

Application Software

USER'S MANUAL

MANUAL NO. APS(GL800)-UM-151





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1. Main Features

1-1 A Variety of Display Formats

Data can be viewed in Y-T, X-Y, Digital, Meter, and Report formats, on large, easy-to-read screens. In the Y-T display screen, display can be either enlarged or scrolled vertically.



1-2 Simple and Easy to Use

Large icons make it simple and easy to control the waveforms. Time axes, spans, waveform positions can be changed easily.



1-3 Multichannel Measurement

A maximum of 200 channels can be measured with one device, and 500 channels with multiple devices connected. Displayed waveforms can be grouped, and you can select and check a desired waveform among many of them (up to four groups can be set per device).

ALL G1	G2	G3 G	4
СН	Level	Unit	A
CH1(Room	+24.4	degC	
CH2 (Outs	+24.5	degC	

ALL	G2 G2	G3 G	}4
СН	Level	Unit	A
CH3	+0.4836	V	
CH4	+0.4836	V	
CH5	+0.4836	V	

1-4 Export to Direct Excel File Function

Captured data can be exported directly to an Excel file and displayed as graphs. Ready-to-use template files are provided as standard for your convenience. (Note: The Microsoft Excel program must be installed.)

1-5 Thumbnail Waveform Display

Before replaying captured data, the waveforms can be checked by referring to the small images (thumbnails) provided next to each file name. These thumbnails provide easy confirmation of the data before opening the file.

2007-01-25_ Size (bytes) : 9732	_ 18-04-50.gbd Day Updated : 2007/01/25	Time Updated : 18:05:03
2007-01-25_ Size (bytes) : 33590	_18-02-09.gbd Day Updated : 2007/01/25	Time Updated : 18:03:44
2007-01-25 Size (bytes) : 14390	_ 17-37-49.gbd Day Updated : 2007/01/25	Time Updated : 17:38:07

1-6 Real-time Calculation Functions

During data capture and data replay operations, up to four calculation operations can be performed. The calculation results can be viewed as a waveform.

1-7 Send Email 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: An email sending environment is required.)

1-8 Printing Function, Screen Save Function

The waveform screen can be printed out on a printer, and screen copies saved to a file. (Note: To use the printing function, the device must be connected to a printer.)

1-9 Help Function

Help buttons that provide simple descriptions of the various functions are assigned to each of the menu setting items to provide ease of use.



2. System Requirements

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

Item	System requirements
OS	Windows 2000, XP
CPU	Pentium 4: 1.7 GHz or higher
Memory	256 MB or more
HDD	20 MB additional space is required for installing software.
Display	1024 x 768 resolution or higher, 65535 colors or more (16-bit or more)
Other	USB port, TCP-IP port, CD-ROM drive (for installing from CD)
Other	Microsoft Excel software (for the Export to Direct Excel File and Display in Excel functions)

CHECKPOINT

Even when using a PC that meets the system requirements, measurement data may not be captured correctly depending on the PC status (e.g. running other applications or insufficient memory capacity in the storage media used). Exit all other applications before capturing data to the internal hard disk.

3. Installing the USB Driver

This chapter describes how to install the USB driver.

Checking the version of your USB driver

This section describes how to view the version of the USB driver if it is already installed.

- (1) Opening "Device Manager"
 Select "Control Panel" → "System" → "Hardware" tab or right-click "My Computer", select "Properties" → "Hardware" tab → "System Properties" window, and then click the "Device Manager" button.
- (2) In the "Device Manager" window, open "USB (Universal Serial Bus) Controller". Confirm that "Graphtec DM/GL/WR Series USB Driver" is shown. Right-click it and select "Properties".
- (3) Updating the driver Select the "Driver" tab and click the "Driver Details" button.
- (4) Select [...\GTCUSBR.SYS] to view the version of the driver file.

Installing the USB driver

This section describes how to install the USB driver.

- (1) Insert the User's Guide CD-ROM provided as a standard accessory into the PC's CD-ROM drive.
- (2) Connecting the GL800 to the PC
 Connect the GL800 to the PC using the USB cable, and then turn the power on.
- (3) Install the USB driver. The installation procedure depends on the type of operating system and whether or not you are installing the driver for the first time.
 - Windows XP: Driver software is to be installed for the first time. Driver software is already installed.
 - Windows 2000: Driver software is to be installed for the first time. Driver software is already installed.

• Windows XP: Driver software is to be installed for the first time.

Installing the USB driver

- Detecting the hardware Connect the USB cable to the PC and GL800. The "Found New Hardware" message appears.
- (2) Starting the wizard In the "Found New Hardware Wizard" window, select "Install from a list or specific location (Advanced)" under "What do you want the wizard to do?" and click "Next".
- (3) In the "Please choose your search and installation options." window, select "Don't search. I will choose the driver to install." and click "Next".
- (4) In the "Select the device driver you want to install for this hardware." window, click "Have Disk".
- (5) In the "Install from Disk" window, browse the CD-ROM under "Copy manufacturer's files from", select "USB DRIVER" → "GTCUSBR.INF" and click "OK".
- (6) In the "Select the device driver...." window, "Graphtec DM/GL/WR Series USB Driver" appears in the "Model" box. Select it and click "Next".
- (7) Installing the driver

Windows XP starts installing the driver. Depending on the OS settings, the following error message may be displayed: "The software you are installing for this hardware: GL800 has not passed Windows Logo testing to verify its compatibility with Windows XP." Click the "Continue" button to proceed with the installation.

(8) Completing installation The "Completing the Found New Hardware Wizard" window appears. Click "Finish" to exit the wizard.

• Windows XP: Driver software is already installed.

Updating the USB driver

- (1) Opening "Device Manager"
 Select "Control Panel" → "System" → "Hardware" tab or right-click "My Computer", select "Properties" → "Hardware" tab → "System Properties" window, then click the "Device Manager" button.
- (2) In the "Device Manager" window, open "USB (Universal Serial Bus) Controller". Confirm that "Graphtec DM/GL/WR Series USB Driver" is shown. Right-click it and select "Properties".
- (3) Updating the driver Select the "Driver" tab and click "Update Driver".
- (4) Starting the update wizard

The "Hardware Update Wizard" appears. Select "Install from a list or specific location (Advanced)" under "What do you want the wizard to do?" and click "Next".

- (5) In the "Please choose your search and installation options." window, select "Don't search. I will choose the driver to install." and click "Next".
- (6) In the "Select the device driver you want to install for this hardware." window, click "Have Disk".
- (7) In the "Locate File" window, browse the CD-ROM, select "USB DRIVER" → "GTCUSBR.INF" and click "Open".
- (8) Return to the "Select the device driver" window and click "Next".
- (9) Installing the driver

Windows XP starts installing the driver. Depending on the OS setting, "The software you are installing for this hardware: GL800 has not passed Windows Logo Testing to verify its compatibility with Windows XP" message may appear. Simply click "Continue Anyway".

(10) Completing the installation

The "Completing the Hardware Update Wizard" window appears. Click "Finish" to exit the wizard.

• Windows 2000: Driver software is to be installed for the first time.

Installing the USB driver

- Starting the wizard
 Connect the USB cable to the PC and the GL800. The "Found New Hardware" wizard appears.
- (2) In the "Found New Hardware Wizard" window, select "Search for a suitable driver for my device (Recommended)" under "What do you want the wizard to do?" and click "Next".
- (3) In the "Locate Driver File" window, select "CD-ROM drive" under "Optional search locations" and click "Next".
- (4) Browse the CD-ROM, select "USB DRIVER" → "GTCUSBR.INF" and click "OK".
- (5) "The wizard found a driver" message appears. Click "Next".
- (6) Completing installation The "Completing Found New Hardware Wizard" window appears. Click "Finish" to exit the wizard.

• Windows 2000: Driver software is already installed.

Updating the USB driver

- (1) Opening "Device Manager"
 Select "Control Panel" → "System" → "Hardware" tab or right-click "My Computer", select "Properties" → "Hardware" tab → "System Properties" window, then click the "Device Manager" button.
- (2) In the "Device Manager" window, open "USB (Universal Serial Bus) Controller". Confirm that "Graphtec DM/GL/WR Series USB Driver" is shown. Right-click it and select "Properties".
- (3) Updating the driver Select the "Driver" tab and click "Update Driver".
- (4) Starting the update wizard "Upgrade Device Driver Wizard" appears. Click "Next".
- (5) In the "Install Hardware Device Drivers" window, select "Display a list of the known drivers for this device so that I can choose a specific driver." under "What do you want the wizard to do?" and click "Next".
- (6) In the "Select a Device Driver" window, click "Have Disk".
- (7) In the "Locate File" window, browse the CD-ROM, select "USB DRIVER" → "GTCUSBR.INF" and click "OK".
- (8) Return to the "Select a Device Driver" window and click "Next".
- (9) In the "Start Device Driver Installation" window, click "Next".
- (10) Completing installation

The "Completing the Upgrade Device Driver Wizard" window appears. Click "Finish" to exit the wizard.

4. Connecting to a PC (Personal Computer)

4-1 Connecting via USB

The GL800 is connected to a PC via a USB cable.



CHECKPOINT

When using a USB cable, a USB driver must be installed in the PC. Please see Section 3, "Installing the USB Driver" for the installation procedure. LAN connector. Make sure the cable is inserted into the correct connector.

• Use an A-B type USB cable to connect the GL800 to a PC.



4-2 Connecting via LAN

It can also be connected via a LAN cable.



CHECKPOINT

Depending on your usage, use one of the following types of LAN cables.

LAN Cable Types

• Use a crossing cable when connecting directly to a PC, without using a hub.



• Use a straight cable to connect to a PC through a hub.



4-3 Setting IP Address or USB ID

To connect to a PC, configure the device's interface settings.

USB Settings

Press the "MENU" key five times to open "I/F Settings". Configure "USB ID Settings".

Power off and restart to make the settings take effect.



TCP-IP Settings

Press the "MENU" key five times to open "I/F Settings". Configure "TCP-IP Settings".

Set "IP Address", "Subnet Mask", "Port Number", and "Gateway". Then power off and restart to make the settings take effect.



Example of TCP-IP Settings

Connecting one PC and one GL800

Refer to the following settings if you are not connecting to a corporate LAN or other networks. Connect GL800 to a PC with a crossover cable.

PC's IP Address	192. 168. 1. 1
GL800's IP Address	192. 168. 1. 2
IP Address of second and more GL800s	192. 168. 1.3 (increase the number replacing "3" with 4, 5, 6, and so on)

CHECKPOINT

In this case, always set the subnet mask to "255.255.255.0".

In this case, always set the port number to "8023".

Setting PC's IP Address (Windows XP)

Select "Start" button \rightarrow "Control Panel" \rightarrow "Network Connections" \rightarrow "Local Area Connection" \rightarrow "Properties" \rightarrow "Internet Protocol (TCP/IP)" \rightarrow "Properties", click to select "Use the following IP address" check box, set "IP address" and "Subnet mask", and then click "OK".

🕹 Local Area Connection Properties 🛛 🔹 🔀	Internet Protocol (TCP/IP) Properties	2 🔀
General Authentication Advanced	General	
Connect using:	You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.	
Configure	Obtain an IP address automatically	
This connection uses the following items:	🕞 💽 Use the following IP address: ———————————————————————————————————	
Client for Microsoft Networks	IP address: 192.168.1.1	
Pine and Printer Sharing for Microsoft Networks Qos Packet Scheduler	Subnet mask: 255 . 255 . 0	
¬ ¬ ¬ ¬ ¬ ¬ Totocol (TCP/IP)	Default gateway:	
Install Uninstall Properties	Obtain DNS server address automatically	
Description	O Use the following DNS server addresses:	
Allows your computer to access resources on a Microsoft	Preferred DNS server:	
	Alternate DNS server:	
Show icon in notification area when connected	Advanced	

5. Installing the GL800 Application Software

This chapter describes how to install the application software.

- (1) Insert the User's Guide CD-ROM provided into the PC's CD-ROM drive.
- (2) Click the Taskbar's Start button, and then click the Run... icon to open the "Run" window.
- (3) Enter the CD-ROM drive name and \English\GL800-APS\Setup.exe as the name of the file you wish to open. If the disk is in drive D, for example, enter "D\English\GL800-APS\Setup.exe" in the box and then click "OK" to launch the installer.
- (4) Follow the instructions on the screen to continue with the installation.

CHECKPOINT

Be sure to observe the following points when connecting the GL800 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.

6. Launching the Software

Click the Taskbar's "Start" button \rightarrow "Programs" \rightarrow "GL800APS" \rightarrow "GL800APS" to launch the application software. Once the program has started up, the following screen is displayed.

Connect (P5) Review PC CSV tile batch conversion Evideged Y-Fidupley Protect New Screen Evid Start Time Capture Stettings Capture Stettings Capture Stettings Capture Stettings Review Device Atarm Statticat.Log Display Start Time Capture Stettings Capture Stettings Number Start Time Start Time Number Start Time Start Time<	GL800-APS Ver 1.00	
Centure Setting Centure (1) Stop (1) Review Device Atom StatisticaLog Digits Stor Time Capture Time Capture Time Capture Time Allowable Time Name Sampling leterval PC Capture Destination Dotron Name 0 100mee 100mee Image: Capture Time Review Time	Connect (F5) Review PC CSV file batch conversion Enlarged Y-T display Protect	Print Screen Save Screen End
Capture Setting Safe(F) Sage(F) Review Device Asm Statistical.og Display Start Time Capture Time Adowable Time Numler Sampling Internal PC Capture Destination 2007/00/15 14 00:816 Dowable Time Numler Sampling Internal PC Capture Destination V-1 More Capture Time Dowable Time Numler Sampling Internal PC Capture Destination 0 Dowable Time Numler Sampling Internal PC Capture Destination PC V-1 More Capture Time Multer Papel PC		
Start Time Capture Time Alkowable Time Number Sameling interval PC Capture Destination 2070/12514.0016 OddwOdhour00min00ec NaN 0 100mecc V-T Kr Ogda Ogea Image: Capture Time Image: Capture Time <td>Capture Settings Start (F7) Stop (F8)</td> <td>Review Device Alarm Statistics/Log Display</td>	Capture Settings Start (F7) Stop (F8)	Review Device Alarm Statistics/Log Display
V-1 V-Y Dute Meter Report	Start Time Capture Time Allowable Time Number Sampling Interval 2007/01/25 14:08:16 00day00hour00min00sec NaN 0 100msec	PC Capture Destination
	Y-T X-Y Digital Meter Report	
Not Connected 0.300 0.300 0.200 0.300 0.200 0.300 0.300 0.300 0.300 0.300 0.300 0.300 0.300 0.300 0.300 0.300 0.300 0.300 0.300 0.300 0.300 0.300 0.300 0.300 0.300 0.300 0.300 0.300 0.300 0.300 0.300 0.300 0.300 0.300 0.300 0.300 0.300 0.300 0.400 0.300 0.400 0.300 0.400 0.400 0.400 0.400 0.400 0.400 0.400 0.400 0.400 0.400 0.400 0.400 0.400 0.400 0.400 0.400 0.400 0.400 0.400 0.400 0.400 0.400 0.400		
0.000 0.0000 0.00000 0.0000 0.0000 0.0000 0.00000 0.00000 0.00000 0.000	Not Connected	CH Level Unit
0 200 0.0000 0.00000 0.0000 0.0000 0.00000 0.00000 0.00000 0.00000000	0.300 - 0.250 -	
0.000 0.0000 0.00000 0.0000 0.0000 0.0000 0.00000 0.00000 0.0000 0.0000	0.200 -	
0 050	0.100 -	
2 0.000 - - </td <td>0.050 -</td> <td></td>	0.050 -	
0 4000	2 0.000 -	
-0.150	-0.100 -	
0.200	-0.150 -	
0.250	-0.200 -	
0.300	-0.250 -	
0.400	-0.300 -	
0.400 -0.500 -0.	-0.300 -	
.0.500 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 Cursor Time Cursor Time Cursor A Cursor B	0.450 -	
ab 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 150 170 180 190 200 Sec Cursor A Cursor B	-0.500 -	
See Cursor A Cursor B	0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 14.0 15.0 16.0 17.0 18.0	19.0 20.0 Cursor Time ?
Cursor B	Sec	Cursor A
		Cursor B

7. PC Connection Settings

Configure the communication settings between GL800 and a PC.

- (1) Click the "Connect (F5)" button on the main menu to display the Connect screen.
- (2) Select the interface to connect.
- (3) Click row "1:" to reverse the display color to blue, and then click the "Edit/Add" button.



(4) Enter "Device Name", "IP Address", "Port Number", and "USB ID", and then click "OK".



- (5) Click the "Connect" button to perform the connection to enable communication between the devices.
- (6) Click the "Close (ESC)" button to close the Connect screen.



Connecting multiple GL800s

GL800APS can connect up to 10 GL800s (maximum of 500 channels). This section describes how to connect multiple devices.



- On each device, register "IP Address" or "USB ID".
 Note: Register one number for each device to avoid duplicates.
- (2) On each device, click the "Connect" button to perform the connection.
- (3) Click the "Close (ESC)" button to close the Connect screen.
- (4) The connected tabs are displayed. Select each device to make desired settings.

G onnect			
TCP-IP	USB	About the Cor Edit/Add	nection Procedure Delete
1: Connect	Device Name Device 1	USB ID 0	Host Master
2: Connect	Device Name Device 2	USB ID 1	Host Master
3:	Create		
4:			
5:			
6:			
7:			
8:			
9:			
10:			
Load Conditions Save	e Conditions ?		Close (ESC)
Connect (F5)	Review	PC	csv
Device 1 Device 2	2		

Capture Settings

00day00hour00min00se

Capture Time

Start Time

Free Running

2007/01/25 14:09:16

8. Display Screens

This chapter describes the various screens used in this software.

8-1 Y-T (Main Screen)



No.	Name		Description		
1	Connect (F5)	Click this button to open the	e Connect screen.	7	
2	Review PC	Click this button to replay th	ne data captured to the PC (personal computer).	11-1	
3	CSV file batch conversion	Click this button to convert r	multiple GBD (binary data) files captured to the PC to CSV files.	12-1	
4	Enlarged Y-T display	Click this button to enlarge	the waveform area in Y-T display screen.	8-2	
5	Protect	Click this button to set the p	password to protect the software.	12-3	
6	Print Screen	Click this button to print out Printing is performed at the If you change the printer, re	t a copy of the screen. e printer that has been selected as the default printer. elaunch the software.		
7	Save Screen	Click this button to save the	e displayed screen as a BMP file.		
8	End	Click this button to exit the	application.	12-4	
9	Simplified message area	The operating status is disp	played here.		
		Free Running S	Stopped status (not capturing data)		
		Armed A	waiting trigger activation; data has not been captured.		
		Recording D	Data capture status		
		Capture Ended D	Data captured has ended. Click the "Stop" key.		
10	Capture Settings	Click this button to open the	e data capture settings screen.	9	
11	Start (F7)	Click this button to start dat	ta capture.		
12	Stop (F8)	Click this button to stop dat	a capture.		
13	Review Device	Click this button to replay the data captured to the device.			
14	Alarm	Click this button to display the alarm output port status. If "Alarm Hold" has been selected, the alarm can be cleared by clicking the "Alarm Clear" button.			
15	Statistics/Log Display	Click this button to display t capture, and a log of the all	the results of statistical calculation performed during data arms generated.	12-2	

No.	Name		Description	Ref. Section
16	Battery Information	The device battery capacity is displayed here.		
		Battery power: Full	(green, green)	
		Battery power: Medium	🗌 📕 (—, orange, orange)	
		Battery power: Low	(—, —, red)	
		Battery power: Very low	$\Box \Box \Box (-, -, -)$	
			Data capture stops if a capture operation is being performed.	
17	Capture Information	Information is displayed he	ere during a data capture operation.	
		Start Time	Data capture start time.	
		Capture Time	The amount of time that has elapsed since the start of data capture.	
		Allowable Time	Allowable Time The amount of time available for data capture. When the remaining time is up, data capture stops at both the davice and the PC	
		Number	Number The number of data capture operations when Repeat Capture has been specified.	
		Sampling Interval	The sampling interval.	
		PC Capture Destination	The data capture destination at the PC.	
18	Waveform Op.	Click this button to perform various settings for the waveform display.		
19	Cursors	Click these buttons to display the cursors during a data capture operation when the device is in the Scroll Off status.		
20	Comment	Click this button to enable a comment to be input above the desired CH waveform on the waveform graph displayed during data capture.		
21	Switch displayed groups	Click one of these buttons to select a group whose waveform and digital values are displayed.		
22	Waveform Graph	The waveforms are displayed here.		
23	Digital	The digital values are displayed in this area. Clicking on any of the CH numbers enables the waveform for that channel to be hidden/displayed. The channels for which an alarm has been generated are shown in red.		
24	Cursor Time	The cursor times are displ	ayed during data capture when Scroll Off has been selected.	

The "Scroll" button is displayed on the Y-T screen during data capture. Use the "Scroll" button's On/Off functions to display current data and past data.

When Scroll On has been selected, the waveform graph is scrolled so that the data at the right edge is the newest data. When Scroll Off has been selected, the scrolling operation is halted and data that was captured in the past can be viewed on the scroll bar.

Scroll On



Scroll (Scroll On/Off selection button)







No.	Name	Description	Ref. Section
1	Simplified message area	The operating status is displayed here.	
2	Start (F7)	Click this button to start data capture.	
3	Stop (F8)	Click this button to stop data capture.	
4	Protect	Click this button to set the password to protect the software.	12-3
5	Print Screen	Click this button to print out a copy of the displayed screen. Printing is performed at the printer that has been selected as "the default printer". Relaunch the software after you change the printer.	
6	Save Screen	Click this button to save the displayed screen as a BMP file.	
7	Close	Click this button to go back to the regular screen.	
8	Capture Information	Information is displayed here during a data capture operation.	
9	Waveform Op.	Click one of these buttons to perform various settings for the waveform display.	10
10	Cursors	Click these buttons to display the cursors during a data capture operation when the device is in the Scroll Off status.	10
11	Comment	Click this button to enable a comment to be input above the desired channel waveform on the waveform graph displayed during data capture.	10
12	CH Select	Select the channel to perform waveform operation.	10
13	Waveform Graph	The waveforms are displayed here.	

8-3 X-Y

Up to four combinations can be handled, and the X-Y channels can be specified freely.



No.	Name	Description	Ref. Section
1	X-Y Waveform Graph	The X-Y waveforms are displayed here.	
2	Range	These buttons specify display of the scale values for the channels selected for the X and Y axes.	
3	ON/OFF	Click these buttons to specify the display as ON or OFF.	
4	X Axis/Y Axis Channel Settings	Use these buttons to select the channels for the X and Y axes.	
5	Cursor Information	The cursor levels of the channels for which Range has been specified are shown here.	
6	Waveform Op.	Use these buttons to expand, shrink, or move X and Y axes.	

8-4 Digital

The captured data is displayed as digital values. Instantaneous values are displayed in large characters to enable easy confirmation.

GL800-APS Ver 1.00				
Connect (F5) Revie	ew PC CSV file batch conv	Enlarged Y-T display	Protect Print Screen	Save Screen End
Device 1				Device Battery
Free Running	Capture Settings	art (F7) Stop (F8)	Review Device	Alarm Statistics/Log Display
Start Time Capi	ture Time Allowable	Time Number Sar	npling Interval PC Capture Destination	
Y-T X-Y Digital Meter F	leport	indu smin szsec		
Analog (1	1-20 21-40 41	-60 61-80 81-100	101-121 121-140 141	-160 161-180 181-200
СН1	ICH2	СНЗ	ICH4	CH5
2) +27.9 degC	+26.2 degC	+0.1769 V	+0.3758 V	+0.1740 V
СН6	ICH7	СНВ	СНа	ICH10
+0.1739 V	+0. 1739 V	+0. 1711 V	+0. 172 V	+0. 170 V
CH11	ICH12	CH13	CH14	ICH15
+0. 17 V	+0.17 V	+0.17 V	+0.17 V	+0. 17 V
CH16	ICH17	JCH18	JCH19	CH20
+0.16 V	+0.16 V	+0.16 V	+0.16 V	+0.12 V
Pulse/Logic				
Pulse1	Pulse2	Pulse3	Pulse4	Logic 4
3 1200 C	1120 C	0 0	0 0	* * * *

No.	Name	Description	Ref. Section
1	Set displayed CH	Click one of these buttons to select 20 analog channels to display the digital values.	
2	Analog	20 analog channels' digital values are displayed here.	
3	Pulse	Pulse signals' digital values are displayed here.	
4	Logic	Logic signals' digital values are displayed here.	

8-5 Meter

The inputs for each channel are displayed in a meter format.

	GL800-APS Ver	1.00								
	Connect (F5)	Review P	CSV f	ile batch conversi	Enlarged '	Y-T display	Protect	Print Screen	Save Screen	End Device Battery
	Free Ru	nning	Capture Settings	Start (F7)	Stop (F8)	Review D	evice	Alarm	Statistics/Log Display
	Start Time 2007/01/25 15:49	Capture Capture Capture	lime Ohour00min52sec	Allowable Tim 00day15hou	e Ni r32min46sec	umber Sampling	Interval PC Capture sec C:\Progra	e Destination m Files\graphte \	2007-01-25_15-49-	42.gbd
	Y-T X-Y Digital	Meter Repor	t 1-20	21-40	41-60 61-	80 81-100	101-121	121-140 14	161-18	80 181-200
	CH1(degC)	CH2(degC)	CH3(V)	CH4(V)	CH5(V)	CH6(V)	CH7(V)	CH8(V)	CH9(V)	CH10(V)
	50- 40-	40-	0.50 - 0.40 - 0.20 -	0.60-0.40-0.20-0.20-0.20-0.20-0.20-0.20-0.2	0.70- 0.60- 0.40-	0.80	0.90	1.00- 0.75 - 0.50-	2.00- 1.50- 1.00-	25 - 2.0 - 1.0 -
3	20-	20-2	0.00 -0.20	0.00- -0.20-	0.00- -020-	-0.20	0.00 -0.20 -0.40	0.00 - -0.25 - -0.50 -	-0.50-	-1.0-
	0-	0-	-0.400.50 -	-0.40-	-0.60-	-0.60-	-0.60	-0.75 - -1.00 -	-1.50- -2.00-	-2.0 -2.5
	CH11(V)	CH12(V)	CH13(V)	CH14(V)	CH15(V)	CH16(V)	CH17(V)	CH18(V)	CH19(V)	CH20(V)
	0.50-	0.50- 0.40-	0.50-0.40-	0.50-	0.50-	0.50-	0.50 - 0.40 -	0.50-	0.50-	0.50-
	0.20-	0.20-	0.20-	0.20-	0.20-	0.20-	0.20-	0.20-	0.20-	0.20-
	0.00-	0.00-	0.00-	0.00-	0.00-	0.00	0.00-	0.00-	0.00-	0.00-
	-0.20-	-0.20-	-0.20-	-0.20-	-0.20-	-0.20-	-0.20-	-0.20-	-0.20-	-0.20-
	-0.50-	-0.50-	-0.50-	-0.50-	-0.50-	-0.50-	-0.50-	-0.50-	-0.50-	-0.50-

No.	Name	Description	Ref. Section
1	Set displayed CH	Click one of these buttons to select 20 analog channels to display in the meters	
2	Alarm Range	The alarm range is displayed in <.	
3	Instantaneous Value Level	This is the current input position. It is filled in red from zero to the current input value.	

8-6 Report

The daily report data is displayed in this screen.

When the device is in the Free Running status, the data can be displayed in Excel format.

If Off has been specified for the Report setting, report data is not displayed.

Connect	(F5) Review	PC	√ file batch conver:	sion Enlarg	ed Y-T display	Protect	Print Screen	Save Scre	en Device Batt	End ery
Fre	ee Running	Capture Setting		(F7)	Stop (F8)	Revie	w Device	Alarm	Statistics/Lo	g Disp
art Time 2007/	Captur 01/25 11:43:37 00da	e Time <mark>1y00hour00min52s</mark>	Allowable Ti ec 00day15hd	ne ur32min46sec	Number Samp	oling Interval PC Cap DOmsec C:VPro	ture Destination gram Files\graphte	e \2007-01-25_1:	5-49-42.gbd	_
т 🗎 х-ү	/ Digital Meter Rep	ort						3		
Dis	play In Excel						Daily Report Cap	oture Interval	1sec	
No.	Date Time	CH1(degC)	CH2(degC)	CH3(V)	CH4(V)	CH5(V)	CH6(V)	CH7(V)	CH8(V)	
4	2007-01-25 11:43:40	+25.2	+23.4	+0.4088	+0.1000	+0.4108	+0.4108	+0.4128	+0.4127	+
5	2007-01-25 11:43:41	+25.2	+23.4	+0.4765	+0.1549	+0.4768	+0.4778	+0.4778	+0.4778	-
6	2007-01-25 11:43:42	+25.2	+23.4	+0.4964	+0.2147	+0.4964	+0.4964	+0.4964	+0.4965	1
7	2007-01-25 11:43:43	+25.1	+23.4	+0.4675	+0.2732	+0.4665	+0.4665	+0.4665	+0.4657	-
8	2007-01-25 11:43:44	+25.2	+23.4	+0.3941	0.3246	+0.3922	+0.3921	+0.3904	+0.3903	-
9	2007-01-25 11:43:45	+25.2	+23.4	+0.2816	2 0.3638	+0.2788	+0.2788	+0.2769	+0.2769	
10	2007-01-25 11:43:46	+25.2	+23.4	+0.1402	+0.3752	+0.1391	+0.1361	+0.1361	+0.1361	-
11	2007-01-25 11:43:47	+25.2	+23.4	-0.0174	+0.3497	-0.0173	-0.0203	-0.0203	-0.0217	-
12	2007-01-25 11:43:48	+25.1	+23.4	-0.1402	+0.3042	-0.1403	-0.1431	-0.1431	-0.1434	-
13	2007-01-25 11:43:49	+25.2	+23.4	-0.3063	+0.2012	-0.3083	-0.3083	-0.3110	-0.3112	
14	2007-01-25 11:43:50	+25.1	+23.3	-0.4130	+0.0928	-0.4150	-0.4149	-0.4169	-0.4169	<u> </u>
15	2007-01-25 11:43:51	+25.2	+23.4	-0.4808	-0.0248	-0.4812	-0.4822	-0.4822	-0.4822	
16	2007-01-25 11:43:52	+25.2	+23.4	-0.5009	-0.1401	-0.5009	-0.5009	-0.5009	-0.5009	
17	2007-01-25 11:43:53	+25.2	+23.4	-0.4718	-0.2419	-0.4710	-0.4709	-0.4710	-0.4700	
18	2007-01-25 11:43:54	+25.2	+23.3	-0.3981	-0.3205	-0.3962	-0.3962	-0.3944	-0.3942	
19	2007-01-25 11:43:55	+25.2	+23.4	-0.2852	-0.3678	-0.2824	-0.2823	-0.2805	-0.2805	
		CH1(degC)	CH2(degC)	CH3(V)	CH4(V)	CH5(V)	CH6(V)	CH7(V)	CH8(V)	
	Average	+25.2	+23.4	+0.0026	4) 1689	+0.0029	+0.0026	+0.0027	+0.0028	T
	Max	+25.2	+23.4	+0.4964	0.3752	+0.4964	+0.4964	+0.4964	+0.4965	
	Min	+25.1	+23.3	-0.5009	-0.3791	-0.5009	-0.5009	-0.5009	-0.5009	

No.	Name	Description	Ref. Section
1	Display in Excel	The data is displayed in Excel format when the device is in the Free Running status.	
2	Daily report data	The daily report data is displayed here. If the number of points exceeds 100, data is deleted starting from the oldest data (the actual data is not affected).	
3	Daily Report Capture Interval	The daily report capture interval is displayed here.	
4	Calc. results	The calculated results for the average, maximum and minimum values are displayed here.	

9. Settings Screens

This chapter describes the screens used to perform settings related to data capture.

9-1 AMP Settings

This screen is used to make the analog input, logic input, and pulse input settings.



No.	Name		Description				
1	Settings tabs	These tabs are u	ised to ch	ange the settings screen.			
		AMP Settings	IP Settings This tab is used to make input-related settings.				
		Data Capture S	Settings	This tab used to make settings related to data capture.			
		Trigger/Alarm S	Settings	This tab is used to make settings related to the trigger and alarm functions.			
		Report Settings	S	This tab is used to make settings related to the daily report, monthly report, and Export to Direct Excel File functions			
		Other Settings		This tab is used to make various other settings, to display information, and so forth.			
2	СН	These are the ch	annel nu	mbers for analog input.			
3	Color	The color used for	or the way	veform for each channel can be specified here.			
4	Annotation	Each channel ca	n be free	ly annotated (input the signal name, etc.).			
5	Input	Select the input t	type for e	ach channel.			
		Off No input is made to that channel.		t is made to that channel.			
		DC	DC Select DC to perform voltage measurement.				
		TEMP	Select T	EMP to perform temperature measurement.			
		RH	Select F	RH to perform humidity measurement.			

No.	Name		Description	Ref. Section						
6	Range	These buttons a	re used to select the input range for each channel.							
		DC	20, 50, 100, 200, 500 (mV), 1, 2, 5, 10, 20, 50 V, 1-5V							
		TEMP	TC-K, TC-J, TC-T, TC-R, TC-E, TC-B, TC-S,							
			TC-N, TC-W, Pt100, JPt100, Pt1000							
		RH	Fixed to 1 V; the unit is converted internally.							
			0 0%, 1 0 0%							
7	Filter	Use these buttor	ns to set the filter for each channel. Moving average processing is used in							
		the filter. It captu	ter. It captures the data for configured number of times at the configured sampling and performs average processing.							
			2, 5, 10, 20, 40 (times)							
	11.2									
8	Unit	The selected uni	t is displayed here.	0.1.1						
9	Span	displayed in the	is to set the upper limit and lower limit values for the wavelorms	9-1-1						
10	Scaling	Use these buttor	is to convert the unit.	9-1-2						
11	CH Group	Use these buttor	is to set the display group for each channel.							
		Only the groups	set here can be viewed in Y-T display screen.							
12	Switch CH	Use this slider to	select 10 channels to perform the settings.							
13	Graph Display	The waveforms f	or which settings have been made can be checked here.							
		Click the "Apply"	button to apply the settings that have been made.							
14	Logic/Pulse switching	Use this button to	o switch the digital input. Logic, Pulse, or OFF can be set here.							
15		Make the legie w	raveform color setting here							
17		Make the logic w	taverorm color setting here.							
''										
18	Pulse CH number	The channel nun	nbers for pulse input.							
19	Pulse Line Color	Make the pulse I	ine color setting here.							
20	Pulse Input	Use the input bu	tton to select the pulse input type.							
		Devolutions	Pulse input is not made.							
		nevolutions	by 60, and displayed as the number of revolutions (BPM).							
		Counts	A cumulative count is made of the number of pulses generated in one							
			sample.							
		Inst.	The number of pulses generated in one sample is counted.							
21	Pulse Range	Use these buttor	is to set the pulse range.							
		Revolutions	50, 500, 5000, 50k, 500k, 5M, 50M, 500M							
			PRM/F.S.							
		Counts	50, 500, 5000, 50k, 500k, 5M, 50M, 500M C/ES							
		Inst.	50, 500, 5000, 50k, 500k, 5M, 50M, 500M							
			C/F.S.							
22	Pulse Filter	Make the pulse f	ilter setting here. The filter is about -3dB at about 30Hz.							
		Off, On								
23	Pulse Slope	Use this button to	o select the pulse detection slope.							
		Н	Rising signals are counted.							
		L	Falling signals are counted.							
24	Pulse Span	Use this button to	o set the upper limit and lower limit values for the waveforms displayed	9-1-1						
		in the waveform	graph.							
25	Pulse Scaling	Use this button to	o convert the unit.	9-1-2						
26	OK	Click this button	to register your settings and close the screen.							
27	Cancel	Click this button	to close the screen without registering your settings.							
28	Apply	Click this button	to apply the settings made.							

9-1-1 Span Settings



9-1-2 Scaling Settings



9-2 Data Capture Settings

Settings such as the Sampling Interval, Device Capture Settings and PC Capture Settings are made at this screen.

📕 Settings		
AMP Settings Data Capture Se	ttings Trigger Alarm Settings Report Settings Other Settings	
Graph Display	Data Capture Settings	
	Common Settings	About Data Capture
	Device Capture Settings	PC Capture Settings
	Select capture destination	• Format 5 GBD V ?
	Allowable capture time 10day00hour14min01sec	• Name Type 6 Auto ?
	Select capture destination • Name Type 3 Auto ? • Save Path	Save Path C:Program Files/graphtec/GL800APS/Data
	JWEM/data\ 4 ?	Backup Interval 9 1h 7
		OK Cancel Apply

No.	Name	Description	Ref. Section
1	Sampling Interval	Use this button to select the sampling interval. 100, 200, 500 (ms), 1, 2, 5, 10, 20, 30 (s), 1, 2, 5, 10, 20, 30 (min), 1 (h) Depending on the measured number of channels, the following sampling intervals can be set.	
		 10 channels or less : 100ms or above 21 to 50 channels : 500ms or above 101 to 200 channels : 2s or above 11 to 20 channels : 200ms or above 51 to 100 channels : 1s or above 	
2	Device Capture Settings Allowable capture time	The length of time available for data capture to the selected device storage medium (internal memory or USB device) is displayed here.	
3	Device Capture Settings Name Type	Use this button to select the method for appending the file name. Auto Create a date folder in the specified folder, and then create a date and time file in it. User The file name can be freely specified by the user.	
4	Device Capture Settings Save Path	The save destination at the device for the captured data is selected here.	9-2-1
5	PC Capture Settings	Use this button to select the format of the data saved to the PC (personal computer).	
	lomat	GBD The data is saved as binary data. When compared with a CSV file, the file size is somewhat small. CSV The data is saved as text data in a format that can be displayed in Excel. Please note that the maximum number of samples that can be displayed in Excel is 65535.	
6	PC Capture Settings	Use this button to select the method for appending the file name.	
	Name Type	Auto A folder with the date as the file name is created within the specified folder, and then a file with the date and time as the file name is created within the newly-created folder. User The file name can be freely specified by the user.	
7	PC Capture Settings Save Path	The save destination at the PC (personal computer) for the captured data is selected here.	9-2-2

No.	Name	Description	Ref. Section
8	PC Capture Settings Create Backup File	To enable this function, click the checkbox to display the check mark. The backup file is created at the same location as that specified in Item 7 "Save Path" above. The "_bk" file extension is appended to the file name.	
9	PC Capture Settings Backup Interval	Use this button to select the backup interval. During data capture, a backup data file is created at the specified intervals. If all the backup files are linked, the data will be same as that of the original data. 1, 2, 6, 12, 24 (h)	

9-2-1 Device Capture Settings

This screen shows the settings for the Device save destination.



CAUTION!!

Data capture cannot be started if the device is full. If the device becomes full during a data capture, the device stops capturing, but the PC continues capturing.

If "Repeat" is set to "ON" in Trigger Settings, after the device becomes full, the PC also stops capturing next time the Repeat starts. When measuring for a long time, attach a USB memory to the device and set it as a destination for capturing.

9-2-2 PC Capture Settings

The screen that is normally used to open Windows is used to make the settings for the PC save destination.

Open									? 🗙
Look in:	DATA		*	G	ø	Þ	•		
My Recent Documents	2007-01-10 2007-01-11 2007-01-12								
Desktop									
My Documents									
My Computer									
	File name:					*			ЭК
My Network	Files of type:	Custom Pattern (*.gbd)				*		Ca	ancel

9-3 Trigger/Alarm Settings

Settings such as the trigger start condition, stop condition, alarm settings, and those for sending email are made at this screen.



No.	Name		Description					
1	Trigger Start Condition	Use this button t	o select the trigger start condition.					
		Off	There is no data capture start condition.					
		Level	Data capture starts when the desired channel reaches the specified level					
			value.					
		Alarm	Data capture starts when the specified alarm occurs.					
		Date	Data capture starts at the specified date and time.					
		Time	Data capture starts at the specified time.					
		External	Data capture starts with the external terminal signal. Data capture starts when the external trigger signal detects a falling of about 2.5V or less.					
2	Start side Level Condition	If "Level" has be	"Level" has been selected for the start condition, make the required level settings here.					
3	Start side	If "Alarm" has be	"Alarm" has been selected for the trigger start condition, set the alarm number here.					
	Alarm Condition	Select an alarm	Select an alarm number between 1 and 4.					
4	Start side	If "Date" or "Time	f "Date" or "Time" has been selected for the trigger start condition, make the required					
	Date Settings	settings here.	ettings here.					
		Date : Set the y	pate : Set the year, date, and time to start the data capture.					
	T	Time : Set only I	the time to start the data capture.					
5	Irigger Stop Condition	This parameter s	specifies the condition for stopping data capture.					
		Off	There is no data capture stop condition.					
		Level	Data capture stops when the desired channel reaches the specified level					
			value.					
		Alarm	Data capture stops when the specified alarm occurs.					
		Date	Data capture stops at the specified date and time.					
		Time	Data capture stops at the specified time.					
		External	Data capture stops with the external terminal signal. Data capture					
			stops when the external trigger signal detects a falling of about 2.5V or less.					
		Capture time	Data capture stops when data has been captured for the specified length of time.					

No.	Name	Description	Ref. Section			
6	Stop side Level Condition	If "Level" has been selected for the stop condition, make the required level settings here.	9-3-1			
7	Stop side Alarm Condition	If "Alarm" has been selected for the trigger stop condition, set the alarm number here. Select an alarm number between 1 and 4.				
8	Stop side Date Settings	If "Date", "Time", or "Capture time" has been selected for the trigger stop condition, make the required settings here. Date : Set the year, date, and time to stop the data capture. Time : Set only the time to stop the data capture. Capture time : Set the length of time between the start and the end of the data capture.				
9	Repeat	On has been selected, the device proceeds to perform the next data capture operation ter a stop trigger has been generated.				
10	Alarm Condition	Use this button to make the alarm level settings for each input.	9-3-2			
11	Alarm Hold	This parameter specifies whether to maintain or clear the alarm status. On Once an alarm has been generated, the alarm status is maintained. The alarm generated on each channel is retained together with the alarm output status. To clear the alarm status, click the "Alarm Clear" button displayed in the "Alarm Screen" described in Item 14 of Section 8-1, "Y-T". Off The alarm generated status is not maintained. If the alarm status is canceled, the alarm status and alarm output for each channel are canceled.				
12	Send Email when Alarm is Generated	Use this button to set the conditions for sending an email. An email can be sent when an alarm has been generated. (However, an email sending environment must be enabled.)	9-3-3			

9-3-1 Trigger Start Condition

If "Level" has been selected for the Trigger setting, the "Trigger Start Condition" settings must be made.



No.	Name		Description			
1	CH	The channel nun	he channel numbers are displayed here.			
2	Function	Use this button to	e this button to select the trigger level detection mode.			
		Off	Disabled			
		Hi	Detection is performed when the signal is rising.			
		Lo	Detection is performed when the signal is falling.			
		Win In	Detection is performed when the value is within the specified range.			
		Win Out	Detection is performed when the value is outside the specified range.			
3	Upper/Lower	The level setting	he level settings are displayed here.			
4	Unit	The unit is displa	ayed here.			

No.	Name		Description			
5	Settings	Click this button to m	lick this button to make the level settings.			
6	Switch CH	Use this slider to sel	ect 10 channels to perform the settings.			
7	Pulse CH	The channel number	rs for pulses are displayed here.			
8	Pulse Function	Use this button to se	elect the pulse level detection mode.			
		Off Dis	sabled			
		Hi De	etection is performed when the signal is rising.			
		Lo De	etection is performed when the signal is falling.			
		Win In De	etection is performed when the value is within the specified range.			
		Win Out De	etection is performed when the value is outside the specified range.			
9	Pulse Upper/Lower	The level settings ar	The level settings are displayed here.			
10	Pulse Unit	The unit is displayed	The unit is displayed here.			
11	Pulse Settings	Click this button to m	nake the pulse settings.			
12	Logic CH	The channel number	rs for logics are displayed here.			
13	Logic Function	Use this button to se	elect the logic setting.			
		X Dis	sabled			
		Hi De	etection is performed when the signal is rising.			
		Lo De	etection is performed when the signal is falling.			
14	Combination	Use this button to se	et the combination of configured triggers.			
		OR : Data capture	starts (stops) when one of the configured trigger conditions is true.			
		AND : Data capture	starts (stops) when all of the configured trigger conditions are true.			
15	OK	Click this button to re	egister your settings and close the screen.			
16	Cancel	Click this button to c	lose the screen without registering your settings.			

Example of level setting screen



9-3-2 Alarm Condition

The alarm level settings for each input are made at this screen.

The settings are the same as those described in Section 9-3-1, "Trigger Start Condition".

	Alarm Co	ondit	ion	A	bout Setting	ys	_								
	Analo	g Setti	ngs				(1)			Pulse Settin	gs				
н	Function		Upper	Lower	Unit	Settings	Output _	1 10	СН	Function	Upper	Lower	Unit	Settings	Outp
1	WinOut	∇	500	-100	degC) (1 🔻	1-10	P1	Off 🔍	5000	0	С)(1 🔻
2	Off	∇	1000	0	degC)(1 -		P2	Off 🔍	5000	0	С)	1 🔻
3	Off	∇	1.0000	-1.0000	V) (1 🔽		P3	Off 🔍	5000	0	С		1 🔻
1	Off	∇	1.0000	-1.0000	V)(1 🔽		P4	Off 🔍	5000	0	С)	1 1
5	Off	∇	1.0000	-1.0000	V)	1 🔽		-	Lavia Callia		1			
6	Off	∇	1.0000	-1.0000	V)	1 🔍			Logic Settin	igs				
,	Off	∇	1.0000	-1.0000	V)(1 🗸		CH I I	Off T					
3	Off	∇	1.0000	-1.0000	V)	1 🔽		12	Off 🔍	1				
9	Off	∇	1.0000	-1.0000	V)	1 🔍		13	Off 🗸	1 -				
0	Off	∇	1.0000	-1.0000	V			- 11-20	L4	Off 🔍	1 -				

No.	Name	Description	Ref. Section
1	Output	Use these buttons to set the number to output when an alarm occurs.	
		Select a number between 1 and 4. The output is from the device's alarm output terminal.	
		To use the alarm output signal, you need a B-513 which is sold separately.	
		For the specification of the alarm output, refer to the device's User's Guide.	

9-3-3 Send Email when Alarm is Generated

An email can be sent to a specified email address (or addresses) when an alarm is generated. (An email sending environment must be enabled.)

To send an email when an alarm has been generated, click the checkbox to insert a check.

Enter the destination— address(es).	Address 4 Address 5	Comment Comment Comment Comment Comment		— Enter a comment.
Enter the SMTP server.— Enter the sender address.—	SMTP Server Sender Address	Ĩ		
			OK Cancel	

9-4 Report Settings

The daily report and monthly report settings, as well as the Direct to Excel settings, are made at this screen. The daily and monthly reports are created as separate CSV files at capture intervals that are separate from those of the captured data.

The Export to Direct Excel File function transfers data in real time to an Excel file as it is being captured. If a template is used for the Excel file, waveforms can also be drawn in Excel in real time.

Settings	
AMP Settings Data Capture Settings Trigger Alarm Settings Report Settings C	Xiher Settings
Graph Display Report Settings Graph Display 1 Capture Interval 1 sec 1 Daily report • Capture Interval 1 sec 2 Monthly report • Capture Interval 1 min • Output Format 5 Save as CSV batch files	About the Export to Direct Excel File function
Configure CSV file	Export to direct Excel file
Daily report C: VProgram Files/graphtec/GL800APS/Data 6 Daily report C: VProgram Files/graphtec/GL800APS/Data 8 7	• Template file © Grant Files (graphtec VGLB00APS)(Temply) © Grant Files (graphtec VGLB00APS)(Temply) © Oblive report Oblive report • Destination sheet • Or Poblive report • Destination sheet • Or Poblive report • Destination sheet • Or Poblive report • Or Poblive
	OK Cancel Apply

No.	Name		Description	Ref. Section			
1	Daily report	Click this checkbox to enter a	check and enable the Daily report function.				
2	Monthly report	Click this checkbox to enter a	ick this checkbox to enter a check and enable the Monthly report function.				
3	Daily report Capture Interval	Use this button to select the c Available settings for 20 chan minutes. The selectable maxi used.	Jee this button to select the daily capture interval. vailable settings for 20 channels are 1, 5, 10, and 30 seconds, and 1, 5, 10, and 30 ninutes. The selectable maximum speeds vary depending on how many channel are used.				
4	Monthly report Capture Interval	Use this button to select the r Available settings are 1, 5, 10	se this button to select the monthly capture interval. vailable settings are 1, 5, 10, and 30 minutes, and 1, 2, 6, 12, and 24 hours.				
5	Output Format	Use this button to select the c Save as CSV batch files Export to direct Excel file	Dutput format for the report(s). The data is saved as CSV batch files. The captured data is exported directly to Excel. If a template file that was created in Excel is used, an original report can be created in real time. The template files that were provided as standard accessories can also be used.				
6	Configure CSV file: Daily report	This parameter is used to spe	ecify the save destination for the Daily report.				
7	Configure CSV file: Monthly report	This parameter is used to spe	ecify the save destination for the Monthly report.				
8	Template file	The template file settings for the Export to Direct Excel File function are made here. Files with the "xlt" and "xls" extensions can be used. Template files are provided as standard in the "Temp" folder that is installed with this software.					
9	Destination sheet	This parameter is used to spe	ecify the name of the specified template sheet.				
10	Start cell	This parameter is used to spe data.	ecify the start position on the sheet from which to transfer				

9-5 Other Settings

This screen is used to make various other settings and to display information.

No.	Name	Description	Ref. Section	
1	Synchronous control	Vhen multiple GL800s are connected, and if you start a measurement on one of them, Il the others whose synchronization control set to On also start the measurement. he same is true for finishing a measurement. rigger and capture settings operate at their own configured values. Friggers or samplings cannot be synchronized.)		
2	Room Temp. Compensation	his parameter is used when thermocouples are used to perform temperature neasurement. Set to On when performing the room temperature compensation on this evice. (Always select On for this setting.)		
3	Burnout	et to On to regularly check a thermocouple sensor line break. a thermocouple is connected parallel with other measurement devices, please set this o Off as it may affect the other devices. Vhen a sensor line break is detected, "BURN OUT" message appears.		
4	Output alarm at burnout	When set to On, an alarm is output when a burnout has occurred.		
5	Temp. Unit	he display unit can be switched between Celsius and Fahrenheit.		
6	Power On Start	Data capture starts automatically as soon as the power to the device is turned on. This setting can only be specified for data capture to the device. If On has been selected, select "Save the settings to the device" when exiting this software.		
7	AC Line Frequency	Set the voltage frequency to suit the area where the device will be used. Be sure to select the correct frequency, as an incorrect setting affects the noise reduction capability. The noise on the power source can be eliminated at the following sampling rates: 10 channels or less : 500ms or above 20 channels or less : 1s or above 50 channels or less : 2s or above 100 channels or less : 5s or above 200 channels or less : 10s or above		
8	Return to Factory Default Settings	Click this button to return the settings to the default values.		
9	Software Version	The software version is displayed here.		
10	Device Information	Information relating to the connected device is displayed here.		
11	Graphtec Web site	Click this button to access the Graphtec web site.		

10. About Icons

This chapter describes icons.



(In this table: F = Operable during a Free Running, C = Operable during a data capture, R = Operable during a replay)

No.	Description	Operable behavior	Ref. Section
1	Shrinks the time axis.	C, R	
2	Expands the time axis.	C, R	
3	Expands the Y axis of the selected channel.	F, C, R	10-1
4	Shrinks the Y axis of the selected channel.	F, C, R	10-1
5	Moves up the position of the selected channel.	F, C, R	10-1
6	Moves down the position of the selected channel.	F, C, R	10-1
7	7 Displays plot marks at the sample points of a waveform. F, C		10-2
8	Opens a sub-screen to:	F, C, R	10-3
	 Switch the scroll direction, 		
	 Set the scale axis, 		
	 Reset the Y axis operation, and 		
	Perform calculations.		
9	Displays Cursor A in the waveform display.	C, R	10-4
10	Displays Cursor B in the waveform display.	C, R	10-4
11	Input comments. Up to 20 comments can be entered.	C, R	10-5
12	Displays the level value for Cursor A in the digital value area.	C, R	
13	Displays the level value for Cursor B in the digital value area.	C, R	
14	Displays the level value for Cursor A-B in the digital value area.	C, R	

10-1 Expand, Shrink, or Move the Y Axis



Select a channel and click one of these icons to expand, shrink, or move the Y axis.

How to Select a Channel

	Regular Y-T Screen			
	СН	Level	Unit	
	CH1	+26.5	deg⊂	
	CH2	+23.4	degC	
	CH3	-0.2053	V	
Highlight the	CH4	-0.2053	V	
Channels to be	CH5	-0.2023	V	
operated.	CH6	-0.2024	V	
	CH7	-0.2023	V	
	CH8	-0.1993	V	
	CH9	-0.200	V	
	CH10	-0.199	V	
	CH11	-0.20	V	
	CH12	-0.20	V	
	CH13	-0.20	V	
	CH14	-0.19	V	
	CH15	-0.19	V	
	CH16	-0.19	V	
	CH17	-0.19	V	
J	CH18	-0.19	V	T





Select a Channel to be operated.

CAUTION!!

There may be some deviation if you repeat the operation to change back to the original state. In this case, follow the steps in 10-3-3 "Reset the Y Axis Operation".

10-2 Plot Marks



The waveforms are plotted by interpolating sample points. Click this icon to display marks for the actual sample points.





10-3 Y Axis Operations



Click this icon to open the sub-screen to perform Y axis operations.

10-3-1 Scroll Directions



10-3-2 Scale Axis Settings

📕 Waveform	Operation	×
Scale Settings	Calculate	
Scroll dire	ction	?
	Horizontal	∇
Scale Sett	tings	?
Zone Divisions	No Divisions	∇
Y Axis 1	CH1	∇
Y Axis 2	OFF	∇
Y Axis 3	OFF	∇
Y Axis 4	OFF	∇
Y Axis Ope	ration Reset	?

Item	Description	Operable behavior
Zone Divisions	Divides the zone for the waveform graph. You can select	F, C, R
	Note: The zone division is not available in vertical scroll mode.	
Y Axis 1-4 (when "No Division" is selected)	Sets the channel for Y axis ranges 1 to 4.	F, C, R

<Zone Division Screen>



<Example of Y Axis Range Display>



10-3-3 Reset the Y Axis Operation

📕 Waveform	Operation	×
Scale Settings	Calculate	
Scroll dire	ction	?
	Horizontal	∇
Scale Sett	tings	?
Zone Divisions	No Divisions	∇
Y Axis 1	CH1	∇
Y Axis 2	OFF	∇
Y Axis 3	OFF	∇
Y Axis 4	OFF	∇
Y Axis Ope	ration	?
	Reset	

Reset F, C, R	Item	Description	Operable behavior
After using these icons to expand, shrink, or move the Y axis, click "Reset" to change back to the state before performing the operation. Select a channel to reset, and then click this key.	Reset	After using these icons to expand, shrink, or move the Y axis, click "Reset" to change back to the state before performing the operation. Select a channel to reset, and then click this key.	F, C, R

10-3-4 Calculation

📕 Waveform Operation 🛛	×
Scale Settings Calculate	
Calc. CH On/Off ?	
Calculation Formula X CH2 V * 1 Y CH1 V * 1 Operator + V 0	
(CH2*1)+(CH1*1)+0	

Item	Description	Operable behavior
Calculation CH	Use these buttons to set calculations 1-4 to On/Off.	F, R
On/Off	On : Calculation results are shown as waveforms and digital values.	
	Off : Do not perform calculations.	
	The calculation results are only shown in Y-T display, and	
	do not affect the captured data.	
Calculation	Use this button to set the variable for a linear expression	F, R
Formula	between channels.	
	$A \cdot CHX * B \cdot CHY + C$	
	The expression you set appears at the bottom of this	
	window.	

10-4 Display Cursors



Click these icons to show cursors in the waveform display.



10-5 Input Comments



Click this icon to input a comment above the waveform of the desired channel during a data capture (replay) operation.

CH CHI Use this button to select the channel for input. 1: Started Use this button to input the comment(s). • Up to 20 comments can be input. • If you change the comment at a location where a comment has already been input, the original comment will be chan • If the location is one where there is no existing comment, the comment will be input as a new comment. Click this button to delete the comment that was input.	CH CH 1: Star Inpu	CH1	-Use this button to select the channel for input. -Use this button to input the comment(s). •Up to 20 comments can be input. •If you change the comment at a location where a comment has already been input, the original comment will be changed •If the location is one where there is no existing comment, the comment will be input as a new comment. -Click this button to delete the comment that was input.
---	-----------------------------	---	--

Click this button to input the comment.

When On has been selected for Scroll When Off has been selected for Scroll When displaying replay

- : The comment is input at "Comment Input Pos" above the waveform graph.
- : The comment is input at the position above Cursor A.
 - : The comment is input at the position above Cursor A.



11. Replay Data

11-1 Replay Data Captured to the PC

This section explains how to replay data that has been captured to your PC (personal computer).

Click Review PC button.

The data files captured to the PC will be displayed together with thumbnails (small index images).



No.	Name	Description		
1	Drive	Jse this button to select the appropriate PC drive.		
2	File Path	The file location is displayed here.		
3	Select Folder	Click this button to select the folder that has data files.		
4	Create Folder	Click this button to create a new folder.		
5	Delete	Click this button to delete the selected file.		
6	Order	Use this button to select the file arrangement order.		
		File Name The files are arranged by file name.		
		Day/Time Updated The files are arranged starting from the latest updated day/time.		
7	Frequently-used folder	Use these buttons to select a frequently-used folder and move the file to that folder. Single click : Select Double click : Move		
8	Waveform thumbnail	The captured data is displayed as a compressed waveform. Thumbnails can only be displayed for data that was captured using this software. Moreover, data that was captured to the device itself cannot be displayed as thumbnails.		
9	File list	The captured data is displayed in a list format.		
10	Register as frequently- used folder	Click this button to register the currently displayed folder as one of the frequently-used folders. After registering, it is added to Item 7 "Frequently-used folder".		
11	Select File	Click this button to select a file (display the file).		
12	Cancel	Click this button to cancel the selected file.		

11-2 Replay Data Captured to the Device

Replay data that has been captured to the device.

Click Review Device button.

The data captured to the device are displayed.

🗏 Open File
File Path Order Day/Time Updated WEM070125\. Select Folder CreateFolder Delete
USB 1 USB 2 USB 3 USB 4 2
070125-180450_UG.GBD Size (bytes): 9512 Day Updated : 2007/01/25 Time Updated : 18:05:02
070125-180209_UG.GBD Size (bytes) : 32704 Day Updated : 2007/01/25 Time Updated : 18:03:42
070125-173749_UG.GBD Size (bytes): 14320 Day Updated : 2007/01/25 Time Updated : 17:38:06
070125-173730_UG.GBD Size (bytes): 10240 Day Updated : 2007/01/25 Time Updated : 17:37:36
070125-154942_UG.GBD Size (bytes) : 21944 Day Updated : 2007/01/25 Time Updated : 15:50:36
070125-110322_UG.GBD Size (bytes): 11516 Day Updated : 2007/01/25 Time Updated : 11:03:28
Select File Cancel

No.	Name	Description	Ref. Section
1	Device Memory	Click this button to display the files saved to the internal memory.	
2	USB device	Click the appropriate button to display the files saved to the selected USB device.	

11-3 Review PC (Waveform Display)

These operations can also be performed for Review device.



No.	Name		Description	Ref. Section	
1	Open File	Click this button to select the	data to replay.		
2	Superimpose/Link	Click this button to display a s files saved in PC.	creen showing superimposed or linked data from multiple	11-3-1	
3	Convert then Save	Click this button to convert the clip and save only the data be	e replayed data to a different file format (GBD, CSV) or to tween the cursors.	11-3-2	
4	Display in Excel	Click this button to display the The Microsoft Excel program	ck this button to display the captured data in Excel format. A Microsoft Excel program must be installed before you can use this function.		
5	Print Screen	Click this button to print out a	Click this button to print out a copy of the displayed screen at your default printer.		
6	Save Screen	Click this button to save the di	lick this button to save the displayed screen as a BMP file.		
7	Close	Click this button to close the re	lick this button to close the replay screen.		
8	Replay information	The replay information is displayed here.			
		Capture File Name The	name of the data capture file that is being replayed.		
		Start Time The	time at which data capture was started.		
		Capture Time The	data capture time		
		Sampling Interval The	sampling interval		
9	Alarm	Click this button to display the	alarm port status.	11-3-4	
10	Search	Click this button to perform da	ta search.	11-3-5	
11	XY between cursors	Click this button to display the	data between the A and B cursors in X-Y format.	11-3-6	
12	Digital	The digital values are displaye the waveform for that channel has been generated are show	he digital values are displayed in this area. Clicking on any of the CH numbers enables he waveform for that channel to be hidden/displayed. The channels for which an alarm has been generated are shown in red.		
13	Scale operations	Use this area to auto-scale X	axis, enlarge the selected area, etc.	11-3-7	
14	Scroll bar	Use this bar to move the wave	eform.		
15	Cursor Time	The cursor times are displaye	d here.		

11-3-1 Superimpose/Link

This function enables multiple files to be superimposed on the display, or to be linked. The data must be captured under the same conditions to be linked.

File Name	Start Time	Time	🚺 Interval 🛛 🚺 🖊 A	dd
2006-12-28_12-55-13e	2006/12/28 12:55:13	10s	100ms	
2006-12-28_12-54-	006/12/28 12:55:00	11s	100ms De	lete
2006-12-28_12-54	06/12/28 12:54:47	10s	100ms 2	
2006-12-28_12-54-28.e	2006/12/28 12:54:29	15s	100ms	
			7	
	I			
o delete multiple files, pre	ess the SHIFT or CTRL ke	ey.	<u> </u>	
	\sim			\

No.	Name	Description	Ref. Section
1	Add	Click this button to add a file to those selected for the superimposing or linking operation.	
2	Delete	Click this button to delete the added file from the list.	
3	File list	The files added to those selected for superimposing or linking are listed here.	
4	Superimpose	Click this button to superimpose files.	
5	Link	Click this button to link files.	
6	Default	Click this button to open the original file without performing any superimposing or linking operations.	
7	Cancel	Click this button to close the screen.	

11-3-2 Convert then Save

This function is used to convert replayed data to a different format (GBD, CSV), and to clip and save only the data between the cursors.



Click to select the save destination.

11-3-3 Display in Excel

This function is used to launch Excel and display the data in a new worksheet. (The Microsoft Excel program must be installed in order for this function to be used.)

Display in Excel	 Data to be converted All Data : All the data is converted. Between Cursors : Only the data between the cursors is converted. Spot Samples Use this button to specify spot sampling of the data. Click to close the screen.
Click to dis	splay the date in an Excel file.

11-3-4 Alarm

The alarm output port status is displayed in this screen, together with the Alarm Clear button. During replay, it shows the alarm output port status at the cursor point selected in the digital value display. The Alarm Clear button is disabled during replay.



Red = alarm generated; White = alarm not generated

11-3-5 Search

🗖 Search 🛛 🔀
Analog Search CH3 V Slope Level Unit
Prev. Search Next Search
Alarm Search ?
Prev. Search Next Search
MaxMin CH1(Ro V Search Max Search Min

Analog Search ("Edge" is used for the search judgment criterion.)						
Use this button to select the CH to be searched.	R					
Use this button to select the slope to use for performing the	R					
search.						
H : Search for a rising signal.						
L : Search for a falling signal.						
Use this button to set the search level.	R					
Search in the past direction.	R					
Search in the forward direction.	R					
e" is used for the search judgment criterion.)						
This parameter is used to specify the alarm port number (fixed).	R					
Use this button to set the alarm status in which searches are	R					
performed.						
Generated : Performs search when an alarm is generated.						
Cleared : Performs search when an alarm is cleared.						
Search in the past direction.	R					
Search in the forward direction.	R					
Use this button to select the CH to be searched.	R					
A search is made for the maximum value data.	R					
A search is made for the minimum value data.	R					
	ge" is used for the search judgment criterion.) Use this button to select the CH to be searched. Use this button to select the slope to use for performing the search. H : Search for a rising signal. L : Search for a falling signal. Use this button to set the search level. Search in the past direction. Search in the forward direction. e" is used for the search judgment criterion.) This parameter is used to specify the alarm port number (fixed). Use this button to set the alarm status in which searches are performed. Generated : Performs search when an alarm is generated. Cleared : Performs search when an alarm is cleared. Search in the forward direction. Search in the past direction. Search in the past direction. Search in the past direction. Search in the forward direction. Multiple Search when an alarm is cleared. Search in the forward direction. Search in the forward direction. A search is made for the maximum value data. A search is made for the minimum value data.					

11-3-6 XY between Cursors

This function is used to display the data between the A and B cursors in an XY format.



No.	Name	Description	Ref. Section		
1	Replay Information	The replay information is displayed here.			
		Start Time The time at which data capture was started.			
		Capture Time The data capture time			
		Sampling Interval The sampling interval			
2	Print Screen	Click this button to print a copy of the screen at the default printer.			
3	Save Screen	this button to save the screen in BMP format.			
4	Close	this button to close the screen.			
5	X-Y Waveform Graph	C-Y waveform graph is displayed here.			
6	Waveform operation icons	nese buttons to expand, shrink, or move X and Y axes.			
7	Range	These buttons specify display of the scale values for the channels selected for the X and Y axes.			
8	ON/OFF	Click these buttons to specify the display as ON or OFF.			
9	X Axis/Y Axis	Use these buttons to select the channels for the X and Y axes.			
10	Channel settings	The sum of the share de familie Dense has been see iffed as shown have			
10	Cursor Information	I ne cursor levels of the channels for which Hange has been specified are shown here.	L		
11	Display Cursor	Click this button to move the cursor to the center of the graph.			

11-3-7 Scale Operations

Use this area to perform scale operations, enlarge the selected area, etc.



11-4 Review PC (Digital Display)

You can select "Digital" tab to switch to the digital display.

The Digital screen is used mainly to perform operations such as statistical calculation using the A and B cursors.



No.	Name	Description	Ref. Section
1	Display switching tabs	Click one of the tabs to switch between Waveform and Digital displays.	
2	Execute Stat. Calc	Click this button to perform statistical calculation of the data between Cursors A and B.	
3	Digital display	The cursor A and B levels, calculation results, and so forth are displayed here.	
4	Cursor Time	The cursor A and B times are displayed here.	

12. Other Functions

12-1 CSV File Batch Conversion

CSV file batch conversion

This function enables multiple GBD (binary data) files to be converted in a batch to CSV format files.

elect conve	erted l	File					
File Name		Start Time		Time	Interval	A	Add
2006-12-27_17-	-59-30.e	2006/12/27	17:59:30	1 min	100ms		
2006-12-27_17-	-58-56.e	2006/12/27	17:58:56	7s	100ms		Delete
2006-12-27_17-	-42-41.e	2006/12/27	17:42:41	14s	100ms		
2006-12-27_12-	-08-24.e	2006/12/27	12:08:24	35min	100ms	_	
2006-12-27_11-	-52-11.e	2006/12/27	11:52:11	15min	100ms	_	
	1)						
	\smile						
						_	
						_	
						x	
o delete multiple :	files, pre	ss the SHIFT o	or CTRL ke	у.			
oloot the co	مام میں	ctination	folder				
elect the sa	ave ue	sunation	loider			4	
C:\							
					\bigcirc		
					(6)		5

No.	Name	Description	Ref. Section
1	List of converted files	The batch-converted files are displayed in a list.	
2	Add	Click this button to add a file to the batch to be converted.	
3	Delete	Click this button to remove a file from the batch to be converted.	
4	Save destination folder	Select the save destination for the batch-converted files here.	
5	Cancel	Click this button to cancel the batch conversion operation and close the screen.	
6	Start batch conversion	Click this button to start batch file conversion.	

12-2 Statistics/Log

Statistics/Log Display

The statistical calculation and alarm log results are displayed in this screen.

	Save r	esults to a	a CSV file.		A	larm Lo	g: The	ala I	rm log	is displa	yed he	ere
Statis	tics/Log Disr la	y										X
Sav	e Results to File]										
Stat. (Calc								Alarn	1 Log	?)
СН	Annotation	Min	Min Time	Max	Max Time	Average	Unit	A	СН	Occurren	ce Time 🛛	1
CH1	RoomTemp	+25.2	06-12-28 11:49:33	+26.5	06-12-28 11:48:52	+25.6	degC		CH	06-12-28	11:48:50	
CH2	OutsideTemp	+23.4	06-12-28 11:48:58	+23.6	06-12-28 11:48:43	+23.5	degC					
CH3		-0.5009	06-12-28 11:48:52	+0.4964	06-12-28 11:49:02	+0.0105	V					
CH4		-0.3799	06-12-28 11:48:56	+0.4902	06-12-28 11:48:42	+0.0151	V					
CH5		-0.5009	06-12-28 11:48:52	+0.4965	06-12-28 11:49:22	+0.0105	V					
CH6		-0.5010	06-12-28 11:49:32	+0.4964	06-12-28 11:49:02	+0.0105	V					
CH7		-0.5010	06-12-28 11:49:12	+0.4964	06-12-28 11:49:21	+0.0105	V					
CH8		-0.5009	06-12-28 11:48:52	+0.4965	06-12-28 11:49:22	+0.0105	V					
CH9		-0.502	06-12-28 11:48:52	+0.497	06-12-28 11:49:01	+0.011	V					
CH10		-0.501	06-12-28 11:48:52	+0.497	06-12-28 11:49:41	+0.011	V					
CH11		-0.50	06-12-28 11:48:52	+0.50	06-12-28 11:49:01	+0.01						
CH12		-0.50	06-12-28 11:48:52	+0.50	06-12-28 11:49:02	+0.01						
CH13		-0.50	06-12-28 11:48:52	+0.50	06-12-28 11:49:01	+0.01						
CH14		-0.50	06-12-28 11:48:52	+0.50	06-12-28 11:49:21	+0.01						
CH15		-0.50	06-12-28 11:49:32	+0.50	06-12-28 11:49:41	+0.01						
CH16		-0.50	06-12-28 11:48:52	+0.50	06-12-28 11:49:01	+0.01						
CH17		-0.50	06-12-28 11:49:12	+0.50	06-12-28 11:49:41	+0.01						
CH18		-0.50	06-12-28 11:48:52	+0.50	06-12-28 11:49:01	+0.01						
CH19		-0.50	06-12-28 11:49:32	+0.50	06-12-28 11:49:01	+0.01		4			4	

Stat. Calc: The statistical calculation results are displayed here.

12-3 Protect

Protect

Click this button to protect all the operations of this software. To clear it, password should match.

Protect Setting Screen

Protected /	Protect	Clear	Screen

E Protect
Protected
Password
Enter the password to clear protect.
Cancel

CAUTION!!

Protect is effective only on this software. Note that you can exit this software by using Windows operations.

12-4 Exit Software

End

Click this button to exit this software. When you click this button, the following appears:

=		X
Save setting con-	ditions to the GL80)0 then exit?
YES	NO	Cancel
YES	NO	Cancel

- Yes : Click this button to save the setting conditions on this software in the GL800 device and exit. Note that it cannot save all the settings. Some settings cannot be saved.
- No : Click this button to exit without saving the setting conditions on this software in the GL800 device. The setting conditions on GL800 device revert to the state before controlling the software. In this case, please power off and back on the device.
- Cancel : Click this button to cancel the termination of this software.

13. Operating Procedure

This chapter describes the basic operating procedure.

The operating procedure starts with the software and the device in the connected status.

For the connection procedure, see Section 4, "Connecting to a PC (Personal Computer)".

The settings that are not addressed in the following sections are the factory default settings.

No.	Operation	Description
1	Capture Settings	Make the settings required for data capture.
2	Start	Start data capture.
3	Displaying past data during a data capture operation	Select Off for "Scroll" to display past data.
4	Stop	Stop data capture.
5	Replay Data	Replay data captured to the PC (personal computer).

13-1 Capture Settings

Click the "Capture Settings" button to make the settings required for data capture.

Connect (F5)	Review	v PC	file batch conversion	Enlarged Y-T display
Device 1				
Free Ru	nning	Capture Settings	Start (F7)	Stop (F8)
Start Time	Captu	re Time	Allowable Time	Number Sa
2007/01/26 9:16:	:04 00da	ayOOhourOOminOOse	c 00day14hour05mi	n39sec 0
Y-T X-Y Digital	Meter Rep	port		
	20sec sec 🔻			<u>A-</u>

13-1-1 AMP Settings

Make the input settings shown below.

CH used	2 channels (CH 1 and CH 2)		
Input	CH 1: DC		
Input	CH 2: TEMP		
Panga	CH 1: IV		
папуе	CH 2: TC-T		

Make the settings as shown in the following screen:

СН	Color	Annotation	-	_	-				Unit
1		TEST1	DC	∇	50V	∇	OFF	∇	V
2		TEST2	Temp	∇	TC-T	∇	OFF	∇	degC
3			 Off	∇		∇	OFF	∇	

13-1-2 Data Capture Settings

When the settings described in Section 9-1, "AMP Settings" have been made, click the "Data Capture Settings" tab. Here, we will make the settings related to data capture.

Select "1sec" for the sampling interval. Leave all the other settings unchanged.

(Device capture destination: Device Memory; PC capture destination: the folder to which this software was installed)

E Settings		
AMP Settings Data Capture S	Settings Trigger Alarm Settings Report Settings Other Settings	
Graph Display	Data Capture Settings Common Settings • Sampling Interval 1sec 7	About Data Casture
	Device Capture Settings	PC Capture Settings
	Select capture destination	• Format GBD 💎
	Allowable capture time 04day09hour42min24sec	Name Type Auto
	Select capture destination • Name Type Auto	Save Path C:Program Files/graphtec/GL800APS/Data ?
-	Save Path MEMidata ?	Create Backup File Backup Interval 1
		OK Cancel Apply

13-2 Start

Click the "Start" button to start capturing actual data.

GL800-APS Ver 1.00	
Connect (F5) Review PC CSV file batch conversion Enlarged Y-T display Protect Print Screen	Save Screen End
Device 1	Device Battery
Free Running Capture Settings Start (F7) Stop (F8) Review Device	Alarm Statistics/Log Display
Start Ime Capture Ime Allowable Ime Number Sampling Interval PC Capture Destination 2007/01/26 9:16:04 00day00hour00min00sec 17day14hour49min36sec 0 1sec	
Y-T X-Y Digital Meter Report	
0500-	ALL G1 G2 G3 G4
0400-	CH Level Unit
0.350-	CH1(TEST -0.4325 V
0.300-	CH2(TEST +27.4 degC
0250-	
0200-	
2 mm-	
5 0000	
#_0.050	
ά-αιφ-	
-0.150 -	
-0.200 -	
-0250-	
-0250-	
-0400	
-0450-	
-0.500-	Cursor Time
00 100 200 300 400 500 600 700 800 900 1000 1100 1200 Sec	Cursor A
	Cursor B
	A-B

13-3 Displaying Past Data during a Data Capture Operation

If Off is selected for the waveform "Scroll" button during a data capture operation, past data can be viewed.



Click the "Scroll" button.

The scrolling operation will be halted, enabling past data to be displayed in the scroll bar. Moreover, moving the cursors enables the cursor level values to be viewed.

To return to the waveform scrolling operation, click the "Scroll" button once again.



13-4 Stop

Click the "Stop" button. Data capture stops, and the device returns to the Free Running status.



13-5 Replay Data

Data that has been captured to the PC (personal computer) can be replayed. Replaying the data enables you to view the captured data, and aligning the cursors enables you to browse the reference values.

Click the "Review PC" button.





The selected file is replayed.

While the data is being replayed, you can move the scroll bar to view the waveforms, or align the cursors to browse the reference values. In addition to these, various other functions can also be used. For further details, see Section 11-3, "Review PC (Waveform Display)". To end data replay, click the "Close" button.



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Specifications are subject to change without notice.

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