

GL Series Measurement Instrument Product How To Guide January 30, 2018



GRAPHTEC
Graphtec America, Inc.
Instruments Division

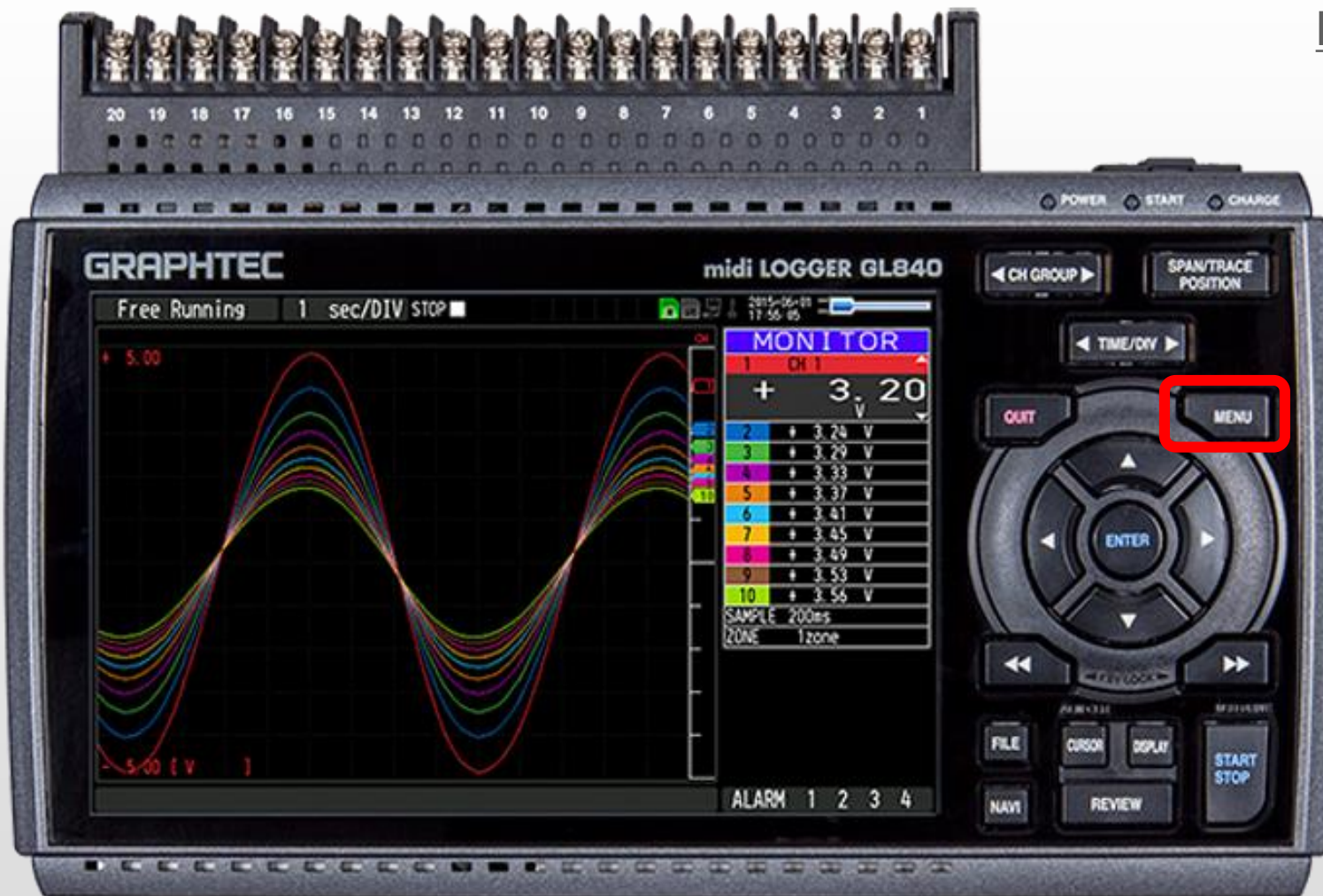
STEP BY STEP Product Guide

GL Series Overview

For GL240, GL840s, GL980, and GL2000

Basic Set Up on GL840-WV [default screen]

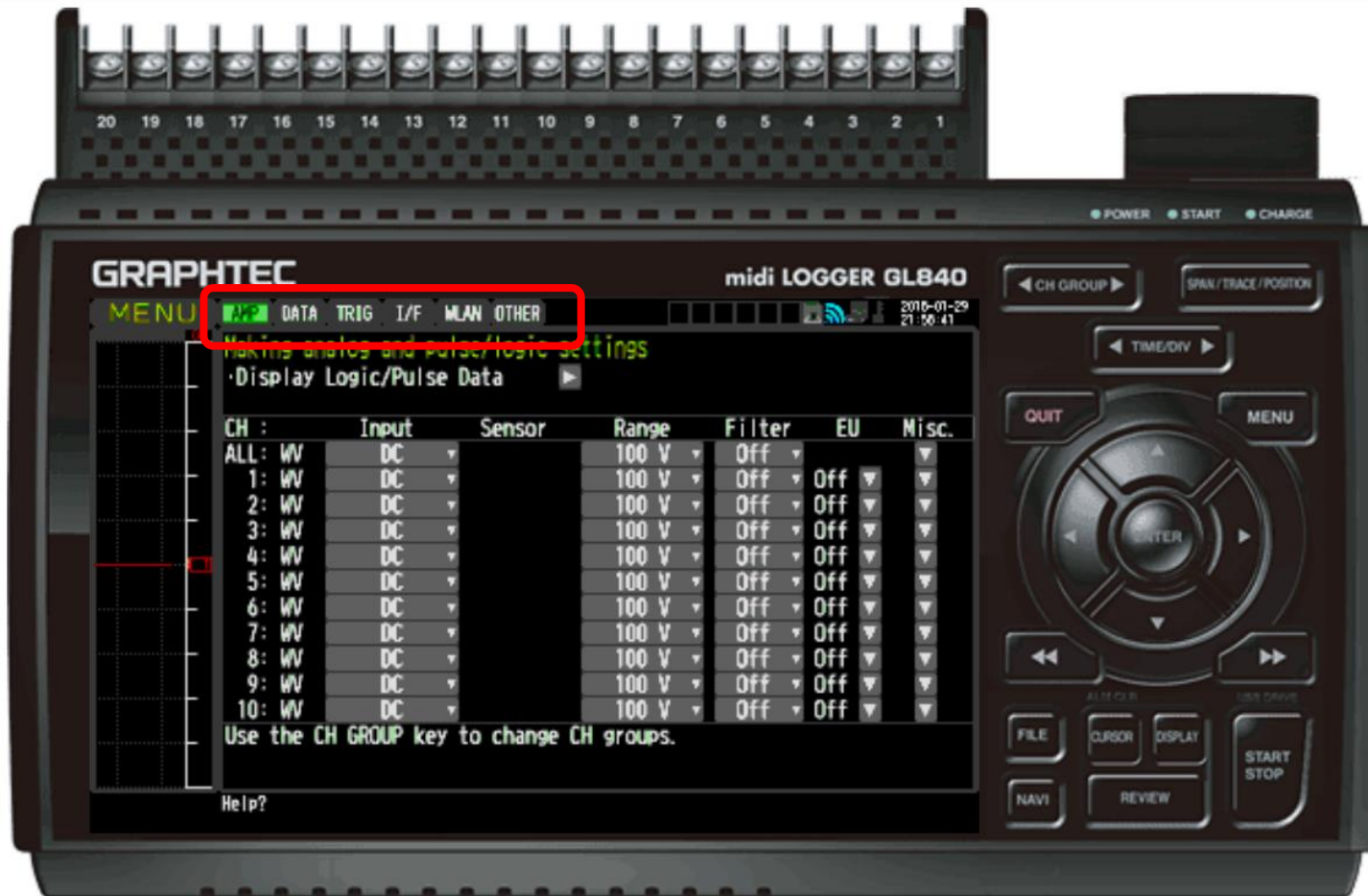
Start with your MENU button



- AMP Settings
- DATA Settings
- TRIG setting
- USB I/F Setting
- WLAN set up
- OTHER

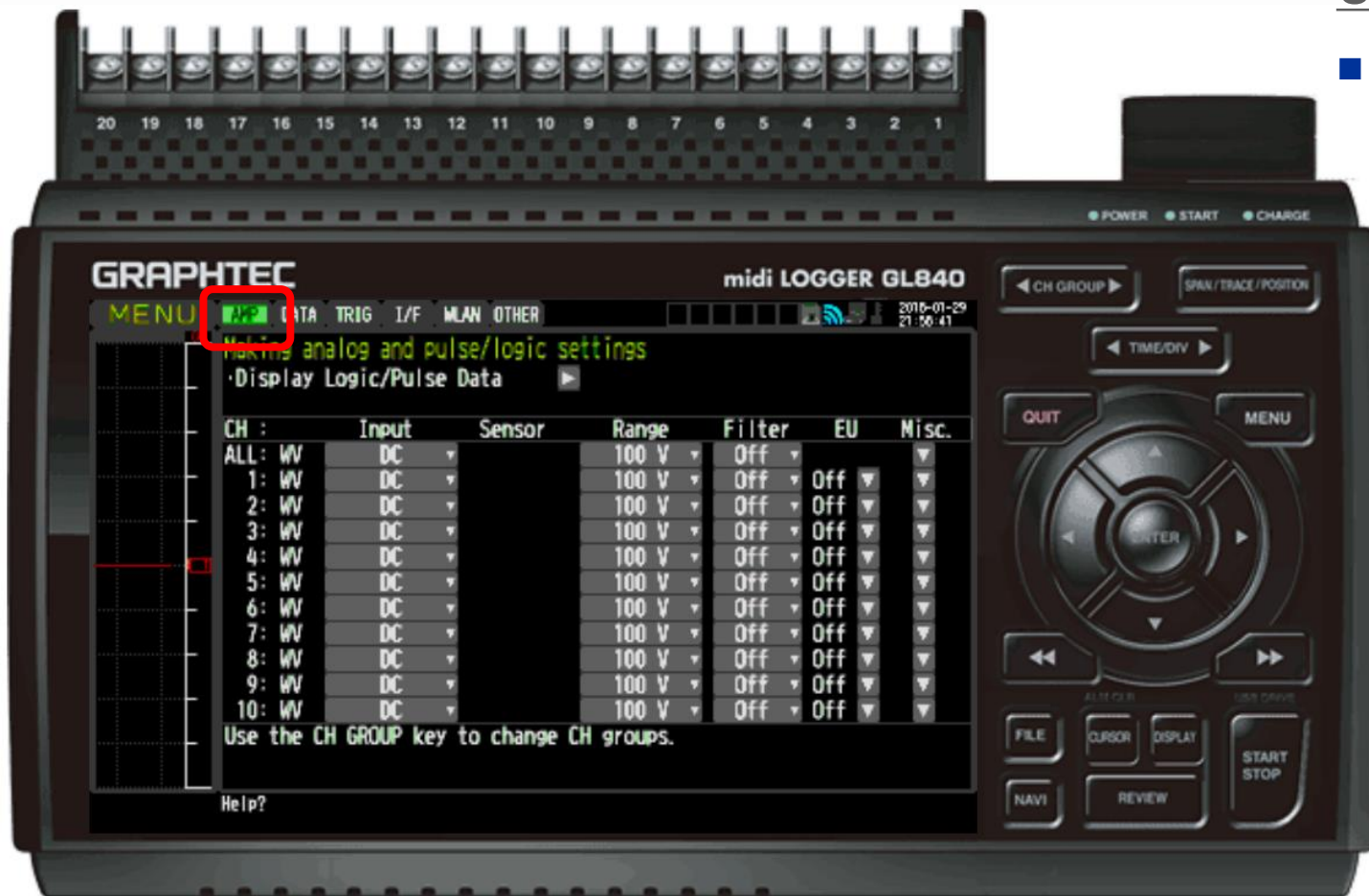
Basic Set Up [MENU]

Start with your MENU button



- ▣ AMP Settings
- ▣ DATA Settings
- ▣ TRIG setting
- ▣ USB I/F Setting
- ▣ WLAN set up
- ▣ OTHER

Basic Set Up - [AMP] Setting



Under [MENU]

■ AMP Settings

- Sets Logic/Pulse Inputs
- Set ON/OFF each channels
- Set Display Range
- Set Filter
- Set Engineering Scaling
- Set MISC.

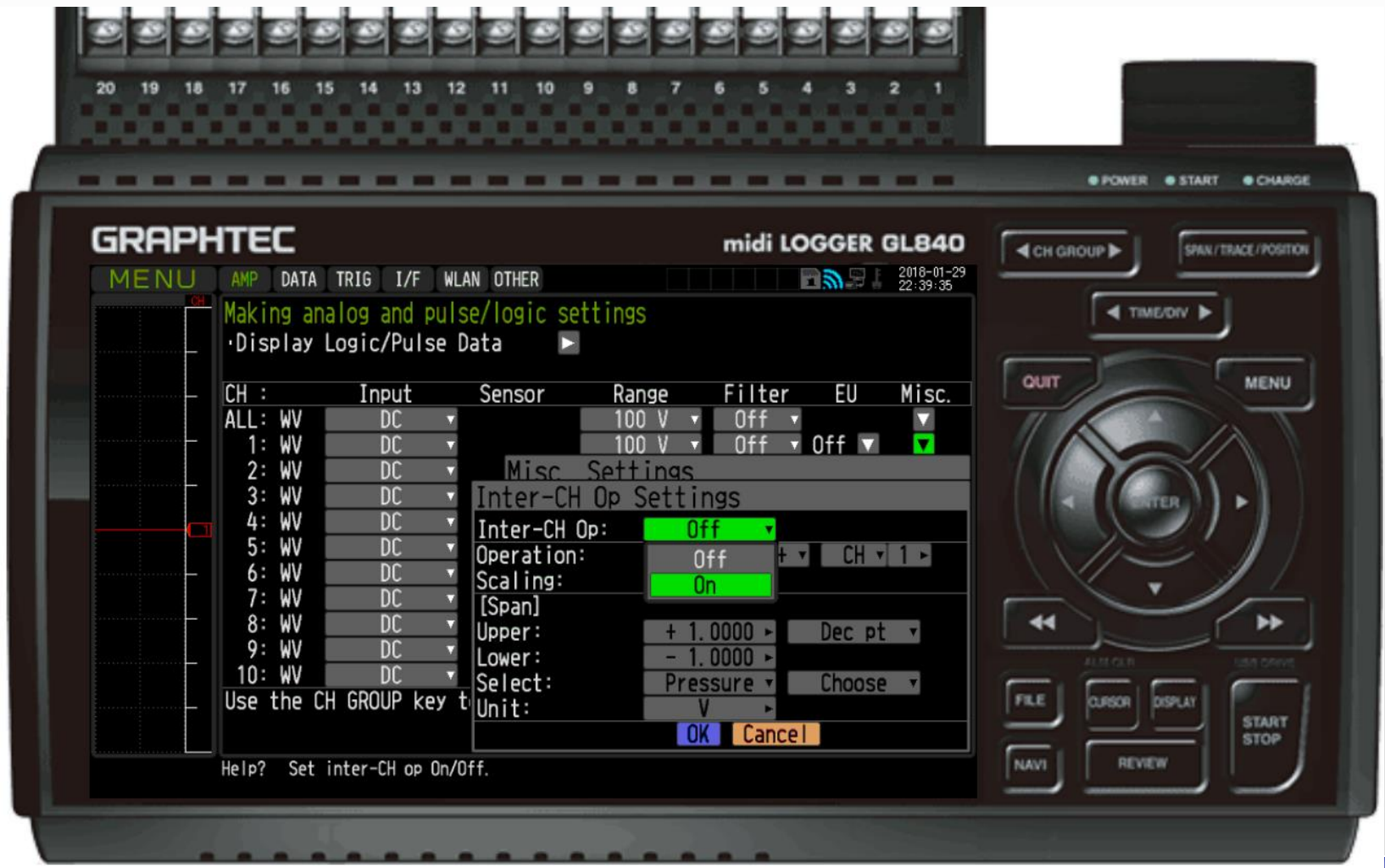
[AMP] Setting - Engineering Scaling (EU Feature)

Each Channel Allows Algebraic Scaling for 0-10V, 1-5V (4-20mA) inputs. True Universal inputs.



[AMP] Setting – Inter-CH Op Settings

Allows inter-CH operation of arithmetic calculations for addition, subtraction, division and multiplication. (ie) Voltage (V) x Current (A) = Power (W)



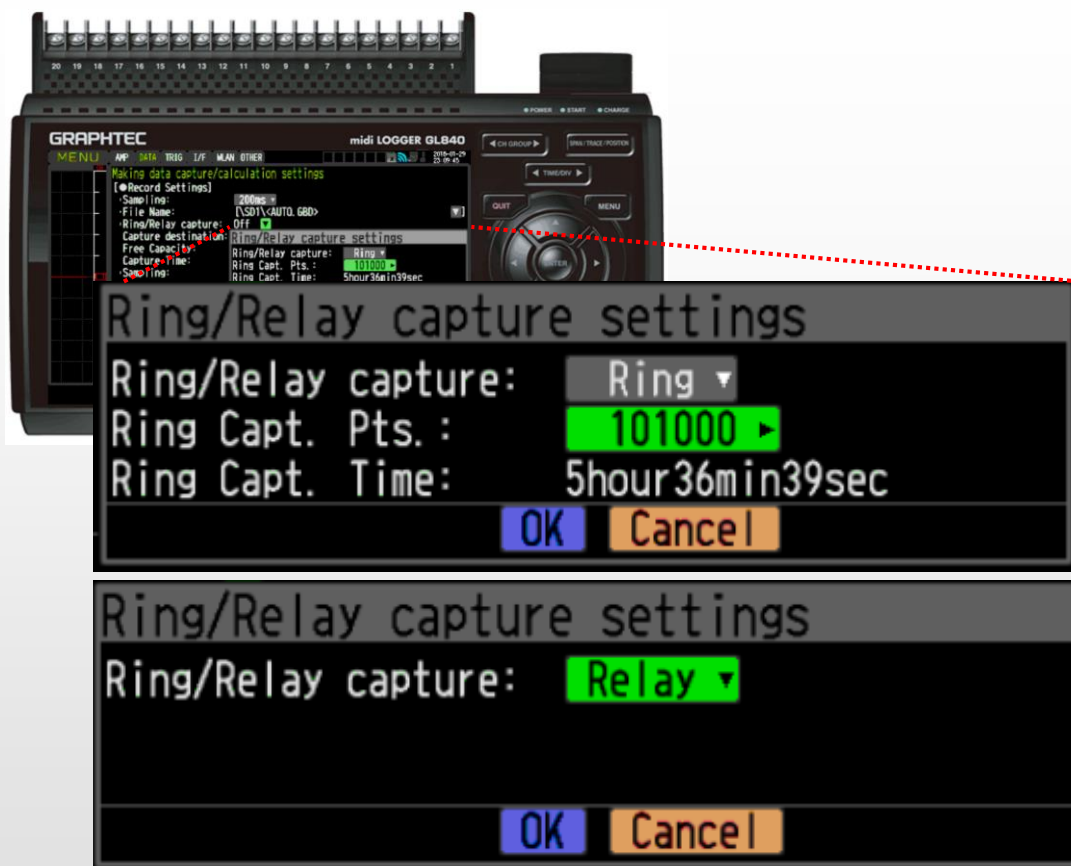
Basic Set Up [DATA] – Overall Summary

[DATA] Menu



- Sets sampling speed
- Sets file name (option to save as binary GBD or ascii CSV)
- Sets ring/relay feature.
- Capture Destination [SD1 = internal flash]
- Sets backup interval

Basic Set Up [DATA] – Relay/Ring Memory Mode



[RING/RELAY MEMORY] Modes

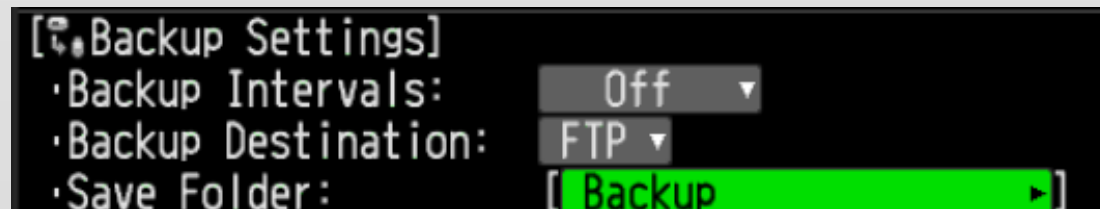
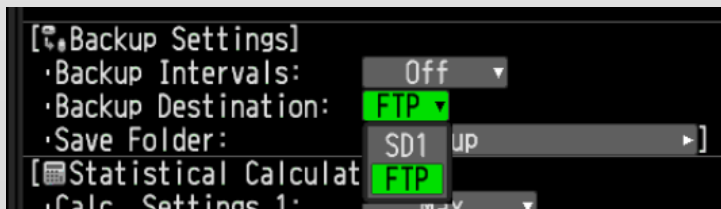
- Ring Memory
 - ▣ Saves a “ring” of files based on capturing points continuously. (ie) 5 hour 36min seen in picture.
- Relay Memory
 - ▣ Saves a 2GB file at any given sampling interval continuously until the recording is stopped

Basic Set Up [DATA] – Backup Settings



BackUp Setting

- Can backup files within a set intervals.
 - 1 hour
 - 2 hour
 - 6 hours
 - 12 hours
 - 24 hours
- Backup can be made on the internal flash or on FTP folder (push).
- Save Folder name can be designated here.



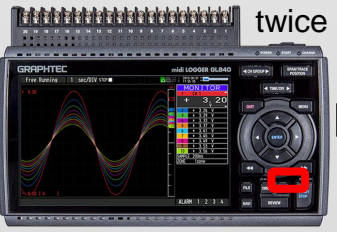
Basic Set Up [DATA] – Statistical Calculation

Statistical Calculation

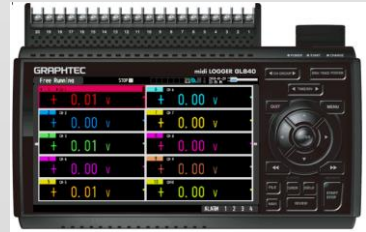
- Here, you can define the display setup for statistically calculated values for:
 - ▣ Average
 - ▣ Max
 - ▣ Min
 - ▣ Peak
 - ▣ RMS
- Display on Third Option



Press DISPLAY twice

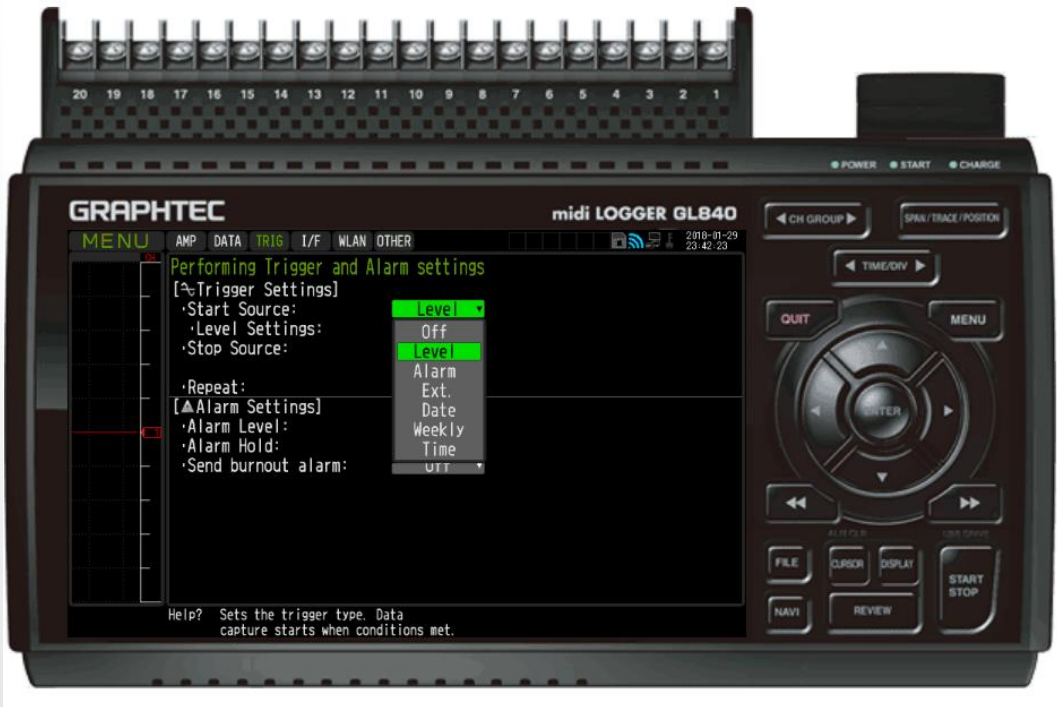


Press Fast Forward >> Three Times



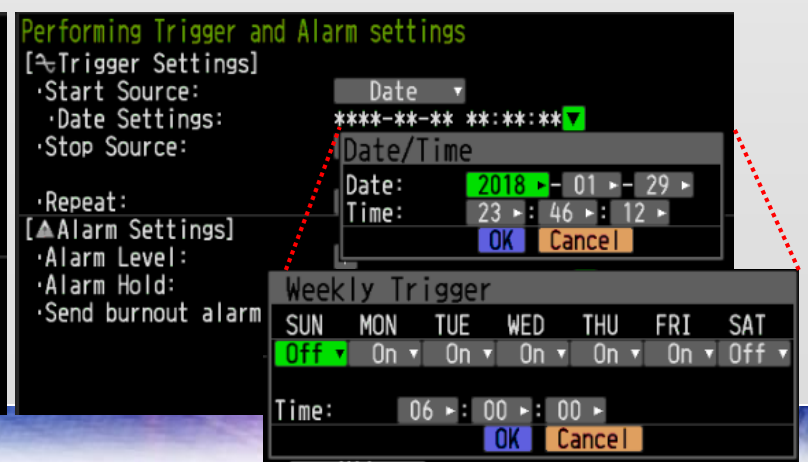
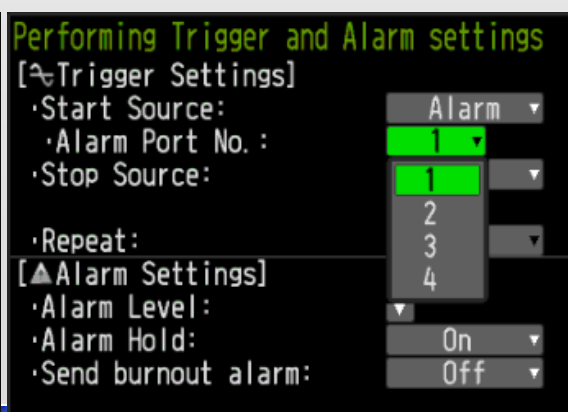
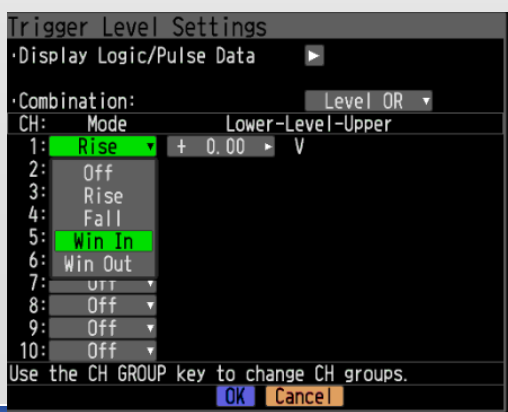
CH	VALUE	RMS	Ave
1	+ 0.00 v	+ 0.00	+ 0.00
2	- 0.01 v	+ 0.00	+ 0.00
3	+ 0.00 v	+ 0.00	+ 0.00
4	- 0.01 v	+ 0.00	+ 0.00
5	- 0.01 v	+ 0.00	+ 0.00
6	- 0.01 v	+ 0.00	+ 0.00
7	+ 0.00 v	+ 0.00	+ 0.00
8	- 0.01 v	+ 0.00	+ 0.00
9	+ 0.00 v	+ 0.00	+ 0.00
10	+ 0.00 v	+ 0.00	+ 0.00

Basic SETUP – [TRIG] Trigger Level Settings



[TRIG] Setting

- Trigger Level Settings include:
 - ▣ LEVEL
 - ▣ ALARM
 - ▣ EXT. (external trigger)
 - Requires B-513 cable.
 - ▣ Date
 - ▣ Weekly
 - ▣ Time
- Available for START and STOP source.
- Available to REPEAT.

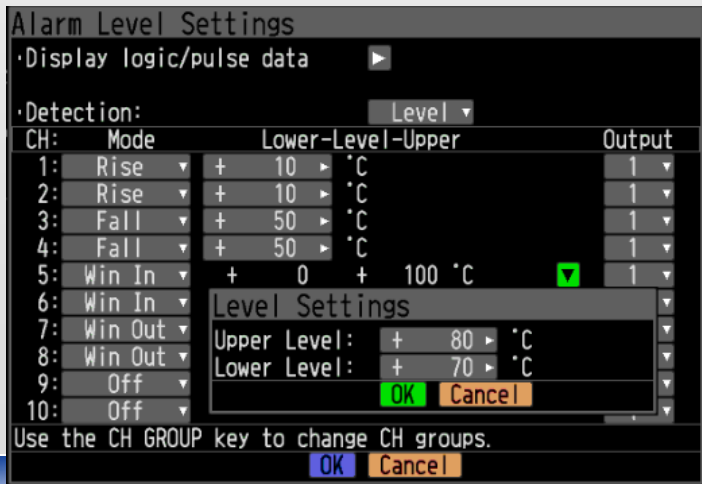


Basic Set Up [TRIG] – ALARM Level Setting

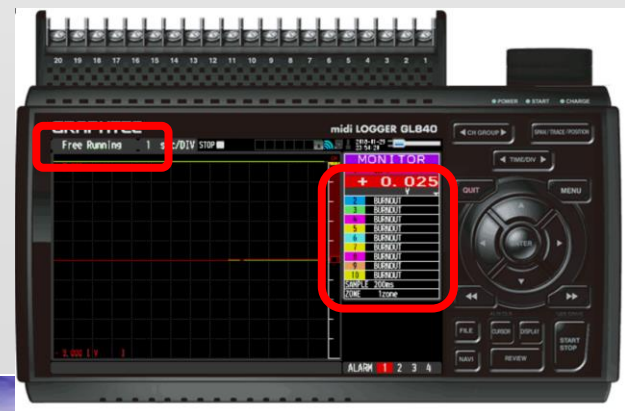


[ALARM] Setting

- ALARM settings are available for internal ALARM and external alarm output using B-513 cable (open collector output 5V, pull up resistance 10ohm)
- Also provides alarm trigger to external buzzer/LED.
 - <Maximum ratings of output transistor>
 - Collector-GND voltage : 30 V
 - Collector current : 0.5 A
 - Collector dissipation : 0.2 W
- **ALARM HOLD** – holds alarm condition.
- **Send burnout alarm** – sends when T/C is not detected.



Internal ALARM on firmware



B-513 Alarm Output Mechanism

● Alarm output

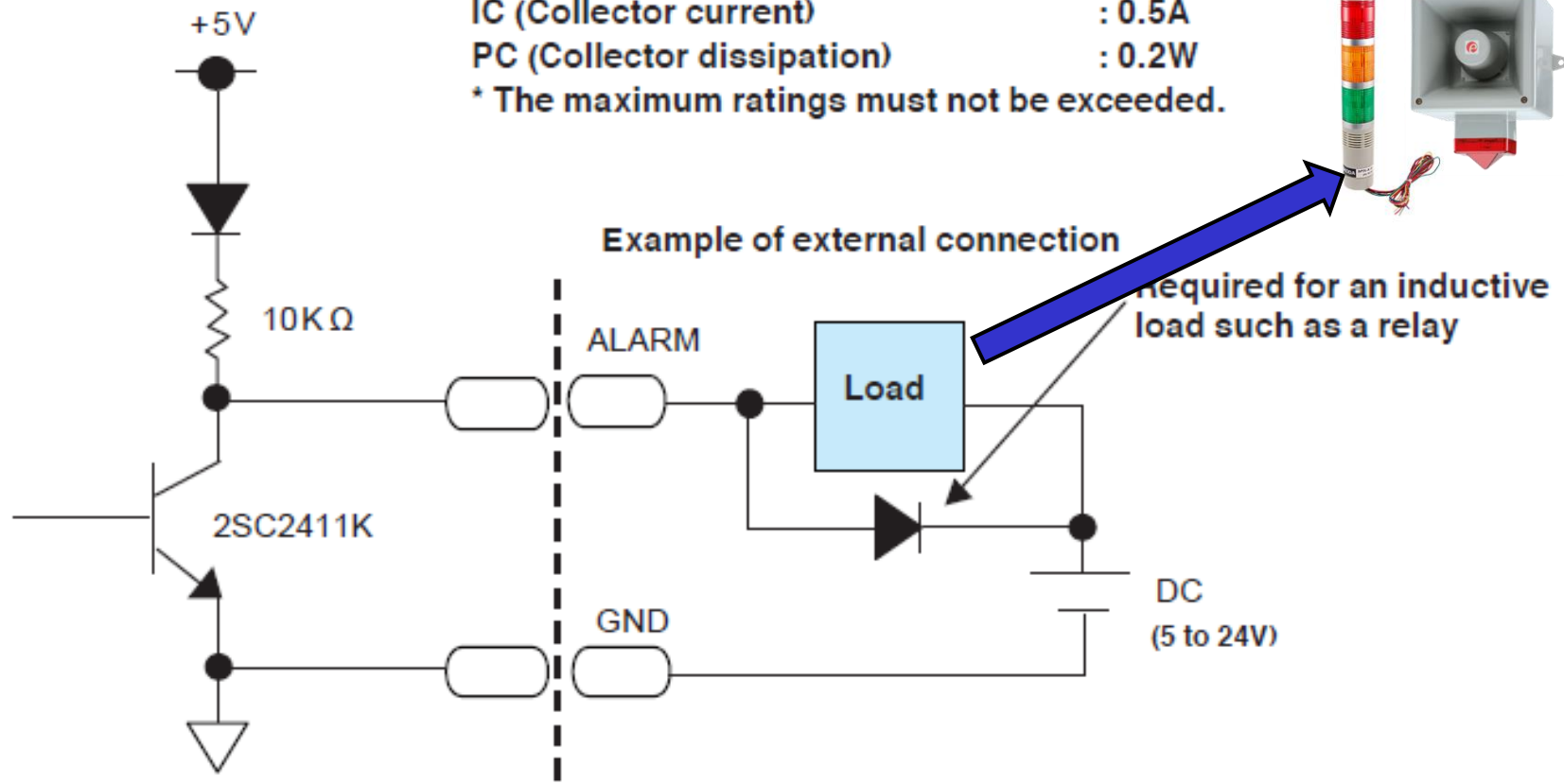
Maximum ratings of the transistor for alarm output

VCEO (Collector-emitter voltage) : 30 V

IC (Collector current) : 0.5A

PC (Collector dissipation) : 0.2W

* The maximum ratings must not be exceeded.



Basic Set Up [I/F] – Interface Set Up



[Interface]

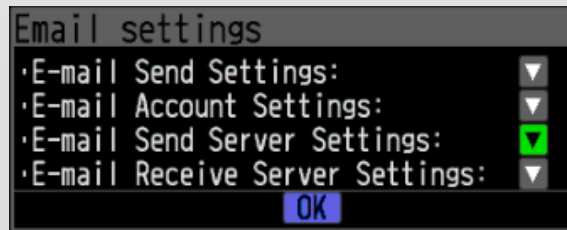
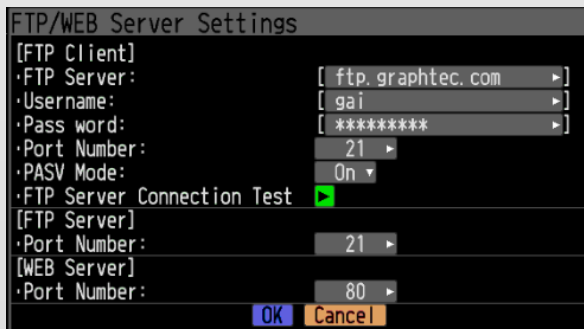
- Sets new line code configuration.
 - [CR+LF]
 - [LF]
 - [CR]

[USB Settings]

- Sets USB configuration
 - port 0 to 9.

[TCP/IP Settings]

- Sets TCP/IP settings for RJ45 LAN (hardwire).
- Also sets FTP/WEB Server Settings for FTP push/pull and web pull.
- Email Setting
- Set Unit Name or [host]



Basic Set Up [I/F] – Email Settings

Outgoing mail settings

[✉ Destination Settings]

·To: [kmatsunaga@graphtecam]

·CC1: []

·CC2: []

·CC3: []

·Subject: []

[▲ Notification settings]

·Alarm: On ▾

·Low battery: On ▾

·Low signal strength: On ▾

·SD card free space: On ▾

·Periodic notifications: 1 hour ▾

OK Cancel

Outgoing mail server settings

·Send(SMTP) Server Name: []

·SMTP port number: 25 ▾

·Time zone: UTC-12:00 ▾

[✉ SMTP settings]

·SMTP authentication method: Off ▾

·SMTP-AUTH: Off ▾

·The same as POP3: No ▾

·SMTP user name: []

·SMTP password: []

·SMTP encryption: Off ▾

·Test email: []

OK Cancel

Email account settings

·User Name: []

·Password: []

·E-mail Address: []

OK Cancel

Incoming mail server settings

·Receive(POP3) Server Name: []

·POP3 port number: 110 ▾

·Time zone: UTC-12:00 ▾

[✉ POP3 settings]

·Inquiry interval: 1 ▾ [minute]

·Inquiry after email sent: Usually ▾

·POP3 encryption: Off ▾

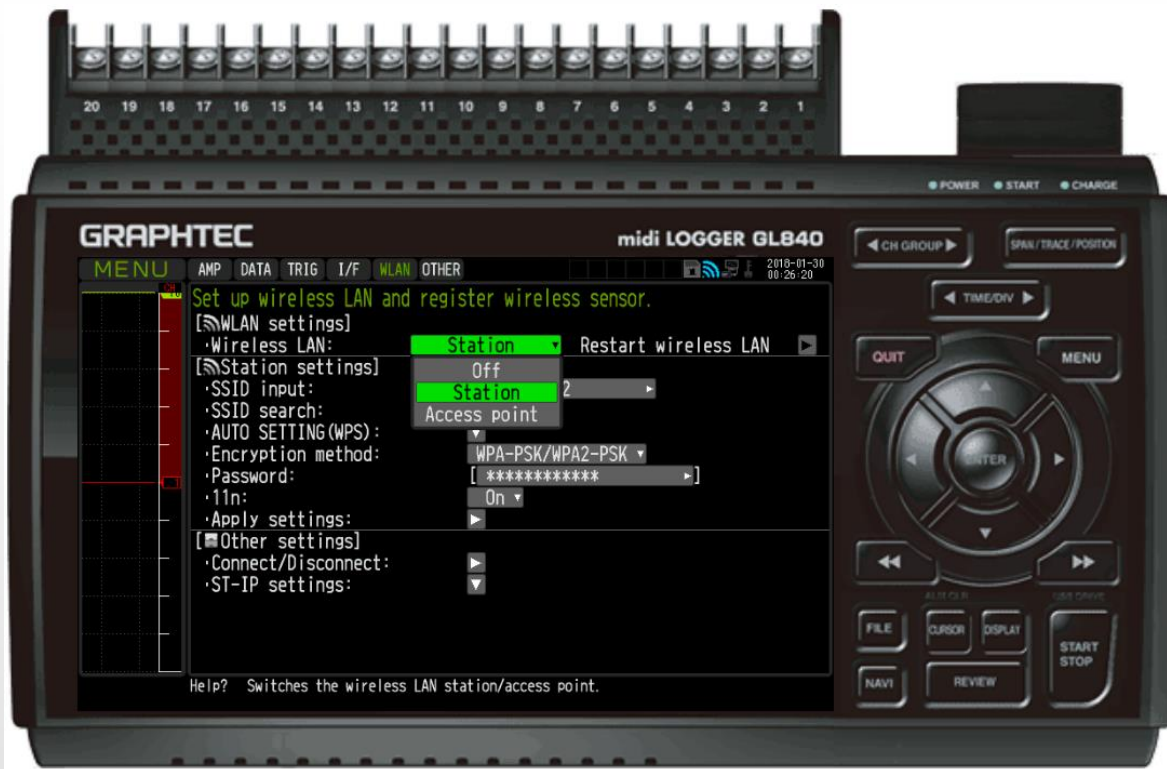
·Receive now: []

OK Cancel

[Email Setting]

- Allows
 - Outgoing mail settings
 - Notifications for Alarm, low battery, low signal strength (RSSI), SD card free space, and periodic notification set to certain interval.
 - Outgoing mail server settings
 - Sets the SMTP setup for sending emails out.
 - Email account settings
 - Sets the email account user name and password.
 - Incoming mail server settings

Basic Set Up [WLAN] – Wireless LAN Set Up



[WLAN] Set Up

- Must use B-568 wireless module.
- Can be set as [Station] or [Access Point]
- SSID search
- Encryption
 - ▣ WEP
 - ▣ WPA-PSK/WPA2-PSK
- Also sets Wireless GL100 monitoring for up to 5 GL100s.



Set Up Guide is available on YOUTUBE

<https://www.youtube.com/watch?v=mvmVDfbcIM4>

Basic Set Up [OTHER] – All other Settings



[OTHER] Settings

- LCD Brightness
 - Light, Medium, Dark
- Screen Saver
 - 10s, 30s, 1min, 2min, 5min, 10min, 30min, 60min.
- Power On Start
 - Disable – recording automatically starts when power is on.
 - Enable – you must press START to initiate recording.
- Room Temp
 - Internal – compensates the GL240 for room temperature.
 - External – executes room temperature compensation through external device.
- Temp Unit
 - °F or °C
- Background Color
 - Black or White
- Burnout
 - On or off
- AC line cycle
 - Noise countermeasure for 60hz and 50hz
- Date/Time Set up
 - NTP Setup
 - Or Manual entry
- Information
 - Firmware/FPGA/Network information
- Demo Waveform – On/OFF

END

GL Series Overview

For GL240, GL840s, GL980, and GL2000