SD card real time data recorder
4 to 20 mA output
SOUND LEVEL DATA RECORDER
Model : MSL-388SD
ISO-9001, CE, IEC1010

LUTron MSL-388SD

94.0 dB

SD Card Data Logger
4 ~ 20 mA Transmitter
RS232 / USB Computer Interface
A/C Frequency Weighting

POWER	RANGE ▲	HOLD REC
TIME	▼	ENTER
SET	A/C , F/S/PH	LOG

SOUND LEVEL DATA RECORDER

Lutron

The Art of Measurement

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FEATURES

* Frequency and Time weighting are designed to meet IEC 61672 class 2.
* A & C weighting networks comply with standards.
* LCD is dot-matrix with backlight and easy reading.
* Data-logger and Sound level meter.
* 0.5" standard microphone head.
* Time weighting (Fast & Slow) dynamic characteristic modes.
* Condenser microphone for high accuracy & long-term stability.
* Memory function to store the Max. & Min. value.
* Hold functions.
* Real time Datalogger
  Records device of an external
  memory device (SD memory card) ,Real time Datalogger, it Built-in
  Clock and Calendar, real time data recorder, sampling time set
  from 5,10,30,60,120,300,600,1800,3600 seconds.
* Manual datalogger is available (set the sampling
  time to 0 second).
* Innovation and easy operation, computer is not need to
  setup extra software, after execute datalogger, just take
  away the SD card from the meter and plug in the SD card
  into the computer, it can download the all the measured
  value with the time information (year/month/date/
  hour/minute/second) to the Excel directly, then user can
  make the further data or graphic analysis by themselves.
* SD card capacity : 1 GB to 16 GB.
* Can default auto power off or manual power off.
* 4-20 mA analog output.
* Microcomputer circuit, high accuracy.
* Power by UM4/AAA (1.5 V) x 6 batteries or DC 9V adapter.
* RS232/USB PC COMPUTER interface.
* Heavy duty & compact housing case.

SPECIFICATIONS

Circuit	Custom one-chip of microprocessor LSI circuit.
Display	LCD size : 50 mm x 30 mm LCD with green backlight (ON/OFF).
Measurement Type	SPL : Sound pressure level
Measurement Range	SPL : 30-80,50-100,80-130 , Auto 30 - 130 dB.
Resolution	0.1 dB.
Function	dB (A & C frequency weighting), Time weighting (Fast, Slow), Data hold Record (Max., Min.).
Accuracy (23 ± 5 ℃)	Characteristics of " A " frequency weighting network meet IEC 61672 class 2. Under 94 dB input signal, the accuracy are :

31.5 Hz	± 3.5 dB
63 Hz	± 2.5 dB
125 Hz	± 2.0 dB
250 Hz	± 1.9 dB
500 Hz	± 1.9 dB
1 K Hz	± 1.4 dB
2 K Hz	± 2.6 dB
4 K Hz	± 3.6 dB
8 K Hz	± 5.6 dB

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.
Data hold	To freeze the measurement value.

Time weighting (FAST &SLOW)	Fast - t = 125 ms * "Fast" range is simulated the human ear response time weighting. Slow - t = 1 s * "Slow" range is easy to get the average values of vibration sound level.	
Function selector SPL	range : 30-80dB, 50-100dB, 80-130dB Auto range : 30 ~ 130dB.	
Frequency	31.5 to 8,000 Hz.	
Microphone type	Electric condenser microphone.	
Microphone size	Out size, 12.7 mm DIA. (1/2 inch).	
Calibration VR	Build in external calibration (key), easy to calibrate on 94 dB level by key button. * Calibrated via external SOUND CALIBRATOR (SC-941, SC-942, optional).	
Calibrator	B & K (Bruel & kjaer), MULTIFUNCTION ACOUSTIC CALIBRATOR Type 4226.	
Datalogger Sampling Time Setting range	Auto	5,10,30,60,120,300,600,1800, 3600 seconds @ Sampling time can set to 1 second, but memory data may loss.
	Manual	Push the data logger button once will save data one time. @ Set the sampling time to 0 second.
Memory device	external memory device (AC Adapter only) : 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	
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.	
Power off	Auto shut off saves battery life or manual off by push button.	
Operating Temperature	0 to 50 ℃.	
Operating Humidity	Less than 85% R.H.	
Power Supply	* Alkaline or heavy duty DC 1.5 V battery (UM4, AAA) 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) : Approx. DC 16 mA. When SD card save the data but and LCD Backlight is OFF) : Approx. DC 16 mA. * If LCD backlight on, the power consumption will increase approx. DC 8 mA.	
Weight	250 g/ 0.55 LB. (without battery)	
Dimension	132 x 80 x 32 mm. (5.2 x 3.1 x 1.3 inch).	
Accessories Included	* Instruction manual....................................... 1 PC * Plug of 4 to 20 mA output (SKT-AS385)…………1 PC * Micophone with clip………………………… .... 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-E2005. * AC to DC 9V adapter.	

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

1605-MSL388SD