

No need to put up with noise,  
measurement and price any more!

# Aco's easy-to-use sound level meters

Precision measurements of  $L_p$ ,  $L_{eq}$ ,  $L_e$ , and  $L_x$   
values are now easier to use and economical.

Wide dynamic range of  
**100dB**

Integrating-averaging Precision Sound Level Meter /  
Integrating-averaging Sound Level Meter

## TYPE 6224 / TYPE 6226



Challenger for your future needs

# ACO



Wide dynamic range of  
**100dB**



## A squeeze-bottle body anyone can handle.

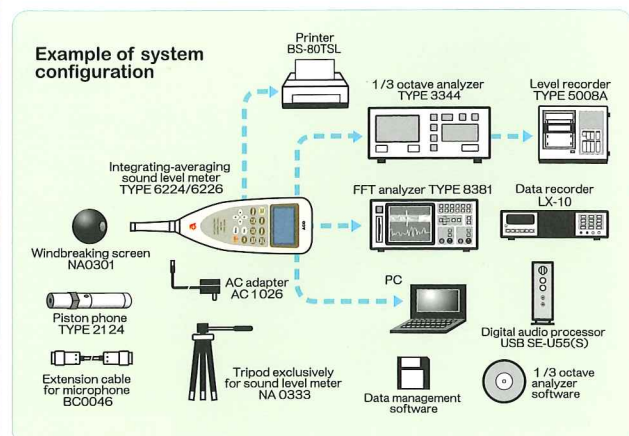
"Noise." Though it is an everyday problem, only experts are engaged in noise level measurements. Is it possible to make noise measurements easy even for beginners... Our simple question has triggered off the creation of a compact, light and easy-to-handle sound level meter with an excellent cost/performance ratio.

This is an integrating-averaging sound level meter appropriate for environmental noise measurements, equipped with the following measurement functions; equivalent continuous A-weighted sound pressure level (Leq), sound exposure level (LE), and percentile level (Lx). It is easily operated to fulfill various functions from measuring the noise of traffic, aircraft and machinery to quality control and diverse tests. Standard equipment includes an RS-232C interface, and connection to an outer CPU enables continuous operation.

Measurement results are expressed both by bar graph and numerically on a liquid crystal display. Further, the wide dynamic range of 100 dB eliminates the need for range switching, realizing easier and more accurate measurements.

### Features

- Percentile level (Lx) –any 5 selectable values
- Measure equivalent continuous A-weighted sound pressure level capability (Leq)  
Measure environmental noise required for securing occupational health capability
- Wide linearity range of 100 dB
- Equipped with an RS-232C function, allows for processing of data by PC
- Equipped with memory function, allows for storing up to 15,000 bits of data
- Backlite LCD screen for high-visibility and easy-on-the-eye display
- Excellent cost/performance ratio overpowers comparably priced products



1/2-inch microphone

1/2-inch preamplifier

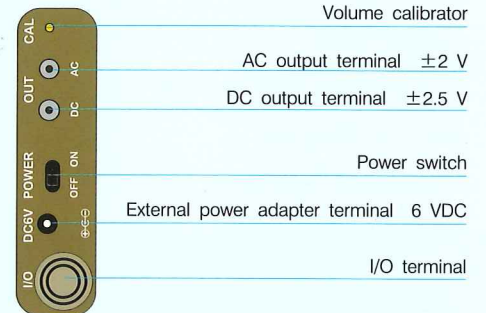
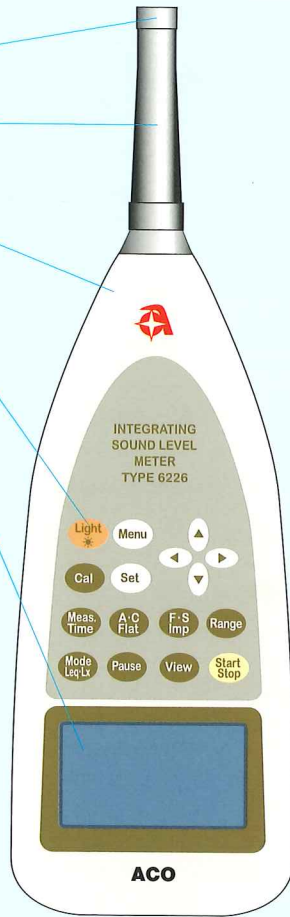
Easy-to-handle squeeze-bottle body approx. 370g

Easy-to-operate push buttons

Easy-to-read large digital display

Composition:

1. Main body
2. Windbreaking screen
3. Storage case
4. Four size AA manganese dry batteries (SUM-3)
5. Driver
6. Instruction manual



**Options:**

- AC adapter..... AC-1026
- Tripod exclusively for sound level meter NA-0333
- Extension cable (2 m or 5 m) .....BC-0046
- BNC pin cord.....BC-0071
- Piston phone..... TYPE 2124

Volume calibrator

AC output terminal ±2 V

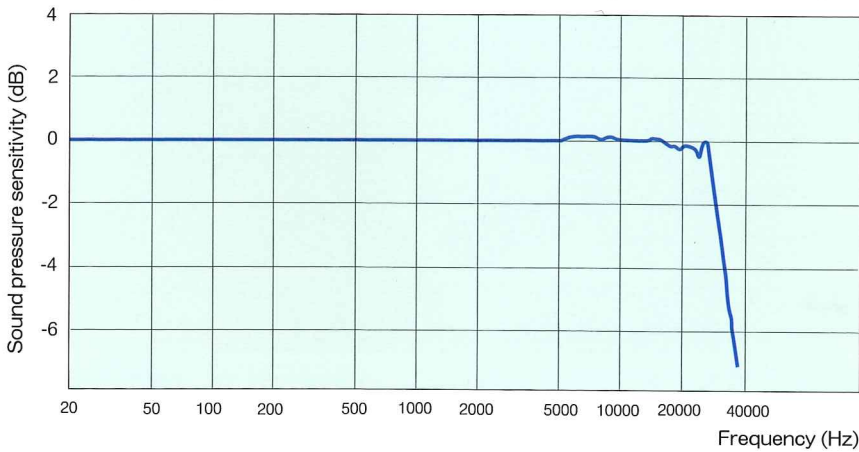
DC output terminal ±2.5 V

Power switch

External power adapter terminal 6 VDC

I/O terminal

**Frequency characteristics of microphone (7052N)**



**Options**

Piston phone

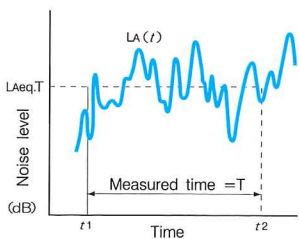
Tripod exclusively for sound level meter



**Equivalent continuous A-weighted sound pressure level (Leq)**

$$L_{AeqT} = 10 \log_{10} \left( \frac{1}{T} \int_{t_1}^{t_2} \frac{P_A^2(t)}{P_0^2} dt \right)$$

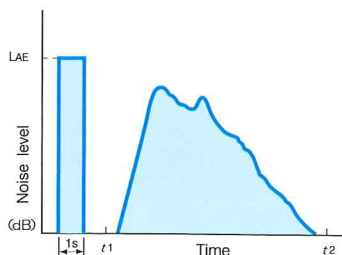
$P_A(t)$ : A-weighted sound pressure.  
 $P_0$ : standard sound pressure 20  $\mu$ (Pa).



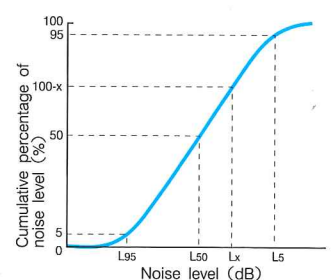
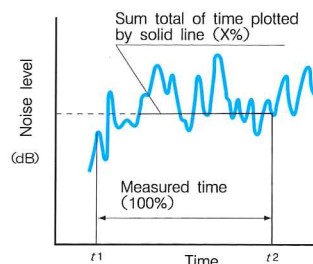
**Sound exposure level (LAE)**

$$L_{AE} = 10 \log_{10} \left( \frac{1}{T_0} \int_{t_1}^{t_2} \frac{P_A^2(t)}{P_0^2} dt \right), T_0 = 1$$

$P_A(t)$ : A-weighted sound pressure.  
 $P_0$ : standard sound pressure 20  $\mu$ (Pa).



**Percentile level (Lx)**





# SPECIFICATIONS

Type	6224	6226
Applicable Standards	Integrating-averaging precision sound level meter JIS C 1505, IEC 60651 Type1, IEC 60804 Type1, IEC/CDV 61672-1 Class1	Integrating-averaging sound level meter JIS C 1502, IEC 60651 Type2, IEC 60804 Type2, IEC/CDV 61672-1 Class2
Measurement Range	27~130dB (A) 38~130dB (C) 41~130dB (F)	28~130dB (A) 33~130dB (C) 38~130dB (F)
Peak Level	38~138dB (A) 55~138dB (C) 60~138dB (F)	
Measurement Frequency Range	20Hz~20kHz (JIS range:20Hz~12.5kHz)	20Hz~8kHz
Microphone	7146N 1/2 Electret condenser microphone	7052N 1/2 Electret condenser microphone
Level Range Control	10dB 6steps	
Linearity Range	100dB	
Time weighting characteristics	Fast, Slow, Impulse	Fast, Slow, Impulse
Frequency Weighting	A, C, Flat	
Measurement Parameters	Lp : Sound pressure level Leq : Equivalent continuous A-weighted sound pressure level Le : Sound exposure level Lmax : Maximum sound level Lmin : Minimum sound level Lx : Percentile level (5values of free select) Lpeak : Waveform peak hold (C weighting selectable)	
Response Time For Constant Input Signal	1s,3s,5s,10s,1min,5min,10min,15min,30min,1h,8h,24h, Manual (Max.199H59M59S)	
Sampling Time	20.8μs(Leq), 10ms(Lmax,Lmin)	
Lx Sampling Time	100ms	
Display	Liquid crystal and Back light (128×64 points) 4 digits, Display Period : 1s Display Period : 0.1s Over : +3dB from upper limited scale Under : -0.6dB from lower limited scale 4steps display	
Memory	Memorize the Sound pressure level or the Operation level (Approx.15000 data)	
Date	Built-in (year/month/day/hour : minute : second)	
Pause	pause/data clear	
Calibration	Electric calibration with internal oscillator (1kHz Sine wave)	
AC Output	1Vrms for full scale Output impedance:600Ω, resistance:more than 10kΩ	
DC Output	2.5V for full scale, 0.25V/10dB Output impedance:50Ω, resistance:more than 10kΩ	
I/O Terminal	Interface:RS-232C Data:8bits, Stop:2bits, Parity:not,Baud rate:4800,9600,19200,bps (direct output to printer, control and output data to computer)	
Battery	Type Life	Four 1.5V Alkaline cells IEC type LR6, Optional AC adapter Alkaline dry cell : Approx.24hours (Manganese dry cell : Approx.11hours) when Switch on a back light:Approx.1/3
Operating Temperature range	Temperature : -10°C~50°C Humidity : 30%~90% (not condensing)	
Dimensions	85 (W) ×310 (H) ×48 (D)	85 (W) ×284 (H) ×48 (D)
Weight	Approx.370g	

HOME PAGE URL <http://www.aco-japan.co.jp/>



Challenger for your future needs  
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