

## **PRACTICAL 2**

### **MEASUREMENT OF CONSTANT AND TIME VARYING NOISE SOURCES**

#### **1. AIM**

The aim of this practical is to gain experience with use of the Sound Level Meter for time varying noise.

#### **2. Equipment Preparation**

- 2.1 Sound level meter and calibrator and sound power source.
- 2.2 Check the battery and the calibration and record the relevant details.

#### **3. Measurements using a constant sound source**

- 3.1 Place the sound source centrally in a suitable location and set the sound power source output to wideband spectrum.
- 3.2 Set the output level of the constant sound source so that it is 10-15 dB(A) above the background noise level in the area at a distance of about 1 m. Do not adjust this level for the next parts of this exercise.
- 3.3 Determine the sound level ( $L_{Aeq}$ ) at the same position over a 15 sec, 30 sec, 60 sec and 90 sec time periods.

#### **4. Measurements using a time varying sound source**

- 4.1 Place the sound source in a suitable location.
- 4.2 Adjust the output of the time varying source so is 10-15 dB(A) above the background noise level in the area. Do not adjust this level.
- 4.3 Determine the sound level ( $L_{Aeq}$ ) at the same position first for-15 sec, 30 sec, 60 sec and 90 sec time periods resetting the signal back to the beginning each time.

#### **5. Report**

Produce a report with comments on each part of this exercise and the implications of the findings for undertaking workplace noise assessments.

Name: .....

**Report on Practical 2 Measurement of Constant and Time Varying Noise Sources**

**Sound Level Meter:**

**Type/Model:**..... **Serial Number:**.....

**Settings of meter:** .....

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**Portable Calibrator:**

**Type/Model:**..... **Serial Number:**.....

**Performance Check Level on Meter:** .....

**Sketch of measurement arrangements:**  
**Constant Source**

**Time Varying Source**

Measurement Time period	15 sec	30 sec	60 sec	90sec
Constant sound source, $L_{Aeq}$				
Time varying sound source, $L_{Aeq}$				

**Comments:**

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