

GL500A Application Manual

Main Functions

- **A Variety of Waveform Displays**

Y-T, X-Y, and FFT waveforms can be displayed on large, easy-to-read screens.

- **Dual-screen Event and Current Data Replay**

Current data for low-speed phenomena and Event data for high-speed phenomena can be displayed on two-tier linked screens.

- **Export to Direct Excel File**

Captured data can be exported directly to an Excel file and displayed as a waveform.

Ready-to-use templates are provided as standard for your convenience.

Note: The Microsoft Excel software program must be installed.

- **Thumbnail Waveform Display**

Captured data waveforms can be displayed as thumbnails for easy confirmation before a data replay operation.

This feature enables the data to be easily checked before the file is opened.

- **Display of Max and Min Values During Data Capture**

The maximum and minimum values for all of the channels can be checked at any time during data capture.

- **Send E-Mail when Alarm is Generated**

When an alarm is generated, this function enables a notification email to be sent to a mobile phone, for example, thereby ensuring that a check can be performed if required.

Note: Internet connection required.

- **Printing**

One touch of a button enables the waveform screen to be printed.

Note: The device must be connected to a printer, and the printer settings made.

- **Help View**

Help buttons that provide simple descriptions of the various functions are assigned to each of the menu setting items to provide ease of use without having to read the User's Manual.

Comparison of the GL500 Application Functions

Function	GL500A Application	GL500 Application
Y-T View	○	○
X-Y View	○	○
FFT View	○	○
Enlarged Digital View		○
GL400 Connection		◎
Review Device		○
Device PC Card Operation		○
Dual-screen display of real-time capture data		○
Screen printout	○	○
Comment input	◎	
Export to Direct Excel File	◎	
Thumbnail Waveform Display	◎	
Alarm History		○
Event Log		○
XY between Cursors	○	
Calculate Data between Cursors	○	○
Replay 2-screen display	○	
Superimpose	○	○
File Linking	◎	
Convert then Save	○	○
Display in Excel		○
Current/Event Data Linked Operation	◎	
Setting Operations While Viewing the Waveform	◎	
Help View	◎	

◎: Major difference

○: Supported

1. System Requirements

Please note that only a GL500A device (with a V2.10 or later firmware version) can be connected with this software.

Make sure that the computer on which you plan to install the software meets the following requirements.

Item	System requirements
OS	Windows 2000, XP (XP recommended)
CPU	Pentium 4, 1.7 GHz or higher recommended
Memory	512 MB or more (1 GB or more recommended)
HDD	100 MB free disk space is required for installing software (1 GB or more recommended for the data capture area). <i>Note: The amount of free disk space required may vary according to the amount of data that will be captured.</i>
Other	TCP-IP port, USB port, CD-ROM drive (for installing from CD) required <i>Note: USB 2.0 required for data transfer at the 1, 2, or 5-ms sampling cycles The fastest sampling interval that can be used with the USB 1.1 or TCP-IP connection is 10 ms.</i>

Note: A computer with the recommended CPU or a higher version is required for capturing data at a high-speed sampling interval.

Note: The recommended memory (1 GB or more) is required when using the Export to Direct Excel File function.

For instructions on how to install the USB driver, please refer to Section 4.2 of the GL500 User's Manual (GL500-UM-152).

For instructions on how to connect the GL500A to a PC, please refer to Section 4.3 of the GL500 User's Manual (GL500-UM-152).

2. Installing the GL500A Application

- (1) Insert the User's Guide CD-ROM provided into the PC CD-ROM drive.
- (2) Click the Taskbar's Start button, and then click the Run... icon to open the "Run" window.
Enter the CD-ROM drive name and \English\GL500A \SETUP.EXE as the name of the file you wish to open. If the disk is in drive D, for example, enter "D:\English\GL500A \SETUP.EXE" in the box to launch the installer. Another method is to open the CD drive in My Computer, select "English" → "GL500A", and then double-click "SETUP.EXE".
- (3) Continue, following the installer instructions on the screen.

CHECKPOINT

Be sure to observe the following points when connecting the GL500A to a PC.

- Do not connect any devices apart from a mouse or a keyboard to any of the other USB terminals on your PC.
 - Set the PC's power-saving functions to Off.
 - Set the Screen Saver to Off.
 - Set the anti-virus software auto update and scan scheduler functions to Off. Also, set the Windows auto update and scheduler functions to Off.
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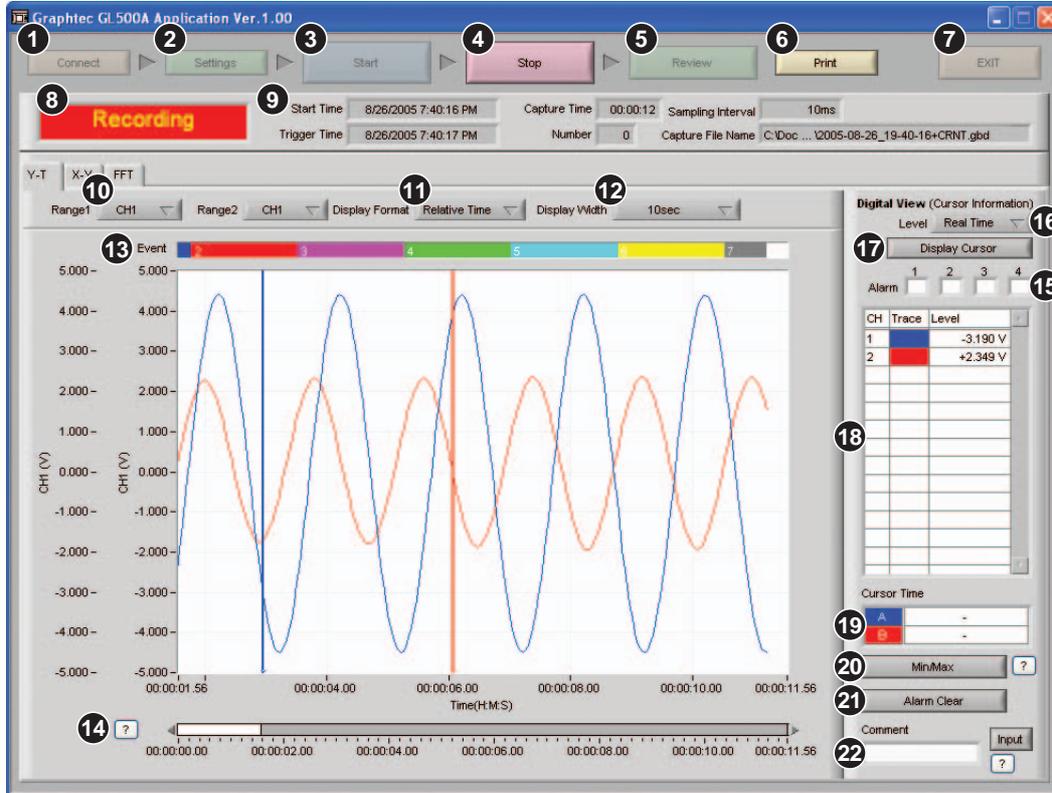
For instructions on how to set the IP address and Device ID, please refer to Section 4.5 of the GL500 User's Manual (GL500-UM-152).

3. Launching the Application

To launch the application, select "Start" → "Programs" → "GL500A".

4. Launch Screen

When the application is launched, the GL500A goes into the Stopped status and a free-running waveform is displayed.

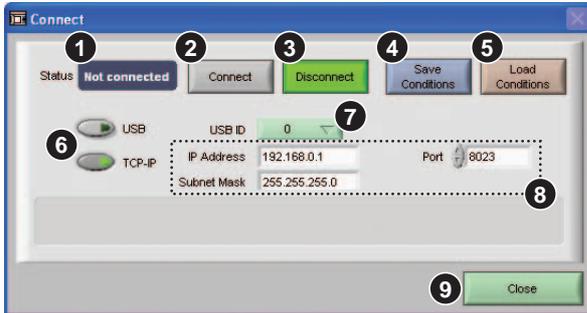


Number	Menu Name	Description								
1	Connect	Click this button to open the connection screen to enable connection with the GL500A.								
2	Settings	Click this button to display the menus for making data capture-related settings.								
3	Start	Click this button to start data capture.								
4	Stop	Click this button to stop data capture . If On has been selected for Event data capture, Event data is received from the GL500A when the GL500A is in the Stopped status. If Event data is not required, abort the data transfer operation.								
5	Review	Click this button to replay the captured data. If data capture has ended, the data captured previously is immediately replayed.								
6	Print	Click this button to print out the waveform. <i>Note: A printer must be connected and printer settings made.</i>								
7	EXIT	Click this button to exit the application.								
8	Status	The current status is displayed in this area. <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="padding: 2px;">Stopped</td> <td style="padding: 2px;">The GL500A is in the Free Running status. Data capture is not performed.</td> </tr> <tr> <td style="padding: 2px;">Armed</td> <td style="padding: 2px;">The GL500A is waiting for a trigger to occur.</td> </tr> <tr> <td style="padding: 2px;">Recording</td> <td style="padding: 2px;">The GL500A is capturing data.</td> </tr> <tr> <td style="padding: 2px;">Finished</td> <td style="padding: 2px;">This message is displayed when the data capture operation has ended. Click the Stop button to return the GL500A to the Stopped status.</td> </tr> </tbody> </table>	Stopped	The GL500A is in the Free Running status. Data capture is not performed.	Armed	The GL500A is waiting for a trigger to occur.	Recording	The GL500A is capturing data.	Finished	This message is displayed when the data capture operation has ended. Click the Stop button to return the GL500A to the Stopped status.
Stopped	The GL500A is in the Free Running status. Data capture is not performed.									
Armed	The GL500A is waiting for a trigger to occur.									
Recording	The GL500A is capturing data.									
Finished	This message is displayed when the data capture operation has ended. Click the Stop button to return the GL500A to the Stopped status.									

Number	Menu Name	Description												
9	Capture Information	<p>The data capture information is displayed in this area.</p> <table border="1"> <tr> <td>Start Time</td> <td>The time at which the Start button was pressed is displayed here.</td> </tr> <tr> <td>Trigger Time</td> <td>The time at which the trigger occurred is displayed here.</td> </tr> <tr> <td>Capture Time</td> <td>The length of time that has elapsed after the trigger occurred is displayed here.</td> </tr> <tr> <td>Number</td> <td>The number of times that data capture was repeated is displayed here.</td> </tr> <tr> <td>Sampling Interval</td> <td>The sampling cycle is displayed here.</td> </tr> <tr> <td>Capture File Name</td> <td>The name of the data capture file is displayed here.</td> </tr> </table>	Start Time	The time at which the Start button was pressed is displayed here.	Trigger Time	The time at which the trigger occurred is displayed here.	Capture Time	The length of time that has elapsed after the trigger occurred is displayed here.	Number	The number of times that data capture was repeated is displayed here.	Sampling Interval	The sampling cycle is displayed here.	Capture File Name	The name of the data capture file is displayed here.
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Trigger Time	The time at which the trigger occurred is displayed here.													
Capture Time	The length of time that has elapsed after the trigger occurred is displayed here.													
Number	The number of times that data capture was repeated is displayed here.													
Sampling Interval	The sampling cycle is displayed here.													
Capture File Name	The name of the data capture file is displayed here.													
10	Y Axis Range 1/2	Two channels can be selected for display on the Y axis grid of the waveform graph. In addition, the Y axis range 1 channel is used as the channel for comment input.												
11	Display Format	<p>Select the X-axis format for the waveform graph.</p> <table border="1"> <tr> <td>sec</td> <td>Display is made in 1-second units.</td> </tr> <tr> <td>Relative Time</td> <td>The amount of time that has elapsed from the start of data capture is displayed.</td> </tr> <tr> <td>Absolute Time</td> <td>The current date and time are displayed.</td> </tr> </table>	sec	Display is made in 1-second units.	Relative Time	The amount of time that has elapsed from the start of data capture is displayed.	Absolute Time	The current date and time are displayed.						
sec	Display is made in 1-second units.													
Relative Time	The amount of time that has elapsed from the start of data capture is displayed.													
Absolute Time	The current date and time are displayed.													
12	Display Width	Specify the display width of one screen in the X axis.												
13	Event Bar	The section where Event data has been captured is displayed here.												
14	Scroll Bar	Use the scroll bar to scroll the waveform.												
15	Alarm Display	Each of the alarm ports lights red when an alarm is generated.												
16	Level	Click this button to change the level value (only during data capture).												
17	Display Cursor	Click this button to call the cursor to the current display position (only during data capture).												
18	Monitor & Trace	The digital values for each channel are displayed in this area. Moreover, clicking the Trace button enables the waveform display for the desired channel to be deleted. (Data capture is still performed even after the waveform display has been deleted.)												
19	Cursor Time	The time at the cursor positions A and B during data capture is displayed.												
20	Min/Max button	Click this button to display the Min/Max screen during data capture.												
21	Alarm Clear	Click this button to clear the current alarm when On has been selected for Alarm Hold.												
22	Comment Input	Comments can be input during a data capture operation. The input position is the channel that was selected for Y Axis Range 1.												

Note: A menu is displayed if you right-click on the waveform graph. Use the "Copy Data" item to make a copy of the displayed screen, but do not use any of the other menu items.

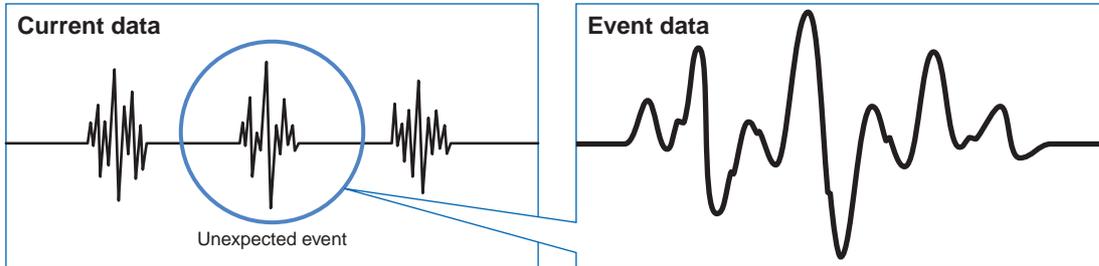
5. Connect Screen



Number	Menu Name	Description						
1	Status	The status is displayed here. <table border="1"> <tr> <td>OK</td> <td>Connected</td> </tr> <tr> <td>NG</td> <td>Not connected</td> </tr> </table>	OK	Connected	NG	Not connected		
OK	Connected							
NG	Not connected							
2	Connect	Click this button to connect the device.						
3	Disconnect	Click this button to disconnect the device.						
4	Save Conditions	Click this button to save the current application settings to a file.						
5	Load Conditions	Click this button to load previously-saved conditions.						
6	Interface buttons	Use these buttons to switch between the USB and TCP-IP interfaces.						
7	USB ID	Use this button to select the USB ID. Make sure that the ID is the same as the one used for the connected GL500A device.						
8	TCP-IP	The TCP-IP settings are performed here. <table border="1"> <tr> <td>IP Address</td> <td>Set the IP address for the GL500A device connected.</td> </tr> <tr> <td>Subnet Mask</td> <td>Set the subnet mask for the GL500A device connected.</td> </tr> <tr> <td>Port Number</td> <td>Set the port number for the GL500A device connected.</td> </tr> </table> <p>(Setting Example) Computer's IP address: 10.0.210.138 Computer's subnet mask: 255.255.255.0 (How to check the GL500A's IP address: Control Panel † double-click Network Connections (does not apply if a wireless connection is used) † Support). The 255 subnet mask digits must be the same for both the computer and the GL500A. In the case of the 255.255.255.0 subnet mask, make the first three digits the same. Accordingly, use 10.0.210.*** for the GL500A's IP address, where *** can be any number in the range from 1 to 155 except for 138. Connection is performed using the IP address for the device that was changed in the application. <i>Note: If the connection destination is an intra-company LAN or similar environment, be sure to consult your network administrator.</i></p>	IP Address	Set the IP address for the GL500A device connected.	Subnet Mask	Set the subnet mask for the GL500A device connected.	Port Number	Set the port number for the GL500A device connected.
IP Address	Set the IP address for the GL500A device connected.							
Subnet Mask	Set the subnet mask for the GL500A device connected.							
Port Number	Set the port number for the GL500A device connected.							
9	Close	Click this button to close the Connection screen.						

6. Basic Operations

The GL500A application enables simultaneous capture of Current (low-speed) and Event (high-speed) data. As shown in the figure at the right, Current data is captured over a long period of time, while Event data is captured when an unexpected event occurs. Event data can be captured to a maximum of 16 blocks at one time.

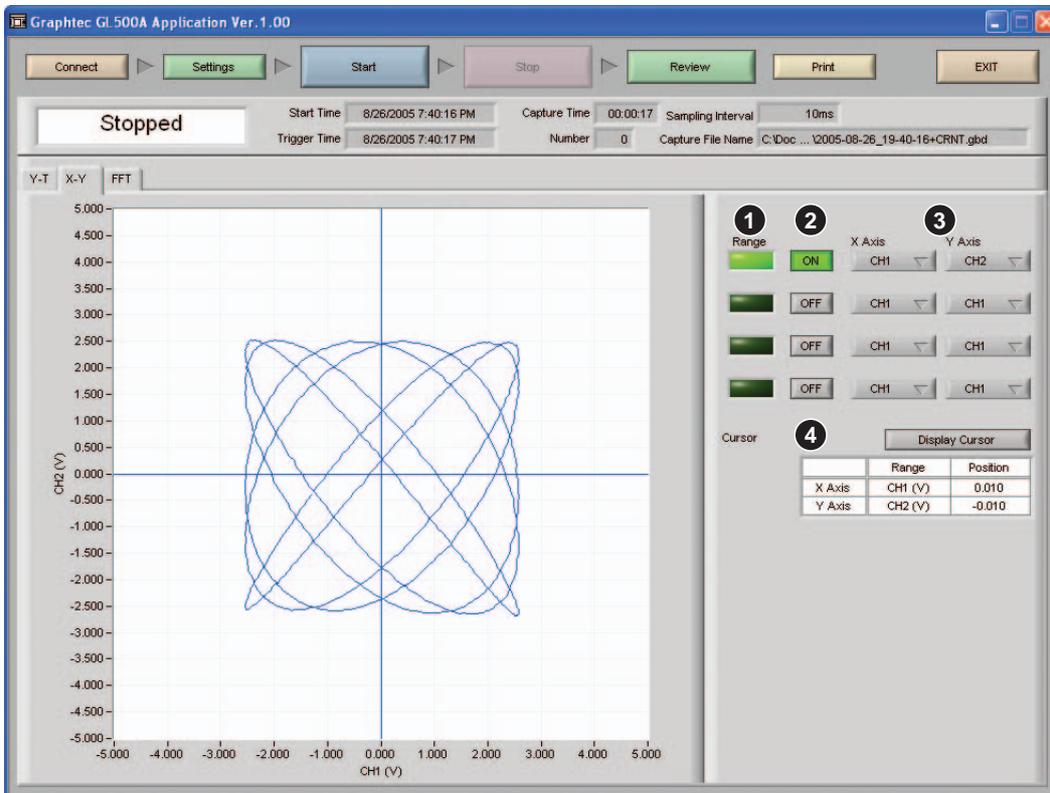


When data capture is started, Current data is captured to a data file created at the computer, while Event data is captured to the GL500A's internal memory. When the Stop button is clicked, all the captured Event data is transferred to the computer.

Data replay can only be performed for data that was transferred to the computer.

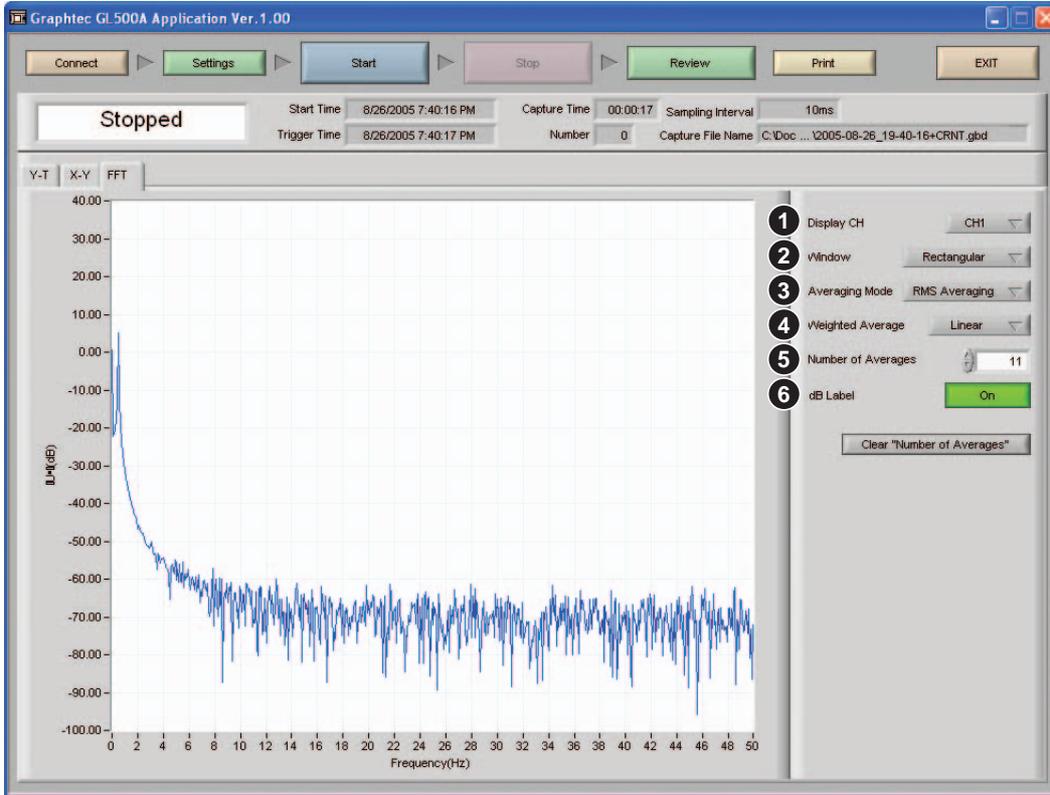
Note: Current data can be captured to the GL500A's internal memory or to a PC card, up to their respective size limitations. However, since data is captured to the computer's large-capacity HDD when the application software is used, data capture via the application will still continue even after capture to the GL500A itself has ended.

7. X-Y Waveform Screen



Number	Menu Name	Description
1	Range	Select the X-Y combination to be displayed on the X and Y axis grids.
2	On/Off	Select On or Off for the X-Y waveform screen.
3	X Axis/Y Axis	Specify the channels to be used for the X and Y axes.
4	Cursor	The cursor values are displayed in this area.

8. FFT Waveform Screen

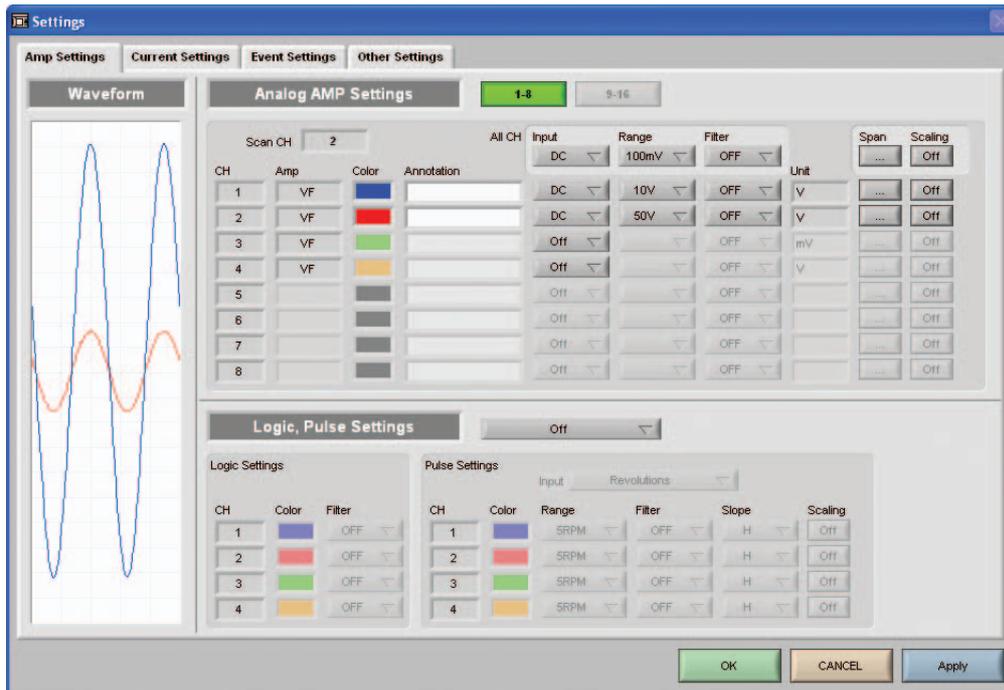


Number	Menu Name	Description
1	Display CH	Specify the channel for waveform display.
2	Window	Specify the type of window for frequency analysis processing.
3	Averaging Mode	Use this mode to perform averaging of the analysis channel.
4	Weighted Average	This mode can be selected when performing averaging.
5	Number of Averages	Specify the number of averages for the averaging mode and weighted average mode parameters.
6	dB Label	Specify dB for the Y axis display format.

9. Settings Screen

Settings can be made while observing changes to the waveform. As almost all of the settings are the same as those made at the GL500A, they can be easily made. To apply the specified settings and close the Settings screen, click the OK button. To apply the specified settings without closing the Settings screen, click the Apply button. To cancel the specified settings and close the Settings screen, click the Cancel button. The specified settings are reflected in the waveform when the Apply button is clicked.

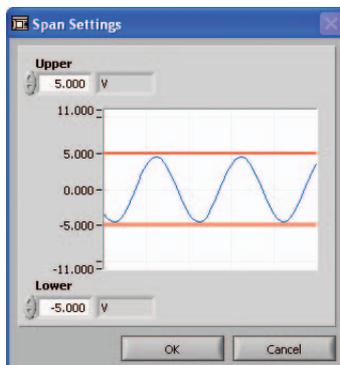
9-1 Amp Settings



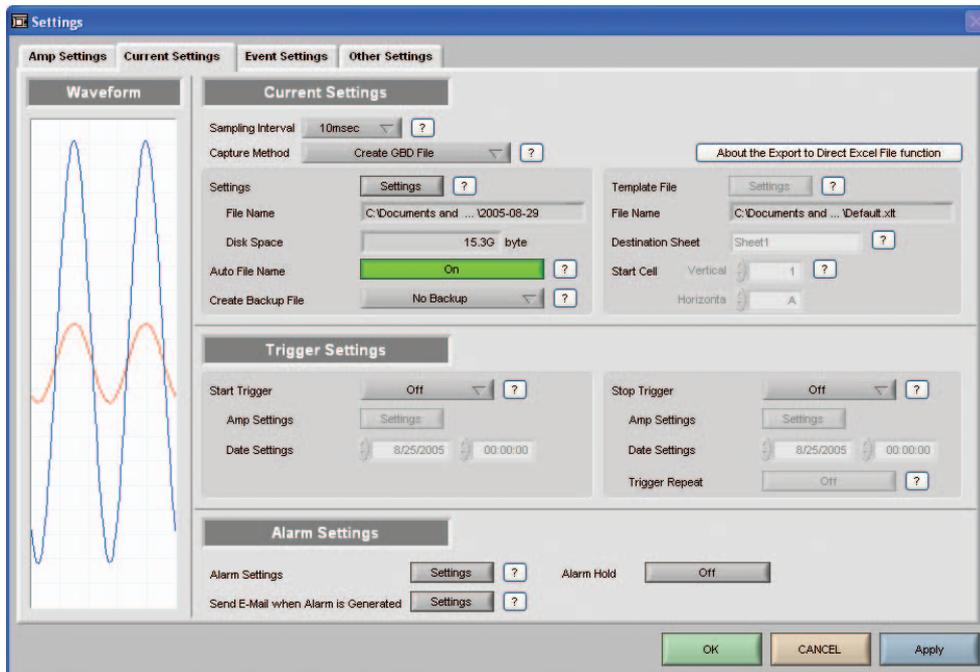
Please refer to Section 3.3 of the GL500 User's Manual (GL500-UM-152) for the settings which are the same as those made at the GL500A.

The All CH span and scaling settings for all the channels can only be made for those channels with the same input and range settings.

The span settings can be adjusted by using the upper and lower cursors, or by the input of numerical values.



9-2 Current (Low-speed) Data Capture Settings



Please refer to Section 3.3 of the GL500 User's Manual (GL500-UM-152) for the settings which are the same as those made at the GL500A.

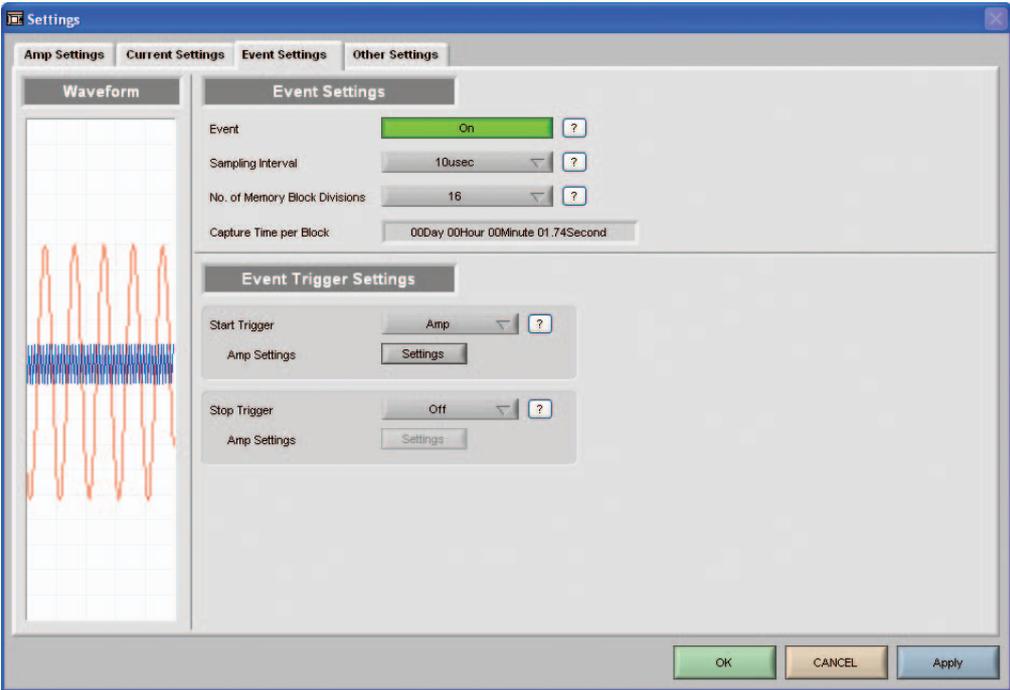
Export to Direct Excel File	<p>Captured data can be exported directly from the GL500A to an Excel file. For the export destination, use one of the templates provided or create your own original template.</p> <table border="1" data-bbox="440 1167 1382 1435"> <tr> <td data-bbox="440 1167 660 1317">Template File</td> <td data-bbox="660 1167 1382 1317">A template file created in Excel has the *.xlt file extension. Several ready-to-use template files are provided for your convenience, but you can also create your original template file if preferred. Please refer to Excel Help for instructions on how to create a template file. (*.xls files can also be used.)</td> </tr> <tr> <td data-bbox="440 1317 660 1350">Destination Sheet</td> <td data-bbox="660 1317 1382 1350">Input the sheet name to be used when outputting the template file.</td> </tr> <tr> <td data-bbox="440 1350 660 1435">Start Cell</td> <td data-bbox="660 1350 1382 1435">Specify the start position for the writing of data. <i>Note: The start cell is included in the file name of the ready-to-use template files.</i></td> </tr> </table> <p><i>Note:</i></p> <ul style="list-style-type: none"> • I The exported template is the same file as the Current data file. A separate sheet is exported for each Event data. • Example: If the name of the Current data export destination sheet is "Test1", the Event data sheet names are as follows: Event 1 sheet name: "Test1_EV01" Event 2 sheet name: "Test2_EV02" • I When using the Export to Direct Excel File function, please note that export of data stops automatically when 65535 points have been exported. • I When an Export to Direct Excel File operation has been completed, be sure to save the data and close the file before starting the next data export operation. • I Do not perform any operations in Excel while an Export to Direct Excel File operation is in progress. Moreover, there is a possibility that data is still being exported to Excel even after the data capture operation has ended. In this case, do not perform any other operations until all the data has been exported to Excel. 	Template File	A template file created in Excel has the *.xlt file extension. Several ready-to-use template files are provided for your convenience, but you can also create your original template file if preferred. Please refer to Excel Help for instructions on how to create a template file. (*.xls files can also be used.)	Destination Sheet	Input the sheet name to be used when outputting the template file.	Start Cell	Specify the start position for the writing of data. <i>Note: The start cell is included in the file name of the ready-to-use template files.</i>
Template File	A template file created in Excel has the *.xlt file extension. Several ready-to-use template files are provided for your convenience, but you can also create your original template file if preferred. Please refer to Excel Help for instructions on how to create a template file. (*.xls files can also be used.)						
Destination Sheet	Input the sheet name to be used when outputting the template file.						
Start Cell	Specify the start position for the writing of data. <i>Note: The start cell is included in the file name of the ready-to-use template files.</i>						
Create Backup File	A backup file is created at the specified interval. However, as only the data between the specified intervals is backed up, please use the link function if you need to restore data.						
Send E-Mail when Alarm is Generated	Up to five emails can be sent when an alarm is generated. This function enables alarm information to be received by people who are not actually at the measurement site. Make the settings in accordance with your computer's email settings.						

Notes on the Sampling Interval:

Since the 1, 2, and 5 ms sampling interval settings that can be specified for a USB 2.0 connection place a considerable processing load on the computer, scroll bar functions such as the display of past data and changing the width of the displayed waveform are disabled while data is being captured.

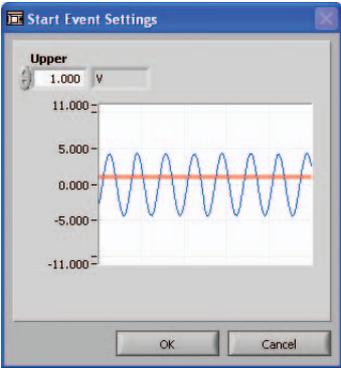
If data is dropped during data capture, select On for "Decimated Waveform Display" in the "Other" menu settings.

9-3 Event (High-speed) Data Capture Settings

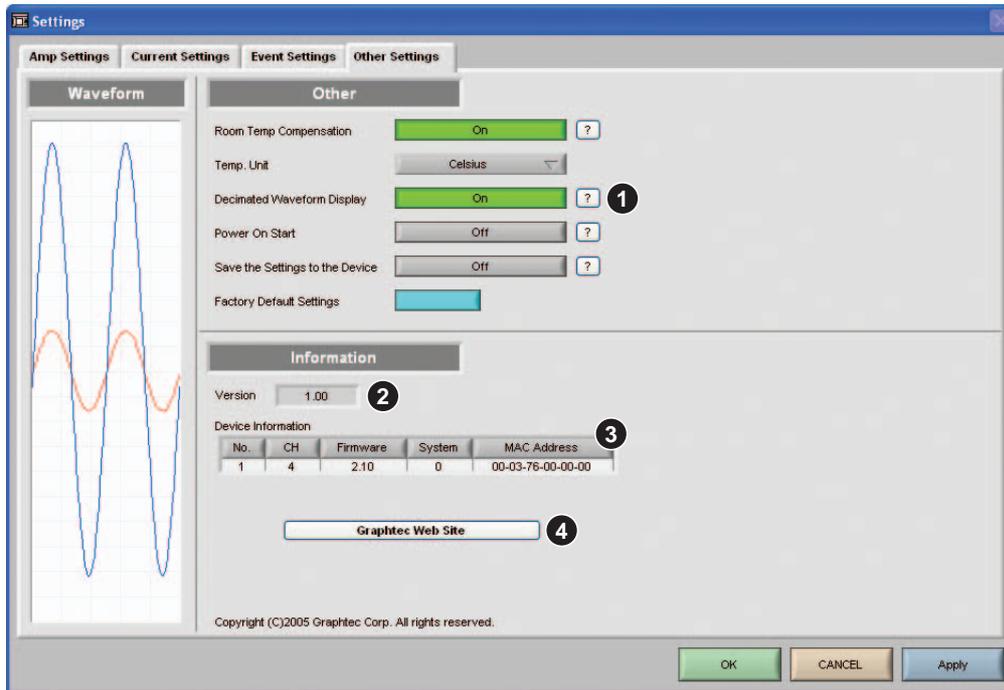


Please refer to Section 3.3 of the GL500 User's Manual (GL500-UM-152) for the settings which are the same as those made at the GL500A.

The trigger position can be specified by using one or both cursors, or by the input of numerical values.



9-4 Other Settings

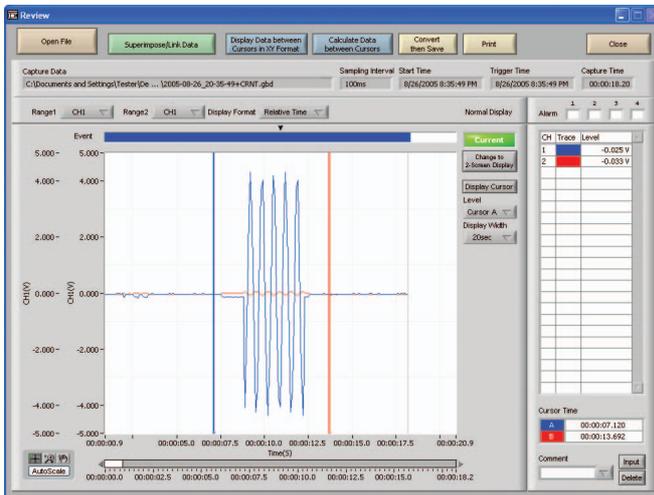
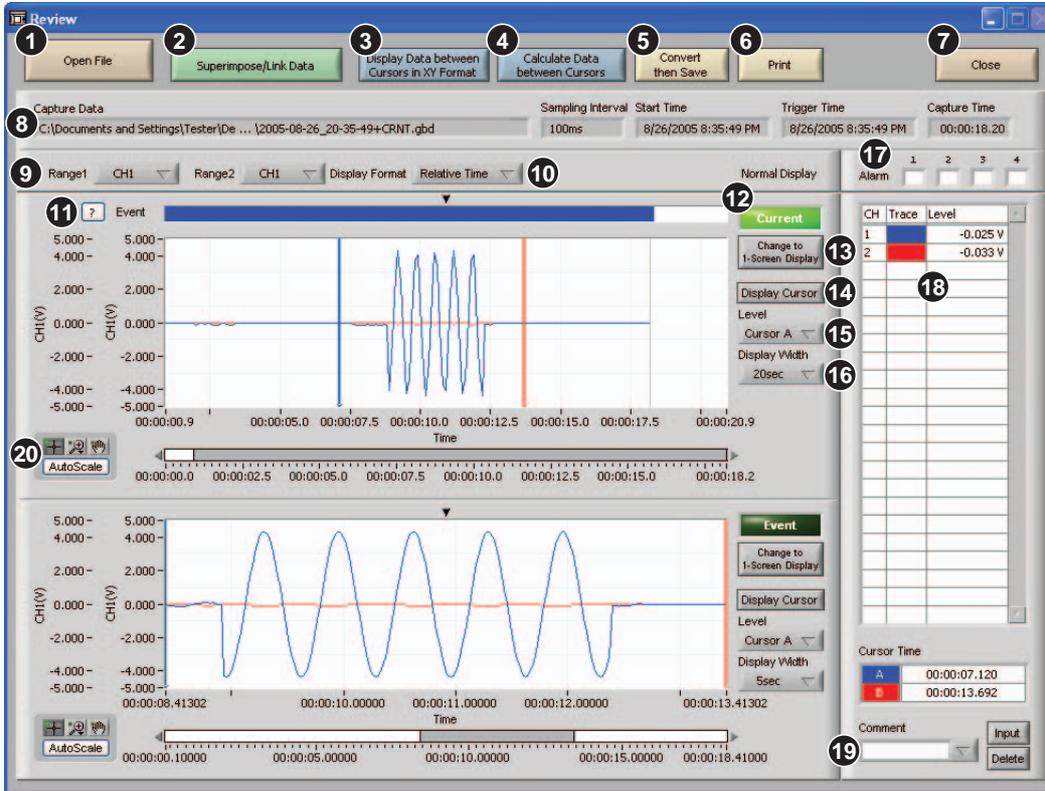


Please refer to Section 3.3 of the GL500 User's Manual (GL500-UM-152) for the settings which are the same as those made at the GL500A.

Number	Menu Name	Description
1	Decimated Waveform Display	The waveform data is shown in a decimated display format. (The captured data is not affected.) Please note the following: <ul style="list-style-type: none"> • Overall performance speeds up (this is particularly effective when the computer is slow). • Select On if a fast sampling interval has been selected and the computer is not able to keep up. • Instantaneous signal display may not be possible in some cases.
2	Version	The application version number is displayed here.
3	Device Information	The number of channels and the device version number are displayed here.
4	Graphtec Web Site	If your computer is connected to the Internet, click this button to display the Graphtec web site. <i>Note: A Web browsing environment is required.</i>

10. Replay Screen (1-Screen/2-Screen)

10-1 Screen



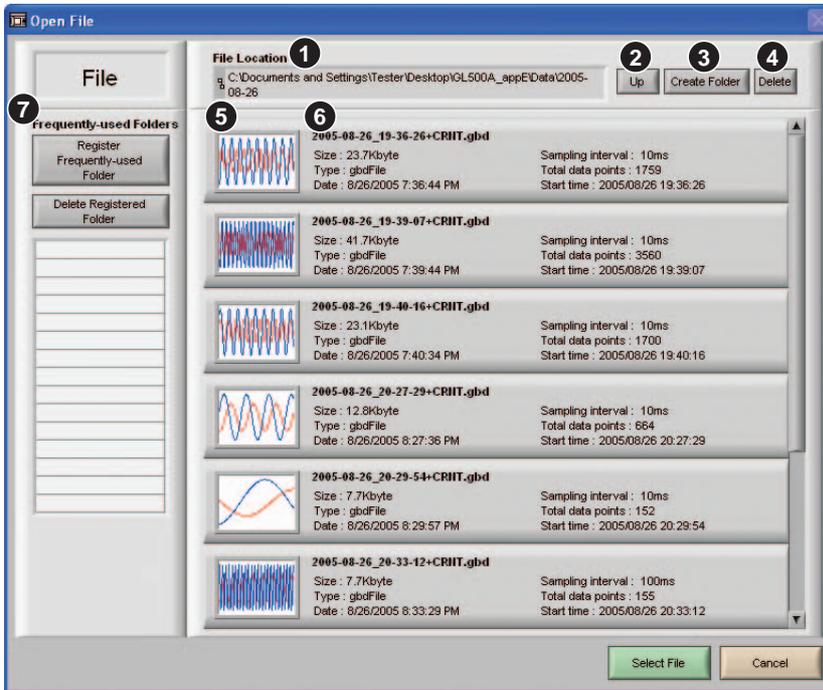
Number	Menu Name	Description
1	Open File	Select the data that you want to replay.
2	Superimpose/Link Data	Superimpose: Multiple files can be superimposed on top of each other to enable the viewing of the correlation between waveforms. Link: Multiple files can be linked for display.
3	Display Data between Cursors in XY Format	Only the data in the range between the cursors is displayed in X-Y format.
4	Calculate Data between Cursors	Only the data in the range between the cursors is calculated.
5	Convert then Save	The data between the cursors, or all the data, is saved as a GBD or CSV file.

Number	Menu Name	Description										
6	Print	Click this button to print out the waveform graph.										
7	Close	Click this button to return to the screen that was in use prior to selection of the replay screen.										
8	Capture Information	<p>The data capture information is displayed in this area.</p> <table border="1"> <tr> <td>Capture Data</td> <td>The replay file name is displayed here.</td> </tr> <tr> <td>Sampling Interval</td> <td>The sampling cycle is displayed here.</td> </tr> <tr> <td>Start Time</td> <td>The time at which data capture started is displayed here.</td> </tr> <tr> <td>Trigger Time</td> <td>The time at which the trigger occurred is displayed here.</td> </tr> <tr> <td>Capture Time</td> <td>The data capture time is displayed here.</td> </tr> </table>	Capture Data	The replay file name is displayed here.	Sampling Interval	The sampling cycle is displayed here.	Start Time	The time at which data capture started is displayed here.	Trigger Time	The time at which the trigger occurred is displayed here.	Capture Time	The data capture time is displayed here.
Capture Data	The replay file name is displayed here.											
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Start Time	The time at which data capture started is displayed here.											
Trigger Time	The time at which the trigger occurred is displayed here.											
Capture Time	The data capture time is displayed here.											
9	Y Axis Range 1/2	Select the X and Y display channels.										
10	Display Format	<p>Select the X-axis format for the waveform graph.</p> <table border="1"> <tr> <td>sec</td> <td>Display is made in 1-second units.</td> </tr> <tr> <td>Relative Time</td> <td>The amount of time that has elapsed from the start of data capture is displayed.</td> </tr> <tr> <td>Absolute Time</td> <td>The current date and time are displayed.</td> </tr> </table>	sec	Display is made in 1-second units.	Relative Time	The amount of time that has elapsed from the start of data capture is displayed.	Absolute Time	The current date and time are displayed.				
sec	Display is made in 1-second units.											
Relative Time	The amount of time that has elapsed from the start of data capture is displayed.											
Absolute Time	The current date and time are displayed.											
11	Event Bar	The section where Event data has been captured is displayed here. Moreover, the Event data at the triangular mark in the center of a 2-screen display is displayed on the event waveform in the lower part of the second screen.										
12	Change Current/ Event Active Screen	Cursor operations can be used to specify one of the two screens as the active screen. Information for the active screen is displayed in the Monitor area.										
13	Change to 1- Screen Display	Clicking the Change to 1-Screen Display button on either of the Current and Event screens changes the 2-screen display to a single screen to enable the waveform to be viewed on a larger screen. When the 1-screen display has been selected, the Change to 2-screen Display button is displayed.										
14	Display Cursor	Click this button to call the cursor to the current display position.										
15	Level	Click this button to select the level value to be displayed in the Digital View format.										
16	Display Width	Specify the display width of one screen in the X axis.										
17	Alarm Display	Each of the alarm ports lights red when an alarm is generated.										
18	Monitor & Trace	The digital values for each channel are displayed in this area. Moreover, clicking the Trace button enables the waveform display for the desired channel to be deleted.										
19	Comment Input	<p>Comments can be input, changed and deleted at the Replay Screen.</p> <table border="1"> <tr> <td>Input</td> <td>If a comment has already been input during a data capture operation, click the Input button to change it. If a comment has not been input, input a comment as required.</td> </tr> <tr> <td>Delete</td> <td>Click the Delete button to delete the comment.</td> </tr> </table> <p>The input position is the channel that was selected for Y axis range 1. If a previously-input comment is selected, the cursor moves to the input position.</p>	Input	If a comment has already been input during a data capture operation, click the Input button to change it. If a comment has not been input, input a comment as required.	Delete	Click the Delete button to delete the comment.						
Input	If a comment has already been input during a data capture operation, click the Input button to change it. If a comment has not been input, input a comment as required.											
Delete	Click the Delete button to delete the comment.											
20	Waveform Operation Tools	<p>Hand: Use this tool to drag the waveform.</p> <p>Magnifying glass: Use this tool to enlarge or reduce the waveform.</p> <p>Cross: Use this tool to move the cursor.</p>										

10-2 Open File

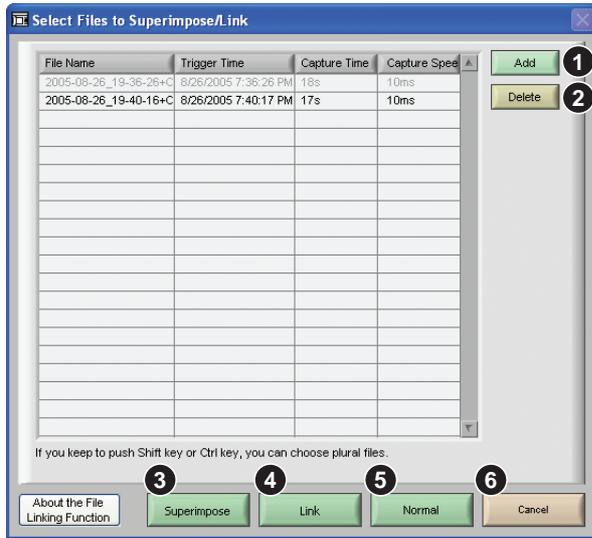
Waveforms of the captured data can be displayed in a thumbnail format to enable easy confirmation of the data without having to open each file. Moreover, frequently-used folders can be easily registered to simplify access to the data capture files.

(The thumbnail display function is only available for use with data captured using the GL500A application software).



Number	Menu Name	Description						
1	File Location	The current location is displayed here.						
2	Up	Click this button to move up one layer.						
3	Create Folder	Click this button to create a folder in the current layer.						
4	Delete	Click this button to delete the specified file or folder.						
5	Thumbnail	<p>The waveforms are displayed as small images.</p> <table border="1"> <tr> <td>Waveform Icon</td> <td>A waveform of the captured data is displayed.</td> </tr> <tr> <td></td> <td>This icon is displayed if there is no thumbnail information available for the captured data (such as when the thumbnail image was inadvertently deleted or the data was captured using the GL500 application software).</td> </tr> <tr> <td></td> <td>The Excel icon is displayed if an Export to Direct Excel File template has been selected.</td> </tr> </table>	Waveform Icon	A waveform of the captured data is displayed.		This icon is displayed if there is no thumbnail information available for the captured data (such as when the thumbnail image was inadvertently deleted or the data was captured using the GL500 application software).		The Excel icon is displayed if an Export to Direct Excel File template has been selected.
Waveform Icon	A waveform of the captured data is displayed.							
	This icon is displayed if there is no thumbnail information available for the captured data (such as when the thumbnail image was inadvertently deleted or the data was captured using the GL500 application software).							
	The Excel icon is displayed if an Export to Direct Excel File template has been selected.							
6	File Information	The file information is displayed here.						
7	Frequently-used Folders	Click on a blank area in the list to invert the displayed folder and then move to the layer where you want to register the folder, or else use a single click to invert the displayed folder and then click the Register Frequently-Used Folder button to register the folder in the list. If the folder has already been registered, it will be re-registered at the new location. Double-click a registered folder to move to the registered folder layer.						

10-3 Superimposing Data and Linking Multiple Data Files

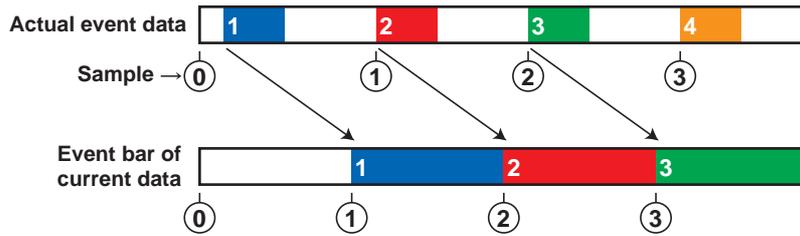


Number	Menu Name	Description
1	Add	Click this button to add a file.
2	Delete	Click this button to delete a file.
3	Superimpose	Click this button to superimpose a file on top of another one.
4	Link	Click this button to link files. <i>Note: Only data that was captured under the same conditions can be linked.</i>
5	Normal	Click this button to return the display to the Normal display format.
6	Cancel	Click this button to close the screen.

11 Other Usage Precautions

- Points to note on the relationship between Current and Event data when a slow data capture cycle has been selected for Current data

The waveform screens displayed while the GL500A is in the Free Running status or while it is capturing data are drawn using a different cycle from that used by the application software, and therefore they do not always match. Even if Event data is being drawn at the GL500A, the actual capture of Event data is determined by each Current data capture cycle, and therefore a time lag will occur.



The specifications, etc., in this manual are subject to change without notice.

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GRAPHTEC CORPORATION
