

# SERIES 24X

## Digital Sound Level Meter

- Simple operation
- Rugged design
- High resolution display
- Latest digital technology
- Fully compliant with IEC 61672
- Large measurement range
- Logging and Averaging models
- Greater than 35 hours battery life
- 2 year warranty
- USB output to PC with optional software
- Includes calibration certificate



### Overview

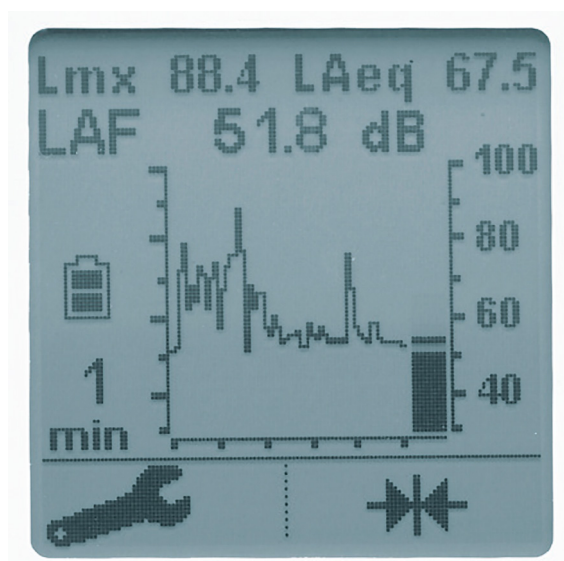
Designed to make noise measurements with confidence. The 24x Series is an easy to use range of instruments, designed to undertake noise measurements for a variety of applications.

By implementing the latest digital technology, the 24x Series gives excellent repeatability, ensuring the highest levels of accuracy and performance, all housed in a rugged and compact design.

With a high resolution display unparalleled in such an inexpensive unit, the 24x Series can display the time-history of noise levels, allowing an easy assessment of the current noise environment.

### Applications

- Occupational noise
- Product noise
- Fire alarm testing
- Simple walk through noise surveys



## Features

The 24x Series has a simple user interface using two 'softkeys', which represent options displayed at the bottom of the screen.

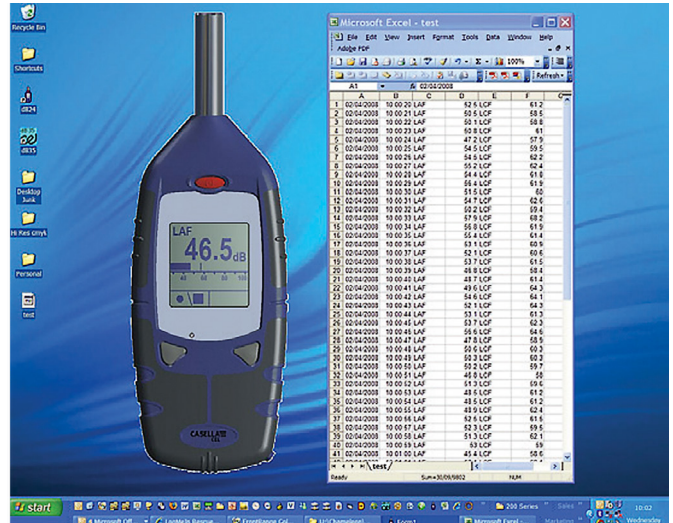
This makes the instrument very easy to use and any setup changes are retained the next time the unit is switched on. To accurately measure fluctuating noise levels, the CEL-246 model measure average values, integrated over time; Leq for European Standards and Lavg for the USA.

In order to quantify how noise varies with time, the CEL-246 logging variant (CEL-246 stores 419,000 data points) is also available to store the time history of the noise levels as well as the levels for the overall measurement (e.g. maximum and average levels, as detailed in the table opposite).

Technical Specifications	
Selectable ranges	30-100 or 60-130dB
Noise floor	<33dB(A)
Time weightings	Fast, Slow and Impulse
Frequency weightings	A and C
Weight	245g including batteries
Dimensions	72x212x31mm
Batteries	3x AA Alkaline or rechargeable
Battery life	Greater than 35 hours
External power	5V via USB 2.0 'Mini B' socket
Tripod mount	1/4" Whitworth socket
AC output	0.85V RMS @ FSD 'A' weighted (Optional 0-1.3V DC instead of AC can be specified at the time of ordering)
Operating conditions	Relative humidity, 5 to 90% (non condensing). Temperature, 0 to 40°C. Atmospheric pressure, 65 to 108kPa.

## dB24 Software

This optional software allows the CEL-246 real-time USB output to be logged and stored on a PC. Sound pressure levels are stored by dB24 every second into a data file compatible with PC based spreadsheet applications. Data stored within the CEL-246 can also be accessed since these meters act like a memory stick, allowing transfer of data to spreadsheet applications.



## Accessories

CEL-6840	Kit case
CEL-6841	Spare windshield
CEL-6842	dB24 Software (optional)
CMC51	PC to USB cable (optional)
CEL-120/2	Acoustic Calibrator (Class 2)

## Model Selection

24x series	CEL-240	CEL-246
Instantaneous and maximum levels	●	●
Logging of 1s levels*		●
Selectable Logging interval of 1-10s*		●
Averaging (Leq or Lavg)		●
Compliance with ANSI S1.4, IEC 61672, 60651	●	●
Compliance with ANSI S1.43, IEC 60804		●

\*requires dB24 to access data stored on CEL-246 model