

## Sound Level Meter

## Construction Noise

PCE Americas Inc.  
711 Commerce Way  
Suite 8  
Jupiter  
FL-33458  
USA  
From outside US: +1  
Tel: (561) 320-9162  
Fax: (561) 320-9176  
info@pce-americas.com

PCE Instruments UK Ltd.  
Units 12/13  
Southpoint Business Park  
Ensign way  
Hampshire / Southampton  
United Kingdom, SO31 4RF  
From outside UK: +44  
Tel: (0) 2380 98703 0  
Fax: (0) 2380 98703 9  
info@pce-instruments.com

[www.pce-instruments.com/english](http://www.pce-instruments.com/english)  
[www.pce-instruments.com](http://www.pce-instruments.com)

Almost all of us are familiar with an annoying and very disturbing noise coming from the near-by construction sites, renovations. The rules and regulations demanding the sites to control the level of the noise affecting the neighboring residential areas should be, not always are followed. A very big number of complaints often come because of the violation of these rules. There are only a few hours per day when the construction noise is allowed at all, another important point is up to what level that



noise should go. Such documents as Control of Pollution from 1974 contain rules as for when, under which circumstances and in which way the construction work should be carried out.

Depending on the size of the construction site different noise measuring instruments can be used. For temporary noise measurement handheld instruments are the best solution. If the measurement should take place for a long period of time, and storage of data is required, the whole kits (with the microphone, cable, battery, acoustic calibrator etc.) for noise measurement are applied. They can be applied in any weather, and are protected from the negative influence of the possible contaminants.

Construction noise may have two peculiarities. First – its influence on the people who work in the immediate environment and are exposed to the permanent or temporary sudden extreme noise. Second – it may have negative influence on the people who are in the area close to the construction site. The construction noise may have permanent character, but can be repeated with certain intervals. Depending on the purpose different models of sound level meters should be chosen. But all of them have got one goal – to identify the level of noise and to introduce changes into the working process so that to diminish the risks. Every construction site should have a Noise Mitigation Plan which includes lots of important points. Among the changes that should follow are – modernization of the equipment (noise reduction devices, application of the noise-isolating materials on the engines, fence around the construction site, curtains) and personal protection of the workers, strict hours of work etc.



The instruments which are used at the construction site are also subject to changes if they do not correspond to the requirements: trucks, bulldozers, excavators, electric saws, drills, cranes etc. Each instrument can be checked as for what kind of noise level measured in decibels it reaches in the operation process.



Construction noise is sometimes difficult to monitor exactly because of its changing nature. And then it makes sense to apply permanent noise monitoring systems which allow seeing how much and how often the noise changes during the day. Depending on which area, industrial or residential, the maximum level can also be different: 75 dB and 65 dB correspondingly.