

SD Card real time data recorder

INTEGRATING

SOUND LEVEL METER class 1

Model : SL-4036

ISO-9001, CE, IEC1010

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02-2389-0101



IEC 61672 class 1
IEC 60804 type 1
ANSI S 1.43 type 1

SPL

Leq

30 - 130 dB

RS232/USB



Lutron

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The Art of Measurement

INTEGRATING SOUND LEVEL METER class 1**Model : SL-4036**www.YaLAB.com.tw 02-2389-0101**FEATURE**

- * Real time recorder, save the data into the SD memory card and can be downloaded to the Excel, extra software is no need.
- * Frequency and Time weighting are designed to meet IEC 61672 class 1, IEC 60804 type 1, ANSI S 1.43 type 1.
- * Measuring modes : SPL, Leq.
- * Auto range : 30 - 130 dB.
- * Tow Manual range : 30 - 80 dB, 80 - 130 dB.
- * A / C frequency weighting.
- * Fast / Slow Time weighting.
- * Dot matrix LCD with backlight.
- * RS232/USB PC COMPUTER interface.
- * Optional wind shield ball, SB-01.
- * Power by UM3/AA (1.5 V) x 6 batteries or DC 9V adapter.
- * SD card capacity : 1 GB to 16 GB.
- * Optional acquisition softwares, SW-US801-WIN, SW-E802
- * Microcomputer circuit, high accuracy.
- * Patented.

GENERAL SPECIFICATION

Circuit	Custom one-chip of microprocessor LSI circuit.
Display	LCD size : 51 mm x 30 mm LCD with green backlight (ON/OFF).
Measurement Type	SPL : Sound pressure level Leq : Equivalent Continuous Noise Level
Measurement Range	30 - 130 dB.
Resolution	0.1 dB.
Function	dB (A & C frequency weighting), Time weighting (Fast, Slow), Peak hold, Data hold Record (Max., Min.).
Accuracy (23 ±5 °C)	Characteristics of " A ", " C " frequency weighting network meet ANSI S1.4-2014 / IEC 61672 -1 : 2013 class 1 Under 94 dB input signal, the accuracy are : 31.5 Hz ±1.5-dB 63 Hz ±1.0-dB 125 Hz ±1.0-dB 250 Hz ±1.0-dB 500 Hz ±1.0-dB 1-KHzp ±0.7-dB 2-KHz ±1.0-dBe] 4-KHz ±1.0-dBe] 8 K Hze ±1.5 dB,-2.5dB 12.5 Hz ±2.0 dB,-5.0dB 16 K Hz ±2.5 dB, -16.0dB <i>Remark :</i> <i>The above spec. are tested under the environment RF Field Strength less than 3 V/M & frequency less than 30 MHz only.</i>

Frequency Weighting Network	Characteristics of A & C. A weighting : The characteristic is simulated as "Human Ear Listing" response. Typical, if making the environmental sound level measurement, always select to A weighting. C weighting The characteristic is near the "FLAT" response. Typical, it is suitable for checking the noise of machinery (Q.C. check) & knowing the sound pressure level of the tested equipment.	
Time weighting (Fast & Slow)	Fast - $t = 125 \text{ ms}$ "Fast" range is simulated the human ear response time weighting. Slow - $t = 1 \text{ s}$ "Slow" range is easy to get the average values of vibration sound level. Proposal to test FAST & SLOW Function ,Please use the manual range mode	
Data hold	To freeze the measurement value.	
Peak hold	To keep the peak (max.) measurement value.	
Range selector	<i>Auto range</i> : 30 to 130 dB.	
	<i>Manual range</i> : 2 range, 30 to 80 dB, 80 to 130 dB, 50 dB on each step, with over & under range indicating.	
Frequency	31.5 to 16,000 Hz.	
Microphone type	Electric condenser microphone.	
Microphone size	Out size, 12.7 mm DIA. (1/2 inch).	
Data error no.	$\leq 0.1 \%$ no. Of total saved data typically.	
Calibration VR	Build in external calibration VR, easy to calibrate on 94 dB level by screw driver. * Calibrated via external SOUND CALIBRATOR (SC-942, optional).	
Calibrator	B & K (Bruel & kjaer), MULTIFUNCTION ACOUSTIC CALIBRATOR Type 4226.	
Datalogger Sampling Time Setting range	Auto	1 second to 3600 seconds <i>@ Sampling time can set to 1 second, but memory data may loss.</i>
	Manual	Push the data logger button once will save data one time. @ <i>Set the sampling time to 0 second.</i> <i>@ Manual mode, can also select the 1 to 99 position (Location) no.</i>
Memory Card	SD memory card. 1 GB to 16 GB.	
Advanced setting	- Set clock time (Year/Month/Date,Hour/Minute/ Second) - Set sampling time - Auto power OFF management - Set beep Sound ON/OFF - Decimal point of SD card setting - SD memory card Format - Frequency weighting to A or C setting	
Over Indication	Show " ".	
Data Hold	Freeze the display reading.	
Memory Recall	Maximum & Minimum value.	
Sampling Time of Display	Approx. 1 second.	
Data Output	RS 232/USB PC computer interface. - Connect the optional RS232 cable UPCB-02 will get the RS232 plug. - Connect the optional USB cable USB-01 will get the USB plug.	

AC output	AC 0.5 Vrms corresponding to each range step. * <i>Output impedance : 600 ohm.</i>
Power off	Auto shut off saves battery life or manual off by push button.
Operating Temperature	0 to 50 °C.
Operating Humidity	Less than 85% R.H.
Power Supply	* Alkaline or heavy duty DC 1.5 V battery (UM3, AA) x 6 PCs, or equivalent.
	* DC 9V adapter input. (AC/DC power adapter is optional).
Power Current	Normal operation (w/o SD card save data and LCD Backlight is OFF) : <i>Approx. DC 8.2 mA.</i>
	When SD card save the data but and LCD Backlight is OFF) : <i>Approx. DC 34 mA.</i>
	* <i>If LCD backlight on, the power consumption will increase approx. 6 mA.</i>
Weight	323 g/0.71 LB.
Dimension	245 x 68 x 45 mm. (9.6 x 2.7x 1.8 inch).
Accessories Included	· Instruction manual 1 PC · Hard carrying case, CA-06 1 PC
Optional Accessories	· Sound calibrator (94 dB), SC-941. · Sound calibrator (94/114 dB), SC-942. · Sound wind shield ball, SB-01 · SD Card (4 GB) · USB cable, USB-01. · RS232 cable, UPCB-02. · Data Acquisition software, SW-U801-WIN. · AC to DC 9V adapter. · Soft carrying case, CA-05A.

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* Appearance and specifications listed in this brochure are subject to change without notice.

SL-4036+181018

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