Wide Range Measurement
From 1 to 20 000 Hz

Sound Level Meter Class1 NL-62
(With low-frequency sound measurement function)

Free trial optional programs now available on our website

http://svmeas.riion.co.jp/
Measure Frequencies from 1 to 20 000 Hz. Measure Low-Frequency Sound and Noise with a Single Unit.

With the auto store function included as standard, as well as a timer function and external power supply support, the NL-62 is ideal for continuous measurement. Designed for intuitive ease of use, there is no more need to consult the manual during a measurement. The large 3-inch color screen is bright and easy to read. Sudden rainfall is also no problem, thanks to the water-resistant construction. Using the optional octave and 1/3 octave band real-time analysis program NX-62RT (under development), the unit can even operate as a frequency analyzer. The High-Precision Sound Level Meter NL-62 supports all your measurement needs.

Large color LCD screen

Three-inch LCD screen with a touch panel High resolution screen is easy to see indoors or outdoors and even in the dark.
No paper manual is needed.
User instructions and a help function can be easily accessed on the device.

Water-resistant (Except for the microphone)

Guaranteed water-resistant to at least level IP54 (resistant to spraying water). Helps reduce failures caused by sudden rain showers.

* Mounting the All-weather windscreen or rainproof windscreen helps raise the water-resistant performance of the entire unit, so that the microphone will meet IPX3 specifications.

Use of rechargeable batteries

In these new models it is possible to use rechargeable batteries which make these meters environmentally-friendly. 16 hour continuous measurement is possible (when using eneloop or dry alkaline batteries).

* Please use the dedicated charger to charged eneloop batteries.
* When using eneloop batteries, please read the eneloop battery instruction manual.
* “eneloop” is a registered trademark of Panasonic group.

Continuous detailed measurements for one month

This meter can be used to conduct long-term measurements, such as environmental measurements. (If an AC adapter is used)

Duration of recording

<table>
<thead>
<tr>
<th>Model</th>
<th>Duration of recording</th>
</tr>
</thead>
<tbody>
<tr>
<td>NL-62</td>
<td>1000 h (approx. one month)</td>
</tr>
<tr>
<td>Previous model</td>
<td>200 h (approx. one week)</td>
</tr>
</tbody>
</table>

Example of detailed recording

If the $L_p$ is measured at 100 ms intervals and the $L_{eq}$ is simultaneously measured at 10 min intervals over a 24 h period, the total size of accumulated data is approximately 74 MB (reference value).

Functionality can be extended by a range of options

Add long-term data recording capability and frequency analysis function

1/3 octave band analysis screen (low range)

FFT analysis screen (x40)

Data management screen of AS-60 software
Program function list

Auto store function

This function enables continuous measurement in $L_p$ mode (instantaneous SPL) and $L_{eq}$ mode (equivalent continuous SPL) to be conducted simultaneously.

Total measuring time of Auto store function: Up to 1000 h

Equipped with a timer function

$L_p$ mode (instantaneous SPL) and $L_{eq}$ mode (equivalent continuous SPL) concept

Comparator function

This function turns on when the open collector output exceeds the set value (max. applied voltage 24 V, max. current 60 mA, allowable dissipation 300 mW).

Continuous data output function

This function enables the continuous acquisition of instantaneous values and processed values during both USB and RS-232C communication.

This is a convenient function for users who can design their own control programs, where data has to be transferred continuously from the sound level meter to the computer.

Optional program function list

Octave, 1/3 octave real-time analysis program

NX-62RT

The NX-62RT is supplied on the 512 MB SD card. The 512 MB SD card can be used as a memory card after installing the program.

By adding the NX-62RT program to the NL-62, octave band and 1/3 octave band real-time analysis can be realized. Saved analysis results can be loaded and shown in an overlay graph display together with current analysis data. NC curve graph display and NC value calculation/display are also possible.
Waveform recording program
NX-42WR

This function enables users to record sounds and processing sound to levels simultaneously. Recorded data can be played on computer and used for frequency analysis.

(Uncompressed waveform WAVE file)
Sampling at 48 kHz, 24 kHz, 12 kHz, Selection of 24 bit or 16 bit

<table>
<thead>
<tr>
<th>Maximum recording time (16 bit)</th>
<th>Memory card</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sampling frequency</td>
<td>512 MB</td>
</tr>
<tr>
<td>48 kHz</td>
<td>1 h</td>
</tr>
<tr>
<td>24 kHz</td>
<td>2 h</td>
</tr>
<tr>
<td>12 kHz</td>
<td>4 h</td>
</tr>
</tbody>
</table>

The NX-42WR is supplied on the 2 GB SD card. The 2 GB SD card can be used as a memory card after installing the program.

Reverberation Time Measurement Program
NX-42RV

By adding the NX-42RV program to the NL-62, reverberation time measurements can be performed. The measurement method is the interrupted noise method. This program allows storage of reverberation time decay curves, T20/T30 calculation, Txx calculation (reverberation time calculation based on a user-defined interval) and averaged reverberation time results displayed on the SLM screen.

The NX-42RV is supplied on the 512 MB SD card. The 512 MB SD card can be used as a memory card after installing the program.

FFT analysis program
NX-42FT

By adding the NX-42FT program to the NL-62, FFT analysis can be performed. The analysis frequency range is 20 kHz, with 8 000 spectrum lines (200 displayed). Saved analysis results can be loaded and shown in an overlay graph display together with current analysis data. Maximum zoom ratio is x40, and the top list screen can show up to 20 lines.

The NX-42FT is supplied on the 512 MB SD card. The 512 MB SD card can be used as a memory card after installing the program.
System construction

Peripheral devices

All-weather windscreen  
WS-15

Rain-protection windscreen  
WS-16

Sound calibrator  
NC-74

Tripod  
ST-80

For All-weather windscreen WS-15, use of ST-81 is recommended.

Waveform analysis software  
AS-70

This software allows you to load stored WAVE files from a RION sound level meter, vibration meter or data recorder. Octave, 1/3 octave, and FFT analyses can then be performed. Playback of the real sound files is also possible.

Recommended computer specifications:

- **CPU**: Intel Core™ Duo 2 GHz or higher
- **RAM**: 2 GB or more (4 GB recommended)
- **HDD**: 20 GB free or more (100 GB or more recommended)
- **DISPLAY**: XGA (1024 x 768) or more
- **OS**: Microsoft Windows XP Professional 32 bit, 7 Professional 32 bit / 64 bit, 8 Pro 32 bit/64 bit
Complete software for environmental measurements

Data management software for environmental measurement AS-60

Data management software for environmental measurement AS-60 enables the graph display of measurement data, arithmetic processing, excluded sound processing, preparation of reports, output of files, and playback of real sound files.

- Easy to use
- Simultaneous display of multiple data items (up to 8 data items)
- Reports easy to prepare
- Data stored in a data recorder can be loaded (CSV file for DA-40 Viewer)
- Data combination

Recommended computer specifications
(Common for AS-60/60RT/60VM)
- CPU: Intel Core™2 Duo 2.0 GHz or higher
- RAM: 2 GB or more
- DISPLAY: XGA (1,024 x 768) or more, at least 65,536 colors
- OS: Microsoft Windows XP Professional 32 bit, 7 Professional 32 bit and 64 bit, 8 Pro 64 bit

If AS-60/60RT/60VM is used for NL-52/42 data, the NX-42EX is also needed.

Supported models
- NL-62
- NL-52/42
- NL-32/31/22/21
- DA-40Viewer
  * Only auto store data are supported.

AS-60RT is for managing SX-A1RT, NX-62RT/42RT or NA-28 data on a computer.

Supported models
- SX-A1RT
- NX-62RT
- NX-42RT
- NA-28
  * Only auto store data are supported.

Free trial version now available on our website

Complete software for environmental measurements AS-60VM

Data management software for environmental measurement AS-60VM

Adds support for handling data measured with VM-53A to AS-60

Supported models
- VM-53A
  * Only auto store data are supported.
Specifications

Applicable standards
- IEC 61672-1, 2002 Class 1
- ISO 7196: 1995
- ANSI S1.4-1983 Type 1
- ANSI S1.4A-1985 Type 1
- ANSI S1.40-1997 Type 1
- JIS C 1509-1: 2005 Class 1

Measurement functions
Simultaneous measurement of the following items, with selected time weighting and frequency weighting

Processing (main ch)
- Instantaneous sound pressure level: Lp
- Equivalent continuous sound pressure level: Leq
- Sound exposure level: LEX
- Maximum sound pressure level: Lmax
- Minimum sound pressure level: Lmin
- Percentile sound levels: Leq, 10.0 to 99.5%, 0.1 increment steps, max. 5 values

Processing (sub ch)
- Instantaneous sound pressure level: Lp

Additional processing
- One of the following can be selected:
  - C-weighted equivalent continuous sound level: LeqC
  - G-weighted average sound level: LavgG
  - Level range
  - Frequency weighting
  - Frequency range: 1 Hz to 20 kHz
  - Power of max. level in time weighted sound level: LmaxT
  - 1-time weighted average sound level: Lavg
  - C-weighted peak sound level: LpeakC
  - Z-weighted peak sound level: LpeakZ

Specifications

Specifications subject to change without notice.

Windows is a trademark of Microsoft Corporation.

Distributed by:
RION CO., LTD.
http://svmeas.rion.co.jp/
3-20-41, Higashimotomachi, Kokubunji, Tokyo 185-8533, Japan
Tel: +81-42-359-7888  Fax: +81-42-359-7442