

Simple Class 1 Sound Level Meter



**Making RION quality
the on-site standard**

**Precision measurement
in your hands**

**Sound Level Meter
NL-38**



■ Detachable microphone and preamplifier with extension cable support.



■ High-visibility OLED display.

■ Up to approximately 9 hours of continuous operation (AA battery x2).



Equipped with USB Type-C connector

- By connecting the USB Type-C connector and PC with a cable, data measured with the NL-38 can be acquired as a CSV file.

Automatic calibration function

- Convenient for sound calibration before and after measurement. Insert the microphone into the acoustic calibrator and calibration is performed automatically.
- Calibration history data can be stored.



Measurement function

The following values can be measured with the selected frequency weighting and time weighting.

	Name	Frequency weighting	Time weighting
Instantaneous value	Time-weighted sound level L_p	✓	✓
Calculated values	Equivalent continuous sound level L_{eq}	✓	(L_{Aeq})
	Sound exposure level L_E	✓	—
	Maximum time-weighted sound level L_{max}	✓	✓
	Peak sound level (C-weighting only) L_{peak}	✓	—
	Takt-max sound level L_{tm5}	✓	✓

Specifications

Applicable standards	IEC 61672-1:2013 class 1 CE Marking • EMC Directive 2014/30/EU EN 61326-1:2021 • RoHS Directive 2011/65/EU EN IEC 63000:2018 China RoHS, WEEE Directive
Measurement function	At the selected time weighting, the following calculated values can be measured with frequency weightings A, C, or Z. (L_{peak} can only be measured with C-weighting, L_{leq} only with A-weighting and time weighting I, and L_{tm} only with A-weighting and time weighting F.)
Instantaneous value	Time-weighted sound level L_p
Calculated values	Equivalent continuous sound level L_{eq} , (I-time-weighted) L_{leq} , Sound exposure level L_E , Maximum time-weighted sound level L_{max} , Peak sound level L_{peak} , Takt-max sound level L_{tm}
Measurement level range	A-weighting: 32 dB to 137 dB, C-weighting: 40 dB to 137 dB, Z-weighting: 45 dB to 137 dB C-weighted peak sound level: 68 dB to 140 dB
Self-generated noise	A-weighting: Max. 24 dB (Typical 21 dB), C-weighting: Max. 32 dB (Typical 29 dB), Z-weighting: Max. 37 dB (Typical 34 dB)
Measurement frequency range	10 Hz to 20 kHz
Frequency weighting	A-weighting, C-weighting, Z-weighting
Time weighting	F (fast), S (slow), I (impulse)
Calculation interval	
L_p , L_{max} , L_{peak}	20.8 μ s (sampling frequency 48 kHz)
L_{eq} , L_{leq} , L_E	1 s
L_{tm5}	5 s

Calibration	A reference signal is input using sound calibrator NC-75/NC-74, Nor1255, Nor1256 or pistonphone NC-72B/NC-72A, and the signal input sensitivity is adjusted automatically or manually. Up to 999 calibrations can be managed in the calibration history and saved. *With auto-calibration, the sound calibrators NC-75/NC-74 and Nor1255 can be used. Nor1256 can be used only when the calibration signal frequency is 1 kHz.
Windscreen correction function (WS-14)	Corrects the influence on the frequency characteristics when the windscreen is attached.
Display	Device: 1.5-inch monochrome organic EL display, Resolution: 128x128 Numeric value update cycle: 1 s, Bar graph update cycle: 100 ms
Manual store	Manually starts or stops measuring and simultaneously calculates L_{eq} , L_E , L_{max} , L_{peak} , L_{tm} and L_{leq} before storing the results in a file.
Data storage capacity	Internal memory: Can store up to 200 data sets
USB	Internal memory can be recognized by the computer as a removable disk for data transfer.
Power supply	AA battery x2
Operating time (23°C, measurement status)	Alkaline battery: Approx. 9 hours, Ni-MH rechargeable battery: Approx. 9 hours
Current consumption	135 mA (power supply voltage: 3 V)
Operating temperature and humidity range	Temperature: -10°C to 50°C Humidity: 10% to 90% RH (no condensation)
Dimensions, weight	Approx. 213 mm (H) x 52 mm (W) x 30 mm (D), approx. 190 g (including batteries)
Supplied accessories	Windscreen WS-14 x1, Windscreen fall prevention rubber x1, Hand strap x1, USB port cover x1, Size AA alkaline batteries x2
Optional accessories	Sound calibrator NC-75 / Nor1255 / Nor1256, Pistonphone NC-72B, AC monitor output / Communication cable CC-38, BNC-pin output cable CC-24/CC-24S, Microphone extension cable EC-38, Tripod for sound level meter ST-80



RION CO., LTD. is recognized by the JCSS which uses ISO/IEC 17025 as an accreditation standard and bases its accreditation scheme on ISO/IEC 17011. JCSS is operated by the accreditation body (IA Japan) which is a signatory to the Asia Pacific Accreditation Cooperation (APAC) as well as the International Laboratory Accreditation Cooperation (ILAC). The Quality Assurance Section of RION CO., LTD. is an international MRA compliant JCSS operator with the accreditation number JCSS 0197.

* Windows is a trademark of Microsoft Corporation. * Specifications subject to change without notice.

Distributed by:



3-20-41, Higashimotomachi, Kokubunji, Tokyo 185-8533, Japan
Tel: +81-42-359-7888 Fax: +81-42-359-7442

Simple Class 1 Sound Level Meter

Sound Level Meter NL-38

- Making RION quality the on-site standard
- Precision measurement in your hands



<https://rion-sv.com/products/NL-38.html>