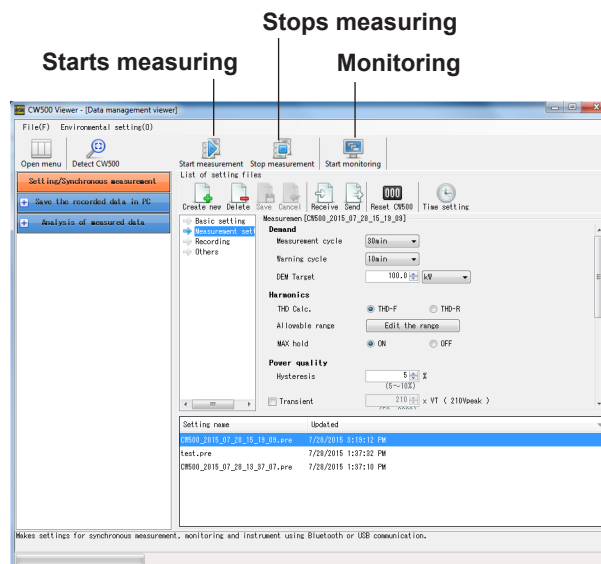On the menu, click **Setting for synchronous measurement and CW500**.

The screen for controlling the CW500 appears.

Starting to Record

2. Click the **Start measurement** icon.

A CW500 selection window appears.

3. Select the serial number of the CW500 that you want to start measurement on, and click **OK**.

The Time series viewer appears, and data is displayed in real time. Depending on the PC performance or usage conditions, updating of graphs and lists may be delayed.

The contents shown in the window are the same as those for analysis (power). See chapter 4, "Analyzing Recorded Data (Power)."

Synchronized Operation

If several CW500 are connected to the PC, you can select two CW500s and start measurement simultaneously.

4. To close the window, click the close button in the upper right of the window.

A window for selecting how to close will appear.
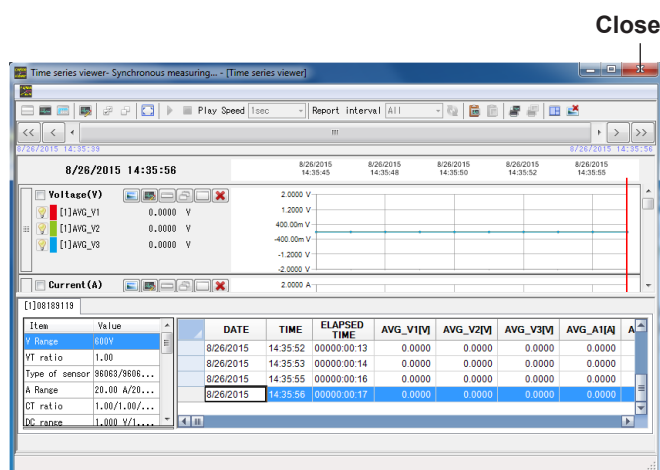
Close

5. Click Continue recording on CW500 and close the window or Stop recording on CW500 and close the window. The window closes. Clicking Cancel will return you to the original measurement window.
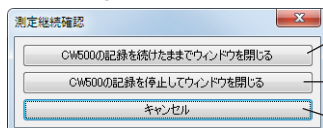
Closes the window while continuing to record
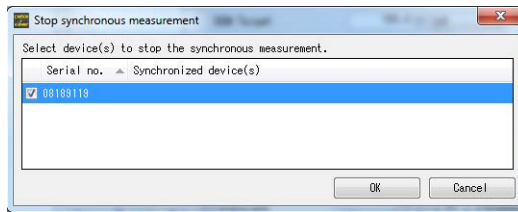
Stops recording and closes the window

Returns to the measurement window

Stopping the Recording

This is possible when the CW500 that the PC is connected to is recording.

6. Click the **Stop measurement** icon.

A CW500 selection window appears.

7. Select the serial number of the CW500 that you want to stop measurement on, and click **OK**.

If synchronous operation is in progress, the serial number of the other CW500 will also appear. If you also want to stop measurement on the other CW500, select its serial number check box.
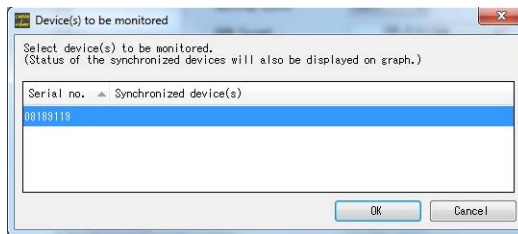
Monitoring

This is possible when the CW500 that the PC is connected to is recording.

8 Click the **Start monitoring** icon.

A window for selecting the CW500 to be monitored appears.

Select the appropriate CW500 serial number, and click **OK**.

If synchronous operation is in progress, the serial number of the other CW500 will also appear.

The Time series viewer appears, and data is displayed in real time. Depending on the PC performance or usage conditions, updating of graphs and lists may be delayed.

To close the window, follow the instructions of steps 4 and 5.

10　Other Features

Adding Recorded Data Together

Two sets of recorded data can be added together. Recorded data whose recording interval is different cannot be added together.

The time axis of the data displayed as "1" when you select the recorded data to be added together becomes the reference, and the two data sets are added together from the first data point.
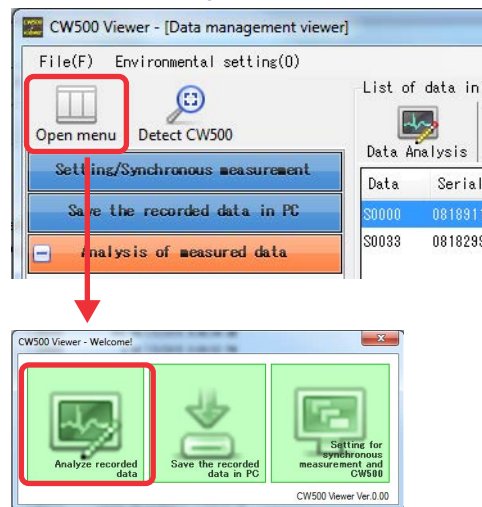
If the number of data points is different between the two sets of recorded data, data is added for the number of data points in the reference recorded data.
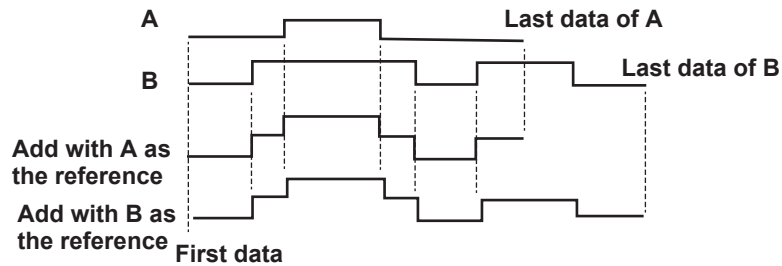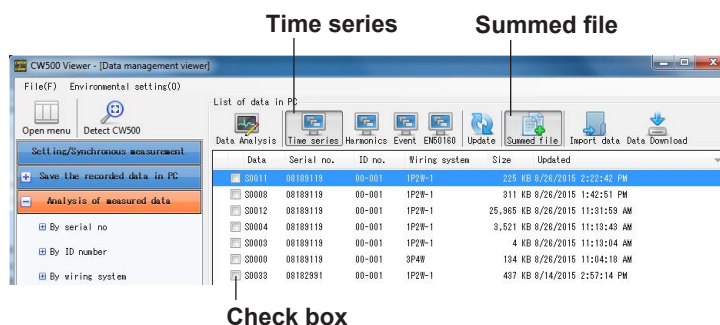

1　On CW500Viewer, click **Open menu**.

On the menu, click **Analyze recorded data**.

The CW500 setting data creation window appears.

2. Click the **Time series** icon and then the **Summed file** icon.

Check boxes appear in the recorded data list.

**Time series**   **Summed file**

Check box

3. Select the check box of the recorded data to be used as the reference. The number "1" appears next to the check box.

4. Select the check box of the recorded data to be added. The number "2" appears next to the check box.

Analyze

Reference data
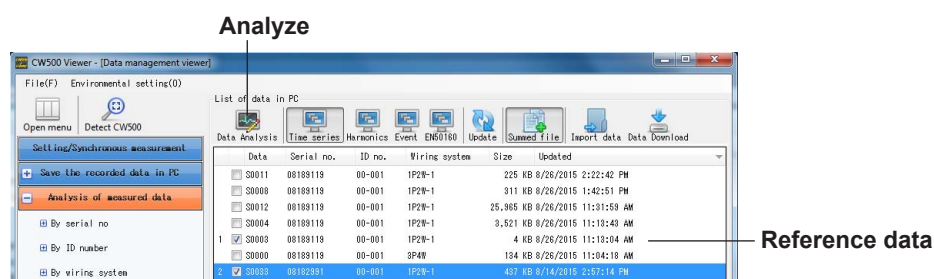
5. Click **Data Analysis**.

A data list of the summed data appears together with the time series analysis graph.

Close

Summed data tab
Original data to sum (2) tab
Reference data (1) tab
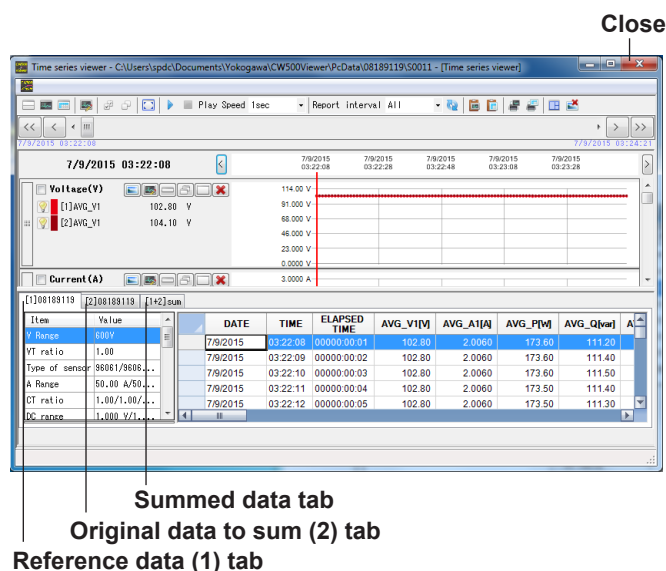
6. Click the close button in the upper right of the window.

A confirmation window for selecting whether to save the summed data appears.

7. To save it, click **Yes**.

A window for setting the file name appears. The default file name is

year (4 digits)_month (2 digits)_day (2 digits)_hour (2 digits)_minute (2 digits)_ second (2 digits).

8. Enter the file name, and click **OK**.

Two sets of summed data using each of the original sets of data as references are saved. The file name is "the specified file name+the reference data file name."

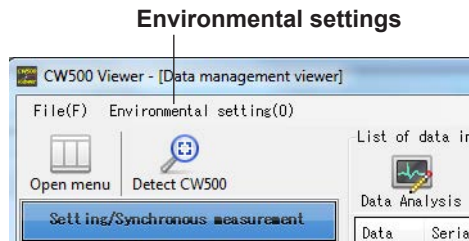The summed data is used for time series analysis.

Summed data of
S0003 and S0011
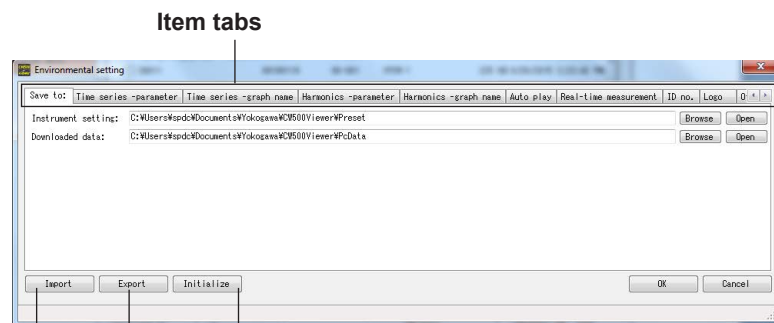
11   Environmental Settings

Displaying the Environmental Setting Window

You can change the environmental settings of CW500Viewer.

1. On the menu bar, click **Environmental setting**.

Environmental settings

The Environmental setting window appears.

Item tabs

Initializes settings
Saves environmental settings
Loads previously created environmental settings

If all the tabs are not displayed, click the left and right arrows in the upper right to display the tab you want to use.
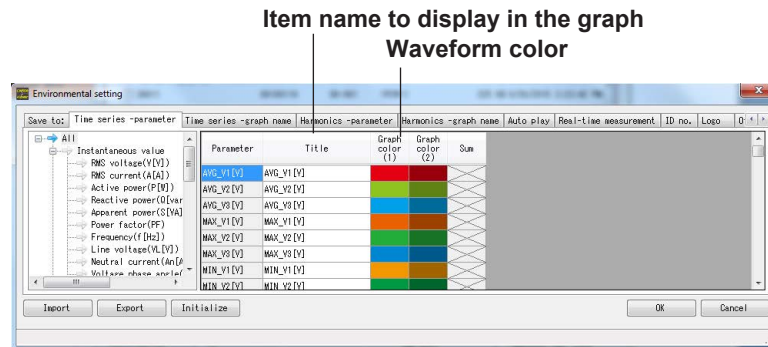
Setting the Save Destination

2. Click the **Save to** tab.

CW500 setup data save destination
Save destination for measured data loaded into the PC
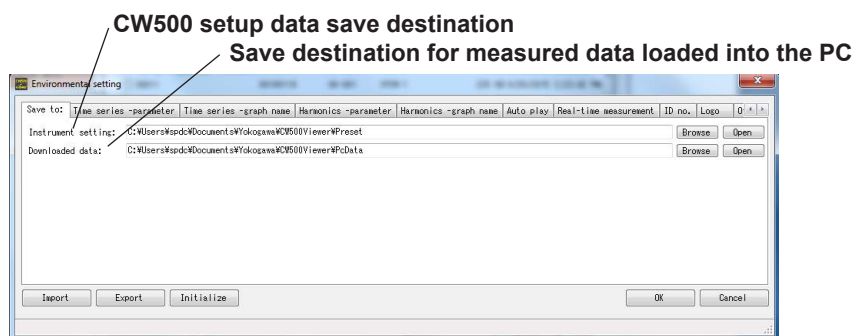
3. Click **Browse**, and set the data save destination.

Configuring the Graph Display

2. Click the **Time series -parameter** tab.

Item name to display in the graph
Waveform color

3. Double-click the **Title** column. The pointer changes into a text pointer, and you can enter text.

4. Double-click the **Graph color** column. A color setting window appears. Set the graph color.

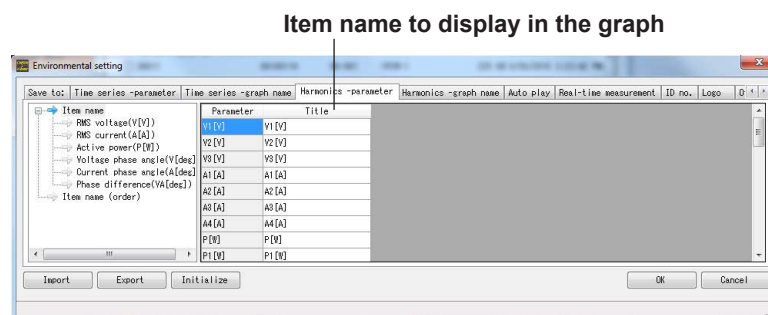## Setting the Measurement Category Name

2. Click the **Time series -graph name** tab.
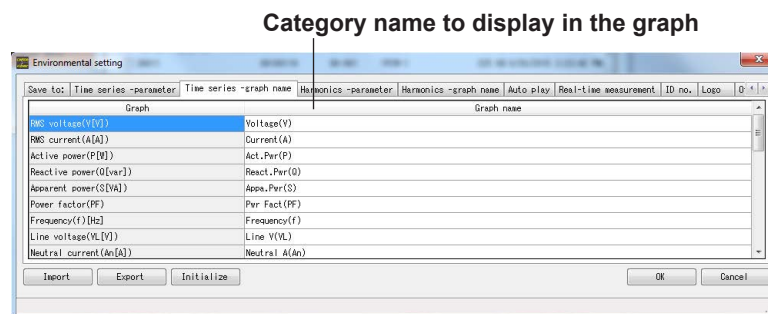
Category name to display in the graph

3. Double-click the **Graph name** column. The pointer changes into a text pointer, and you can enter text.

Setting the Harmonic Analysis Parameter Names

2. Click the **Harmonics -parameter** tab.
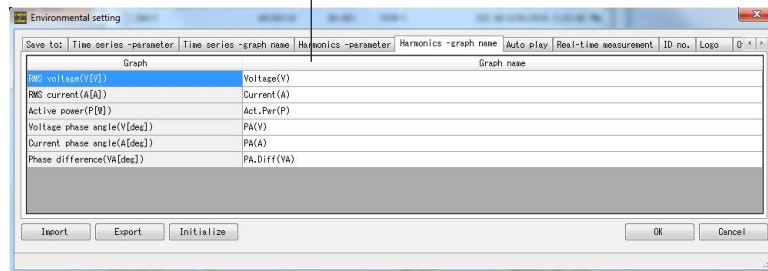
Item name to display in the graph

3. Double-click the **Title** column. The pointer changes into a text pointer, and you can enter text.

Setting the Harmonic Analysis Category Names

2. Click the **Harmonics -graph name** tab.

**Category name to display in the graph**

3. Double-click the **Graph name** column. The pointer changes into a text pointer, and you can enter text.

Setting the Cursor Stop Positions

If a set of data that does not fit in the time axis of the displayed graph is displayed and the cursor is automatically moved (auto play), the cursor stops at the specified position, and the graph is scrolled one data point at a time so that you can read all the data with the cursor.

Here, specify the approximate position where the cursor will be stopped.

2. Click the **Auto play** tab.

Display range

Cursor stop position
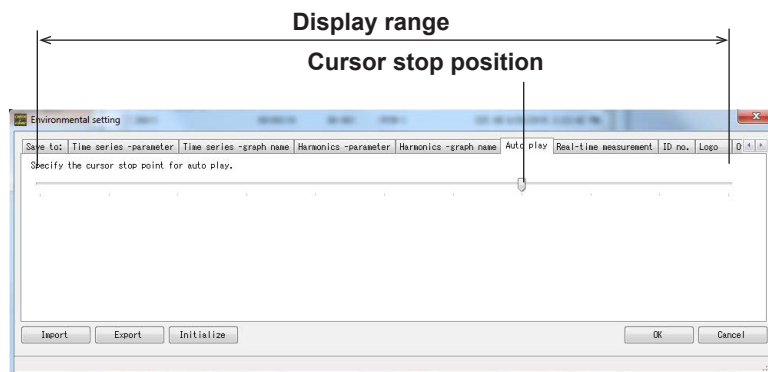
3. Click the left or right side of the knob indicating the stop position. The knob moves between the 10 equally divided positions in the display range.

Setting the Display Refresh Rate and Number of Data Points

Set the display refresh rate and the maximum number of displayed data points to use when displaying or monitoring measured data in real time.
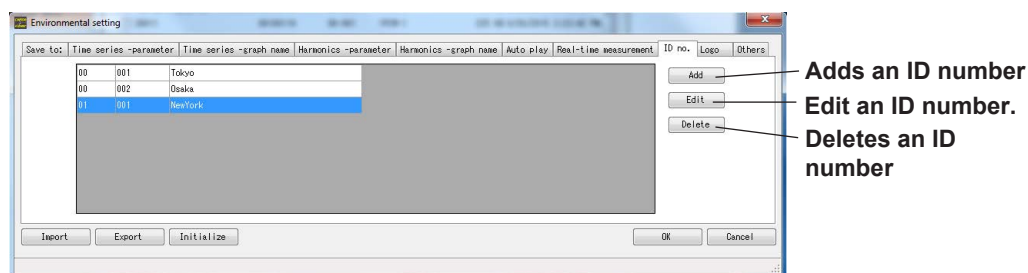
2. Click the **Real-time measurement** tab.
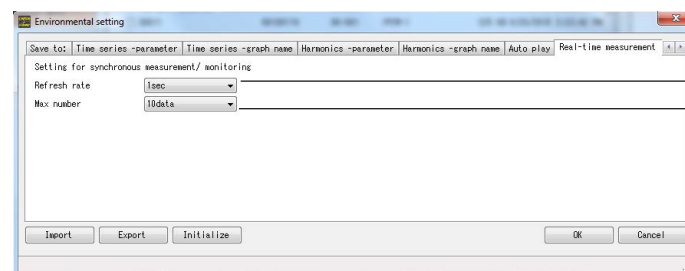
Data update interval

Maximum number of data points to display in a single graph

Setting ID Numbers

2. Click the **ID no.** tab.

Adds an ID number
Edit an ID number.
Deletes an ID number

3. Click **Add or edit**. An ID number registration window appears.

Enter an ID number and its description. When editing, you cannot change the ID number.

ID number　　**Description**

Note

If data with the same ID number exists in the recorded data list, an explanation of the ID number will be displayed next to the ID number of the recorded data search in the window's left frame.

Setting the Image Data to Be Displayed in the Header and Footer

2. Click the **Logo** tab.

Center of the header and footer
Left side of the header and footer　　**Right side of the header and footer**
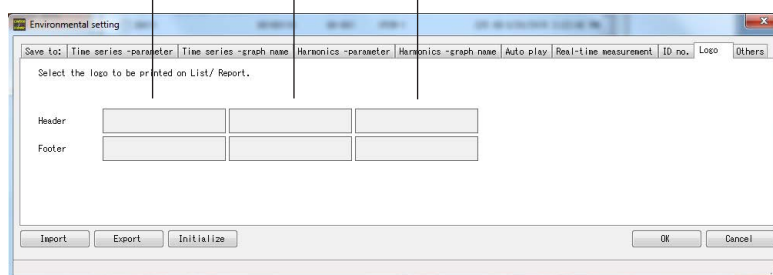
3. Click the area you want the image data to be displayed. A file selection window appears.

4. Select the image data.

Image data that can be added to the header and footer is bitmap data (.bmp extension).
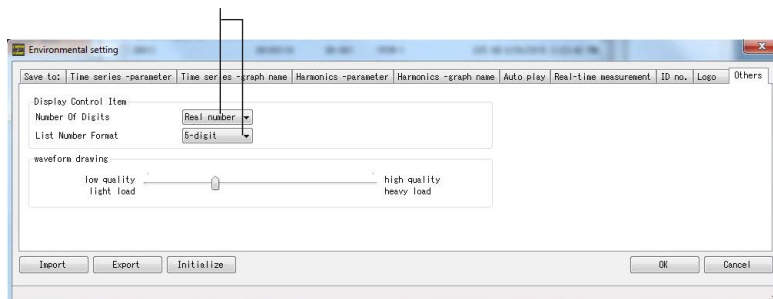The image will be displayed in the specified position.
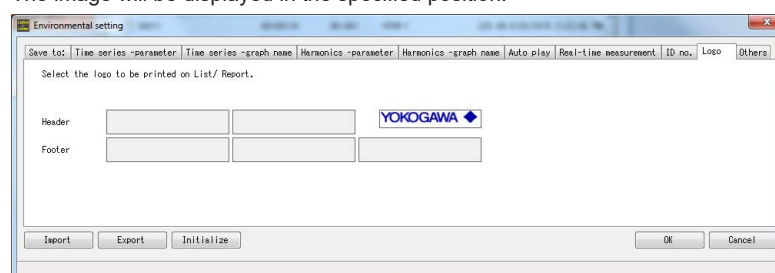
Other Settings

Set the number display format and the number of digits in the list display and the graph display resolution.

  2. Click the Others tab.

List of options

  3. Click the **Number Of Digits** list, and select real number or exponential number.

  4. If you selected real number in step 3, click the **List Number Format** list, and set the number of digits excluding the sign and decimal to 4, 5, or 6.

  5. Use the waveform drawing nob to set the waveform display resolution of detailed event data.

12   Troubleshooting

* Unable to communicate with the CW500 using CW500Viewer over a USB connection
If communication such as synchronous measurement, downloading, and CW500 configuration cannot be performed over a USB connection, click Detect CW500. Then, remove the USB cable from the PC once, and reconnect it.
Next, click Detect CW500.
Check that the serial number of the connected CW500 appears below Save the recorded data in PC.

* File Download Time
The larger the file size, the longer the download time.
If the file size is large, use an SD memory card reader or the like to load data into the PC.
USB data rate: Approx. 27 s to transfer 3 MB internal memory
Bluetooth data rate: Approx. 10.5 min to transfer 3 MB internal memory

* In synchronous or monitoring measurement, the graph and list data updating cannot keep up.
Depending on your PC, updating may not occur at the specified refresh rate.
If the list display shows "----," display updating may be falling behind.
Increase the data updating interval of real-time recording in the environmental settings.

* Unable to connect to the PC using Bluetooth
• Enable the CW500 Bluetooth function.
• From Devices and Printers on the PC, select the CW500 you want to pair with.
• Start CW500Viewer after Bluetooth pairing is complete.