auto range +Type K Temp.
optional Humidity, Light, Anemometer

SOUND LEVEL METER

Model : SL-4112   **ISO-9001, CE, IEC1010**

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EM-900P probe
(optional)

Lutron

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The Art of Measurement

auto range +Type K Temp. optional Humidity, Light, Anemometer
SOUND LEVEL METER
Model : SL-4112

FEATURE
* Large LCD display, easy to read.
* Frequency and Time weighting meet IEC 61672 class 2.
* A, C frequency weighting networks is selected.
* Time weighting (Fast & Slow) dynamic characteristic modes.
* 0.5" standard microphone head.
* AC output for system expansion.
* RS232/USB computer interface.
* Auto range & Manual range selection.
* Available for external calibration adjustment.
* Condenser microphone for high accuracy & long-term stability.
* Memory function to store the Max. & Min. value.
* Hold and Peak Hold functions.
* Build in type K and type J thermometer.
* Optional probe (EM-900P) for Humidity/Temp., Light and Anemometer measurement.
* Data logger with 1,600 no. memory, sampling time can select to 1, 2, 5, 10, 30, 60, 600, 1800 or 3600 seconds.
* DC 1.5 V battery (UM-4, AAA) X 6 or DC 9V adapter in.
* Operation key used push button.
* LCD display for low power consumption & clear read-out even in bright ambient light condition.
* Using the durable, long-lasting components, including a strong, light weight ABS-plastic housing case.
* Small and light weight design allow one hand operation.
* Patent.

GENERAL SPECIFICATION

Display	51 mm x 37 mm LCD (Liquid crystal display), 5 digits with annunciator.
Data logger	Data logger with 1,600 no. memory, sampling time can select to 1, 2, 5, 10, 30, 60, 600, 1800 or 3600 seconds.
Operating Temp.	0 to 50 ℃ (32 to 122 ℉).
Operating Humidity	Less than 80% RH.
Power Supply	DC 1.5 V battery (UM4, AAA) x 6 PCs, or equivalent.
Power Consumption	Approx. DC 19 mA.
Dimension	245 x 68 x 41 mm (9.6 x 2.7 x 1.6 inch).
Weight	358 g/0.79 LB (including battery).
Accessory Included	Instruction Manual 1 PC.
Optional Accessories	94 dB Sound Calibrator : Model : SC-941. SC-942. Sound wind shield ball Model : SB-01
	USB cable Model : USB-01 RS232 cable (isolated RS232 cable) : Model : UPCB-02.
	* Data Acquisition software Model : SW-U801-WIN. * Data logger transfer software Model : SW-DL2005.
	Type K Temperature probe : Model : TP-01 TP-02A, TP-03. TP-04
	Humidity, Light, Temp., Anemometer probe Model : EM-900P
	Hard carrying case : Model : CA-06

ELECTRICAL SPECIFICATIONS (23± 5 ℃)

Function	dB (A & C frequency weighting), Time weighting (Fast, Slow), Hold, Memory

	(Max. & Min.), Peak hold, AC output, RS232 output.
Meter default function	Range set to auto range. Frequency weighting set to A weighting. Time weighting set to fast.
Measurement Range	30 - 130 dB.
Resolution	0.1 dB.
Range selector	*Auto range :* 30 to 130 dB.
	Manual range : 3 range, 30 to 80 dB, 50 to 100 dB, 80 to 130 dB, 50 dB on each step, with over & under range indicating.
Frequency	31.5 to 8,000 Hz.
Microphone type	Electric condenser microphone.
Microphone size	Out size, 12.7 mm DIA. (0.5 inch).
Frequency weighting	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.
Range selector	Manual range: 3 ranges (30 to 80 dB, 50 to 100 dB, 80 to 130 dB). Auto range: 30 - 130 dB.
Time weighting (Fast & Slow)	Fast - t= 200 ms, Slow - t = 500 ms, *"Fast" range is simulated the human ear response time. *"Slow" range is easy to get the avg. values of vibration sound level. *The "Fast" & "Slow" response range are designed to meet IEC 61672 class 2 requirement.
Calibrator	B & K (Bruel & kjaer), MULTIFUCTION ACOUSTIC CALIBRATOR 4226.
Output Signal	* *AC output :* AC 0.5 Vrms corresponding to each range step. Out put impedance - 600 ohm.
	* *RS232 output.*
Output terminal	*Terminal 1 :* RS232 computer interface terminal, photo couple isolated.
	Terminal 2 : AC output terminal.
	Terminal socket size : 3.5 mm dia. phone socket.
Calibration VR	Build in external calibration VR, easy to calibrate on 94 dB level by screw driver.

Type K/J thermometer

Sensor Type	Resolution	Range	Accuracy
Type K	0.1 ℃	-50.0 to 1300.0 ℃	±(0.4 %+0.8 ℃)
		-50.1 To -199.9 ℃	±(0.4 %+1 ℃)
	0.1 ℉	-58.0 To 2372.0 ℉	±(0.4 %+1.5 ℉)
		-58.1 To -327.8 ℉	±(0.4 %+1.8 ℉)
Type J	0.1 ℃	-50.0 To 1100.0 ℃	±(0.4 %+0.8 ℃)
		-50.1 to -199.9 ℃	±(0.4 %+1 ℃)
	0.1 ℉	-58.0 to 2012.0 ℉	±(0.4 %+1.5 ℉)
		-58.1 to -327.8 ℉	±(0.4 %+1.8 ℉)
* *Accuracy value is specified for the meter only.*			
* *Temp. probe (Type K, TP-01 TP-02A, TP-03. TP-04) is the optional accessories.*			

OPTIONAL PROBE EM-900P

Air velocity

Measurement	Range	Resolution	Accuracy
m/S	0.4 - 25.0 m/s	0.1 m/s	± (2% + 0.2 m/s)
km/h	1.4 - 90.0 km/h	0.1 km/h	± (2% + 0.8 km/h)
mph	0.9 - 55.9 mile/h	0.1 mile/h	± (2% + 0.4 mile/h)
knot	0.8 - 48.6 knots	0.1 knots	± (2% + 0.4 knots)
FPM	80 - 4930 ft/min	1 ft/min	± (2%+40 ft/min.)
Note : m/S - meters per second FPM - feet/per minute km/h - kilometers per hour mph - miles per hour knot - nautical miles per hour (international knot)			

Temperature

Measuring Range	0 ℃ to 50 ℃/32 ℉ to 122 ℉
Resolution	0.1 ℃/0.1 ℉
Accuracy	± 0.8 ℃/1.5 ℉

Humidity/Temp. meter

Humidity

Measuring Range	0 % to 95 %	R.H.
Resolution	0.1 % R.H.	
Accuracy	≧70%RH	± (3% reading + 1% RH).
	< 70%RH	± 3% RH.

Temperature

Measuring Range	0 ℃ to 50 ℃/32 ℉ to 122 ℉
Resolution	0.1 ℃/0.1 ℉
Accuracy	± 0.8 ℃/1.5 ℉

Light meter

Measuring Range	LUX	0 to 20,000 LUX.
	Ft-cd	0 to 1,860 Ft-cd
Resolution	LUX	1 LUX
	Ft-cd	0.1 Ft-cd
Accuracy	± (5% rdg + 8 dgt)	
Note : Ft-cd : Feet candle		

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

SL-4112+1109

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