SoundEar 3-320 Noise Processor

Features

- Minimal or no display of noise levels
- Long term sound level monitoring via USB memory stick
- Link to your monitoring or process control system (DC or current loop output)
- Unobtrusive
- Large, expandable memory
- Calibration can be checked with 1/2" calibrator
- Weatherproof outdoor version available

Applications

- Factories and other industrial sites
- Hospitals, libraries, schools
- Open plan offices
- Entertainment venues

Overview

The SoundEar 3 Noise Processor mounts on the wall to monitor and record the sound levels. The digital display usually shows the current sound level, but this can be switched off or even set to display the time.

The SE3-320 Noise Processor is part of the SoundEar 3 range of products. It is technically identical to the SoundEar 3, but without the large green/yellow/red light-up display.

Its purpose is to continuously monitor the sound levels, recording the sound level for download to a computer via memory stick. It can also be linked directly into an existing process control system via the 4-20mA Current Loop or the DC output.

Data Logging

The SE3-320 Noise Processor has a large internal memory, to which it can store various sound level parameters every second. It can store the Fast or Slow sound level with "A" or "C" frequency weighting. You can select whether it stores all of these parameters or just the ones you need. When you plug a memory stick in the SE3-320 will automatically transfer the measurements on to it. You then plug the memory stick into your computer to load the measurements into the SoundEar software.

The Noise Processor's internal memory is large enough for more than 18 months storage without download - although of course we would recommend regular download to avoid data loss.

Connect to Process Control Systems

The SE3-320 can be linked in to existing monitoring and process control systems, or you can develop your own monitoring system, using either the DC output or Current Loop output.

4-20mA Current Loop

This is a standard method of electrical signalling, used by many process control systems, with the benefit that the signal is not degraded by voltage drops in the wiring. For more information please visit the **Outputs** page.

0-10V DC Output

The DC Output from the SoundEar 3 Noise Processor provides the measured sound level over a range of 0 to 10V DC, which can be measured using a basic A-D converter. For more information please visit the **Outputs** page.

Display

The digital display on the SE3-320 usually shows the current sound level, updating every second. However, it can be set to any of the following:

- Slow sound level, dB(A)
- LAeq,1s
- Time
- Off (display is blank)

Turning the display off or displaying the time can be useful if you don't want to show the sound level in decibels.

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Specifications

Technical Specifications

Frequency Range	20Hz to 20kHz
Measuring Range	30 to 120 dB
Deviation	± 0.5 dB
Frequency Weighting	"A" ("C" weighted Peak)
Time Weighting	Fast and Slow
Digital Display	dB(A) Slow, LAeq, Alarm settings, Clock
Outputs	"A" weighted, 0-10V or 4-20mA
USB Ports	1. Micro USB (power and PC connection)2. USB Controller (for USB memory stick connection)
Internal Memory	16MB (128MBit) - 600 days
Cabinet	Shockproof acrylic
Dimensions	121 x 149 x 43 mm, 4.8" x 5.9" x 1.7"
Weight	470 g, 1lb 6oz
Power	5 VDC (micro USB) or 24 VDC (screw terminal)Max 2.5W
Acoustic Standards	IEC61672-2-2002 Class 2, ANSI S1.4 Type 2
Medical Standardswith P-SE3-MED adapter	60601-1: Medical electrical equipmentPart 1: General requirements for basic safety and essential performance. 60601-1-2: Medical electrical equipmentPart 1-2: General requirements for basic safety and essential performance.