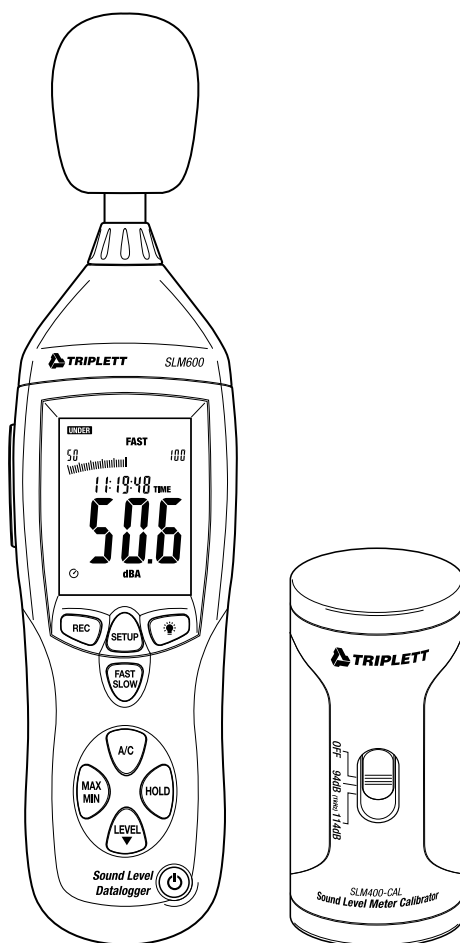


SLM600-KIT

Sound Level Meter/Datalogger and Calibrator Kit



INTRODUCTION

Thank you for purchasing Triplet's SLM600-KIT Sound Level Meter/Datalogger and Calibrator Kit. This professional-grade instrument is designed to deliver precise and reliable sound level measurements from 30 to 130dB across multiple ranges, making it an ideal solution for a wide variety of industrial, environmental, and occupational applications. With its easy-to-read LCD display, dynamic bargraph for real-time monitoring, selectable 'A' and 'C' frequency weighting, Fast/Slow response times, Max/Min hold, and AC/DC analog outputs, the SLM600-KIT provides both accuracy and versatility.

The included PC interface and software further enhance its capabilities by enabling seamless datalogging transfers, analysis, and reporting. Fully tested and calibrated prior to shipment, your instrument is ready for immediate use and, with proper care, will provide years of dependable performance.

Please read this manual carefully before operation to ensure safe use and optimal performance.

What's in the box: • SLM600 Meter/Datalogger • Windscreen • USB cable • Software (online) • User Manual • 9V battery • Hard carrying case	• Sound Level Calibrator • Screwdriver • 9V battery	Stay updated: For the most recent version of this user manual, visit www.triplett.com and search for "SLM600-KIT". You can also find the latest specifications, FAQs, and product datasheets on our website.
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SAFETY



Use the meter only as specified in this manual; otherwise, the protection provided by the meter and its warranty may be voided.

Operating Environmental Conditions

- Altitude: ≤2000 meters
- Relative Humidity: 90%RH max
- Operating Temperature: 32 to 104°F (0 to 40°C)

Maintenance and Cleaning

- Servicing not covered in this manual should be performed only by qualified personnel. Visit www.triplett.com/support for support.
- Periodically wipe the housing with a dry cloth. Do not use abrasives or solvents.

Suggestions

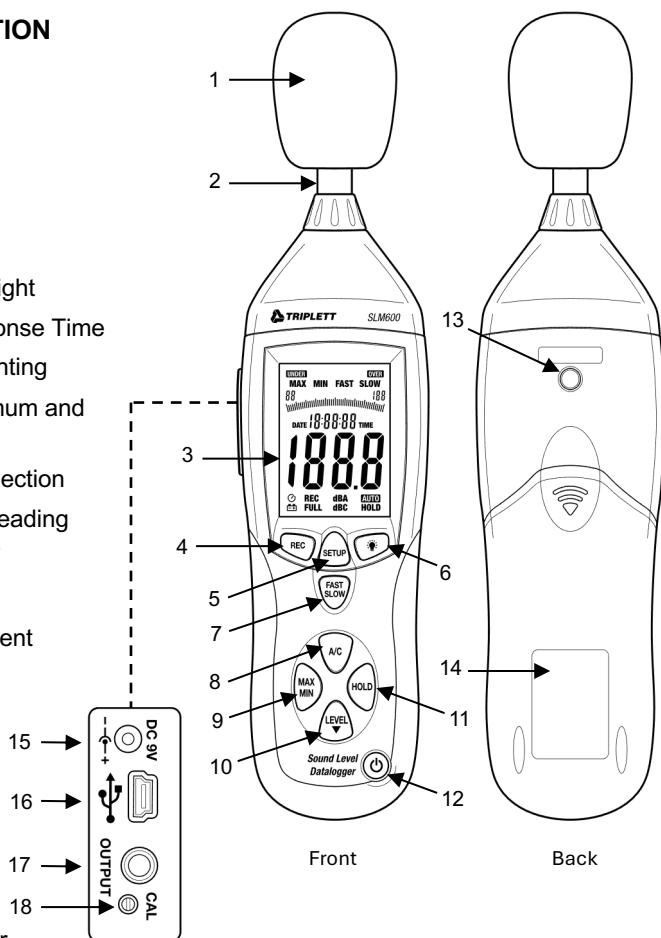
- Wind blowing across the microphone can increase noise measurements. Use the supplied windscreen to cover the microphone when applicable.
- Calibrate the instrument before each use whenever possible, especially if it has not been used for an extended period.
- Do not store or operate the instrument in areas with high temperature or humidity.
- Keep the meter and microphone dry.
- Avoid severe vibration and protect the meter from impact. Do not drop it. Transport the meter in the supplied case.
- Remove the battery when storing the meter for long periods of time.

METER DESCRIPTION

1. Windscreen
2. Microphone
3. LCD Display
4. REC – Record
5. SETUP
6. - Display Backlight
7. Fast/Slow – Response Time
8. A/C – A & C Weighting
9. MAX/MIN – Maximum and Minimum
10. Level – Range Selection
11. HOLD – Freeze Reading
12. - Power On/Off
13. Tripod Mount
14. Battery Compartment

Side Panel

15. External 9V DC Power Adaptor
16. USB PC Port
17. DC/AC Analog Output
18. CAL Potentiometer



Display View

Symbol	Function
MAX	Maximum hold
MIN	Minimum hold
OVER	Overrange
UNDER	Under range
FAST	Fast response time
SLOW	Slow response time
dBA	A-Weighting
dBC	C-Weighting
REC	Recording data
AUTO	Auto range selection
FULL	Memory full
HOLD	Data hold
	Auto Power Off enabled
	Low battery indicator



SETUP

Battery Installation/AC Adaptor

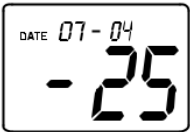
The meter can be powered by one 9V battery or by an AC power adaptor. Before inserting or replacing the battery and before connecting the AC adaptor, be sure to turn off the meter.

Time and Date Setup

The **SETUP** mode is used to set the time, date, and default measurement range. Once set, the meter will retain the settings. Resetting should not be required.

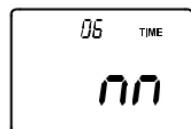
NOTE: Press the **HOLD** button at any time during the setup to save the set data and to return to normal operation.

1. Make sure the meter is turned OFF
2. Press and hold both the **SETUP** button and power  button simultaneously for 2 seconds. Release both buttons to enter the setup mode.



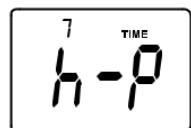
3. Minutes Setup:

- Press the **SETUP** button again to enter the “minutes” adjustment screen
- Press the **LEVEL** button to adjust the minutes
- Continue to the next step to setup the Hour or press **HOLD** to keep the setup and exit setup mode



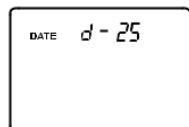
4. Hour Setup:

- Press the **SETUP** button again to enter the “hour” adjustment screen. The “h-P” indicates PM and “h-A” indicates AM.
- Press the **LEVEL** button to adjust the hour
- Continue to the next step to setup the Date or press **HOLD** to keep the setup and exit setup mode



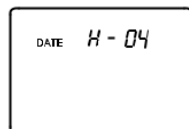
5. Date Setup:

- Press the **SETUP** button again to enter the “date” adjustment screen.
- Press the **LEVEL** button to adjust the date.
- Continue to the next step to setup the Month or press **HOLD** to keep the setup and exit setup mode



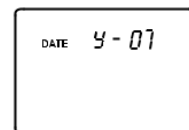
6. Month Setup:

- Press the **SETUP** button again to enter the “month” adjustment screen.
- Press the **LEVEL** button to adjust the month.
- Continue to the next step to setup the Year or press **HOLD** to keep the setup and exit setup mode



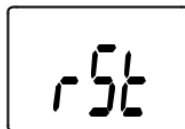
7. Year Setup:

- Press the **SETUP** button again to enter the “year” adjustment screen.
- Press the **LEVEL** button to adjust the year.
- Press **HOLD** to keep your time and date setup. The screen will return to normal measurement mode. If you choose to clear your settings, do not press HOLD. Follow the next step instead.



8. Reset Screen:

- a. Only press the SETUP button again to RESET screen if you plan to clear your settings.
- b. If the HOLD button is pressed with this screen displayed, (image shown on right) the time and date will be reset to the factory setup.
- c. When the battery runs out or replaced, if the time can't be adjusted, go through the steps to reset the values.



OPERATIONS

Basic Operation

1. Turn the meter ON by pressing the **⏻** button
2. Select 'A' or 'C' frequency weighting by pressing the **A/C** button
3. Select Fast or Slow response time by pressing the **FAST/SLOW** button
4. Use the **LEVEL** button to select the appropriate range. The range is shown near the top of the display. Use a range that puts the sound level reading in the center of the range. If the OVER or UNDER icons appear on the display, select a new range if possible.
5. The numeric and bargraph displays indicate the sound level measurement
6. To turn the meter off, press and hold the **⏻** button for 3 seconds

BUTTON FUNCTIONS

LEVEL: Range Selection

The **LEVEL** button is used to select the measurement range.

1. Press this button to step through the ranges as indicated on the display (30 to 80, 50 to 100, 80 to 130, or 30 to 130 autoranging).
2. Each time you press the **LEVEL** button, the level range will change between 'Lo' level, 'Med' level, 'Hi' level, and 'Auto' level in the sequence.

A/C Frequency Weighting

The A/C button allows you to choose which frequency weighting you will be measuring in.

1. Press the **A/C** button to select 'A' or 'C' frequency weighting
2. Select 'A' weighting for the frequency response of the meter to be similar to the response of the human ear

- a. 'A' weighting is commonly used for environmental or hearing conservation programs such as OSHA regulatory testing and noise ordinance law enforcement
 - b. Most noise applications use 'A' Weighting and SLOW Response
3. Select 'C' weighting for a much flatter frequency response
 - a. 'C' weighting is commonly used for the sound level analysis in industrial & heavy machinery, entertainment & audio engineering (concert venues), hearing protection assessment (OSHA), and impulsive noise events (explosions, alarms, etc.)

FAST/SLOW Response Time

Use the **FAST/SLOW** button to select a FAST or a SLOW response time.

1. Select FAST (125ms) response time to capture noise peaks and noises that occur very quickly
2. Select the SLOW (1 second) response time to monitor a sound source that has a consistent noise level or to average quick changing levels (most applications use SLOW response time)

HOLD

Use the HOLD function to freeze a reading on display. It is helpful when measuring in an area that is difficult to view the display during time of measurement.

1. Press the **HOLD** button to "freeze" the current reading on the display
2. Press the button again to resume normal operation

MAX/MIN

In the MAX/MIN mode the meter will display and hold either the maximum or minimum reading. The display will update only when the measured value exceeds the value presently on the display.

1. Press the **MAX/MIN** button and the MAX icon will appear on the display. The reading displayed is the highest value since entering the MAX mode.
2. Press the **MAX/MIN** button again. The MIN icon will appear on the display. The reading displayed is the lowest value since entering the MIN mode.
3. Press the **MAX/MIN** button again to exit the MAX/MIN screen.

LCD Backlighting

Use the display backlighting feature to improve screen visibility in low-light environments or enhance readability when the screen is exposed to bright daylight or direct sunlight.

1. Press the button to turn the LCD backlight ON or OFF
2. To conserve battery life, the backlight will automatically turn off after approximately 30 seconds

AUTO POWER OFF

The meter is default with the auto power off feature. It will automatically shut off after ~15 minutes of inactivity. The  icon indicates the feature is active.

1. To disable the auto-power-off feature, press the **SETUP** button. The  icon will disappear from the display. This confirms the feature is disabled.
2. To activate the auto-power-off feature again, press the **SETUP** button and the  icon will appear on the display indicating the feature is enabled.
3. When the meter is turned OFF and then ON again, the auto-power-off feature will automatically be active again.

DATALOGGING

The meter can store up to 32,700 readings at an interval rate of 1 to 59 seconds. Each recording session is saved as a data set, and each record is saved with a date and time stamp (refer to the SETUP section to set up the date and time if it hasn't been done already). This data can be downloaded using the supplied software.

Interval Time Setting

1. Start with the meter in the OFF position
2. Press and hold both the  and  buttons until the screen displays both **0001** and **Int**
3. Press the **LEVEL** button to set the sample interval from once per second to once every 59 seconds (long press the LEVEL button will speed up the count)
4. Press the **HOLD** button to save the interval setting and exit the setting mode

Recording Mode

1. Press the **REC** button to start recording. REC icon will appear on the display.
2. Press the **REC** button again to stop recording
3. Auto Power Off is disabled when the record function is active

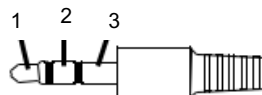
Clearing Stored Readings

1. Press **⏻** power button to turn the meter OFF
2. Press and hold both the **REC** and **⏻** buttons until **CLR** (clear) appears
3. Release both buttons. Stored readings are erased and the memory is cleared.

ANALOG OUTPUTS

The meter is equipped with an analog output feature. The analog output jack is located on the side panel and requires a 3.5mm stereo phono plug (not included).

1. **AC Analog Output:** The AC output is a retransmitted representation of the meter's measurement (note that the output factors in the meter's frequency weighting selection 'A' or 'C')
 - Output voltage: 1Vrms at full scale of the selected range
 - Output impedance: Approximately 100Ω
2. **DC Analog Output:** The DC output signal reflects the frequency weighting selected ('A' or 'C')
 - Output voltage: 10mV (± 1 mV) per displayed dB
 - Output impedance: Approximately 1kΩ
3. **Ground:** The common reference point for AC and DC output signals, ensuring signal stability and accurate readings when connected to external devices



CALIBRATION

Frequent calibration is recommended and is often required by noise standards and directives.

1. Turn the meter ON
2. Put the meter in the 'A' weighting mode
3. Put the meter in the 'SLOW' response mode
4. Place the calibrator onto the meter's microphone as shown on the illustration to the right
5. Turn the calibrator ON
6. Adjust the meter's CAL potentiometer located on the side panel with the included screwdriver so that the meter's display matches the output of the calibrator (typically 94dB or 114dB)



BATTERY REPLACEMENT & DISPOSAL

1. The  battery icon will appear on the display when the battery needs replacing
2. Press  to turn the meter OFF, and slide the rear battery cover off
3. Install the 9V battery and replace the cover back on

Battery Disposal



- Never dispose used or rechargeable batteries in household wastebin
- As consumers, users are legally required to take used batteries to a collection site or stores that sell batteries
- Never dispose of batteries in a fire. Batteries may explode or leak
- Never mix battery types. Always install the same type.

Meter Disposal

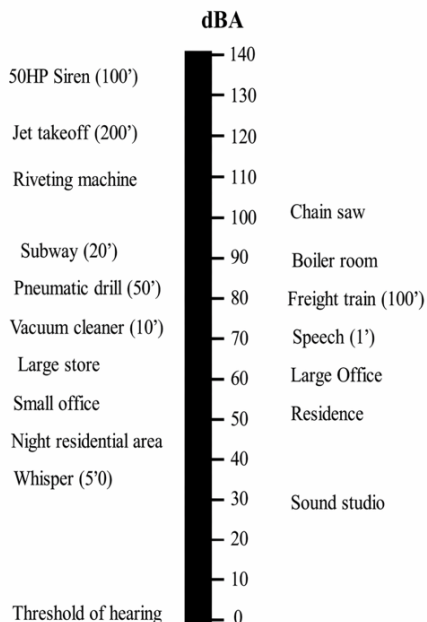
Do not dispose of this instrument in household wastebin. The user is obligated to take end-of-life devices to a designated collection point for the disposal of electrical and electronic equipment.

SPECIFICATIONS

Feature	Description
Applicable Standards	IEC61672-1: 2002 Class 2; IEC60651: 1979 Type 2; ANSI S1.4:1983
Measurement Ranges	30 to 80dB, 50 to 100dB, 80 to 130dB and autoranging (30 to 130dB)
Accuracy	Type 2, $\pm 1.4\text{dB}$ (under reference conditions)
Frequency/ Dynamic Ranges	31.5Hz to 8kHz/ 50dB
Frequency Weighting	A and C
Time response	Fast (125ms) and Slow (1 second)
Memory	32,700 records with date and time
Microphone	$\frac{1}{2}$ " electret condenser
Display (Update rate)	4-digit LCD with bargraph and backlighting (2 times/second update rate)
Range indicators	"OVER" and "UNDER" range indication
Battery life	30 hours (approximately)
Power supply	One 9V battery (NEDA1604 or equivalent) or 12V/1A AC adaptor
Auto Power Off	After approx. 15 minutes of inactivity with disable
Analog Outputs	AC: 1Vrms full scale; Output impedance: 100 Ω ; DC: 10mV/1dB; Output impedance: 1k Ω
Operating conditions	32 to 104°F (0 to 40°C); 10% to 90% relative humidity
Storage conditions	14 to 140°F (-10 to 60°C); 10% to 75% relative humidity
Dimensions/ Weight	10.9 × 3 × 1.97" (278 x 76 x 50mm)/12.35oz (350g)

TYPICAL A-WEIGHTED SOUND LEVELS

Sound level scale reference with distance (feet) in parenthesis.



SOFTWARE

Triplett's Sound Level Meter Software is a program for downloading stored data from the memory of the meter or livestream the data directly from the meter to your PC/laptop/notebook when they are connected using the USB cable.

The software allows you to process the data as a graphic or text style interface. It is easy to use via the graphical user interface. The key functions are displayed as icons on the main software window eliminating the need to search through menus.

System Requirements

- Operating System: Windows® XP, 7 or above
- Minimum Hardware requirements:
 - PC or laptop computer with microprocessor $\geq 90\text{MHz}$
 - 32MB RAM
 - 5MB hard disk free space for the software
 - Resolution of at least 800×600 and 16-bit color display

Software Installation

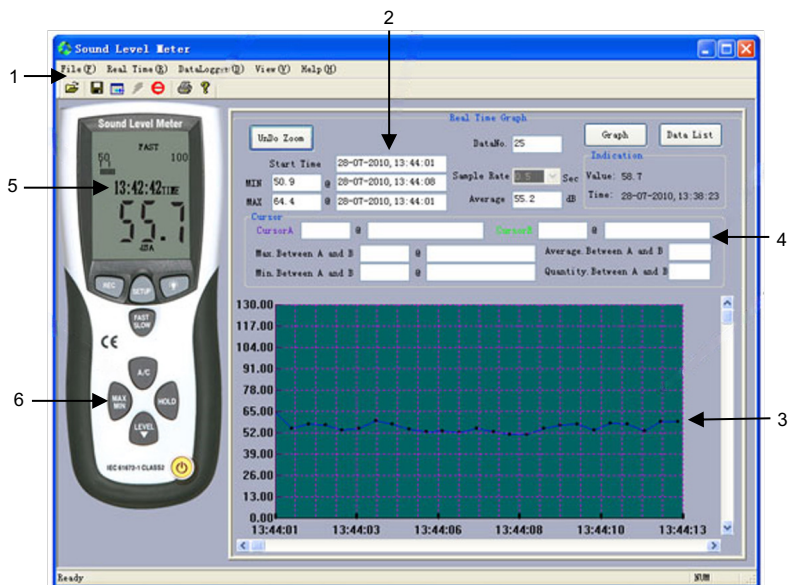
Go to www.triplett.com/software/ and locate SLM600-KIT. Download the software file. Click the downloaded zip file to access the SLM600 Setup.exe file. Follow the instructions below.

PC to Meter Communication

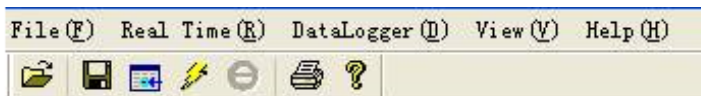
1. Connect the meter to the PC using the supplied USB cable
2. Turn the meter ON and press the SETUP button
3. Launch the application by clicking on the SLM600 Shortcut on your Desktop
4. Select the COM port that has the CP210X driver installed
5. Data will appear on the PC screen when communication is established

Main Screen

1. Drop-down menus and control icons
2. Graph statistics
3. Graph
4. Cursor statistics (downloaded or saved data only)
5. Real-time display
6. Interactive buttons (limited by PC speed)



Main Screen

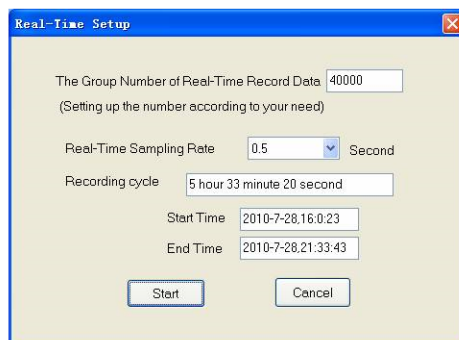


- File | Open: Retrieve files previously stored on the PC
- Save: Save the data to a file on the PC
- Export: Export data in Excel format
- Real Time Data | Run: Begin collecting real-time data
- Stop: Stop collecting real-time data

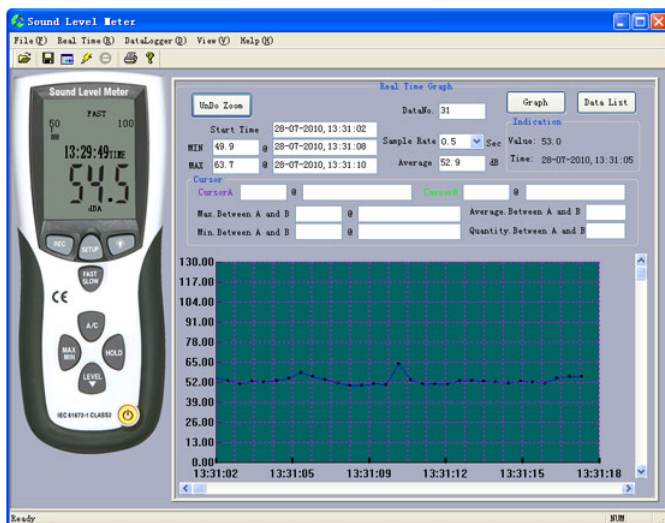
TUTORIAL – QUICK START

1. Plotting real-time data

- 1.1 Power ON the Sound Level Meter first and connect it to the PC USB serial port with the cable
- 1.2 Start the Sound Level Meter program (press the meter's "Setup" button)
- 1.3 If the connection is successful, the panel will display the same value as the Sound Level Meter
- 1.4 Select the sampling rate from Real-Time Graph window
Note: If the PC speed is slow, select a sampling rate above 0.2 second. To sample a large amount of data (>5000), at least 64MB of RAM is recommended.
- 1.5 When the connection is successful, click  to start recording real-time data. The data will begin to plot on the Real-Time Graph Window, or you can select the menu "real time" then "Setup" to set the record data number and the sample rate.

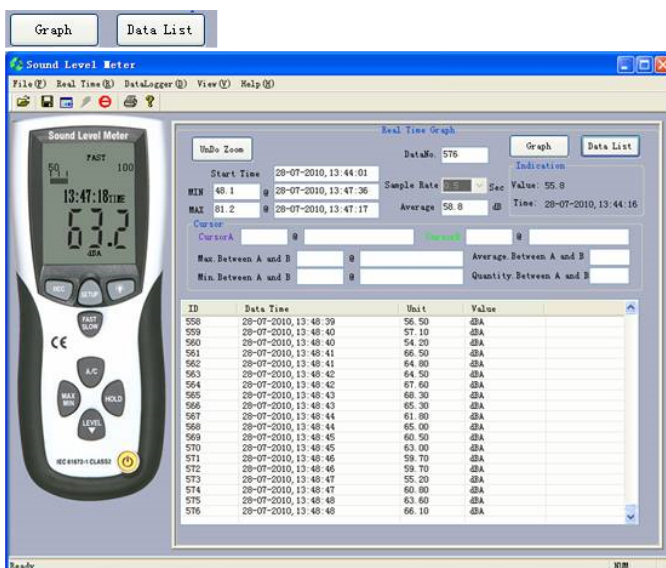


1.6 Click  to stop recording



2. Show the real-time data list

2.1 Click the button “Data List” to show the real-time data in the table list



2.2 Click the button “Graph” to go back to the graph plotting view

3. Saving recorded real-time data to a file

- 3.1 Choose "File" then "Save As" from main menu or click  from the tool bar to save the file in "*.txt" format
- 3.2 Choose "File" then "Export Data" from the main menu or click  from the tool bar to export data to the file in "*.xls" format.

4. Downloading data from the meter's memory and saving it to a file

NOTE: The Sampling Interval and Clearing Data are set up in the Setup Menu of the SLM600 Meter. Intervals can be set from 1 to 59s. Full Capacity is 32,700 readings. Each time a START and STOP REC is done, it is logged as a "Data Set". Refer to the DATALOGGING section of the manual on p. 8.

- 4.1 Power ON the Sound Level Meter
- 4.2 Press the REC button of the meter to start recording data
- 4.3 Connect the Sound Level Meter to the PC
- 4.4 To stop recording, press the REC button again
- 4.5 Launch the Sound Level Meter program
- 4.6 Choose 'Data Logger' from the main menu
- 4.7 The data sets will be downloaded from the meter.

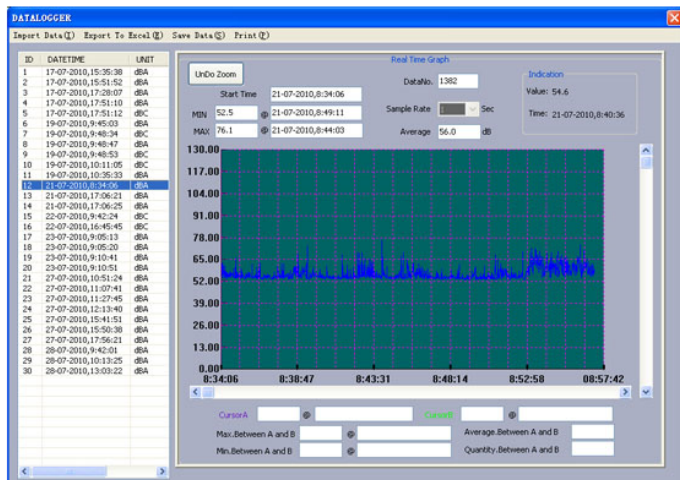
5. Datalogger and Opening Files

- 5.1 When the Sound Level Meter is connected to the PC, select "Data Logger" from the main menu to download recorded data from the meter's memory.



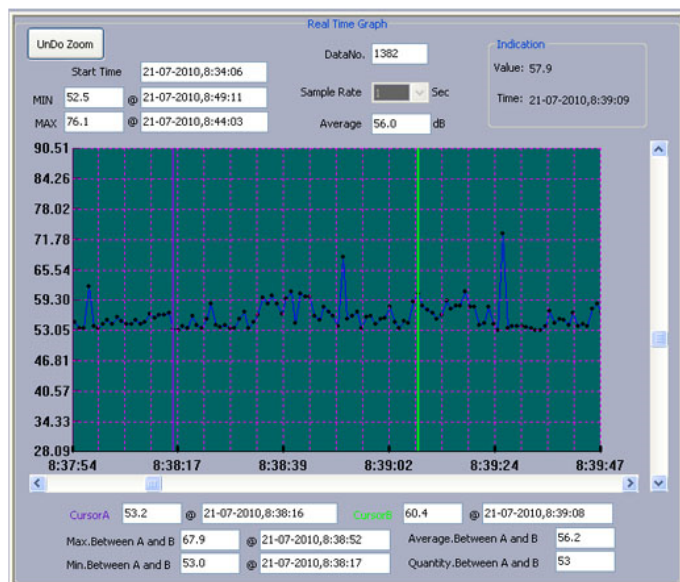
- 5.2 After the data is downloaded, the left list will show how many data sets are loaded with detailed information for each data set (start data, start time, recording rate and record numbers). Use the scroll bar to view all the information.

5.3 Double click on one set to display the data in the graph. This procedure is also used to open a saved file



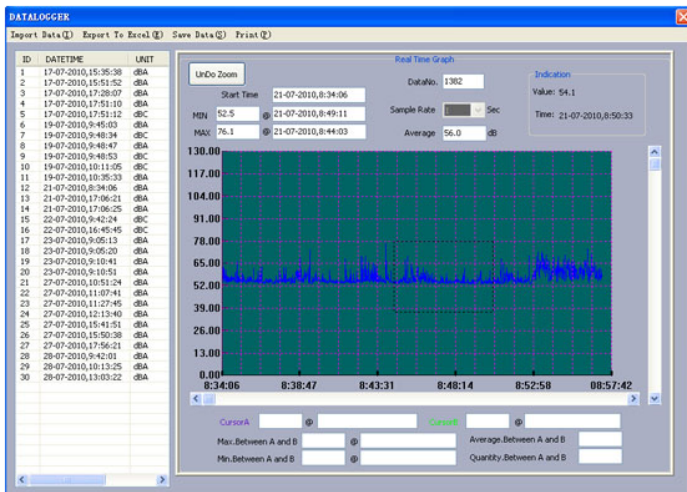
6. Cursors

Left double click on the datalogger graph then left click to set the A and B cursor positions. Statistics for the cursor locations and the area between the cursors are displayed below the graph. Right click on a cursor to delete it. This is also used in real-time plotting.



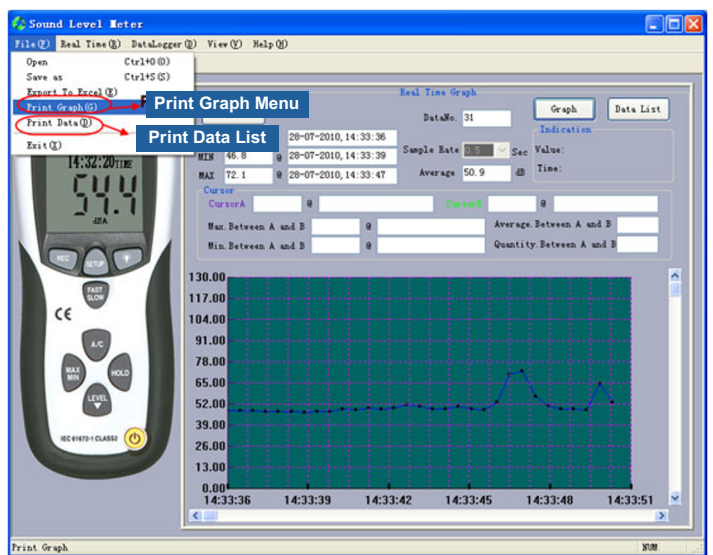
7. Zoom

Position the mouse cursor on the graph and drag a rectangle to zoom in on any portion of the graph. Click on “UnDoZoom” to return to the normal view.



8. Print

When data is plotted on the graph, select the “print graph” from main menu to print the graph or select “print data” to print the data list. This is also used for Data Logger or Open file.



CERTIFICATIONS



This product complies with applicable CE requirements, is RoHS compliant, and has been tested to applicable IEC standards.

WARRANTY

Triplett offers warranty to the original purchaser of its products. We guarantee that our products will be free from defects in workmanship and materials for two (2) years from the purchase date.

This warranty does not cover:

- Products purchased from unauthorized distributors.
- Items that have been repaired or altered by unauthorized individuals.
- Damage from misuse, abuse, misapplication, negligence, or accidents.
- Products with altered, defaced, or removed serial numbers.
- Accessories, including batteries.

For product support, registration, FAQs, or to request calibration or repair services, visit www.triplett.com/support.

Imagery is for reference and may be enhanced for clarity. Actual product appearance and screen content may vary slightly. Specifications are subject to change without notice. For the latest information, visit www.triplett.com.