

S&N-S Light: An anthropic noise control device to reduce the noise level in densely occupied spaces encouraging personal control of voice

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ABSTRACT FINAL ID: 3aAAb1

TITLE: S&N-S Light: An anthropic noise control device to reduce the noise level in densely occupied spaces encouraging personal control of voice

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ABSTRACT BODY:

Abstract (200 words): Recently, in many fields related to environmental quality, such as thermal and visual quality, the tendency is to customize the comfort according to the user's needs. A tailored comfort zone is planned in public spaces, in which occupants can set their own comfort level with passive or active systems. In this context, the reduction of noise due to anthropic sources can be seen as a priority.

In densely occupied spaces, such as classrooms, workplaces, restaurants and outdoor spaces, the noise due to users chatting has a detrimental effect upon performance, health and environmental quality. This study reports applications of S&N-S Light, Speech & Noise Stop-Light, a patented smart phonometric device with a warning light activation of exceeding of predetermined anthropic sound levels limits, which encourages personal voice control through visual feedback. The light activation, with green, yellow and red colour, is based on an adaptive algorithm that accounts for pre-defined statistical noise levels; therefore accidental noise levels can be filtered. The device has been used in classrooms, restaurants and urban squares. Results indicate a decrease of noise levels with S&N-S Light, especially when the occupants received training about the device benefits.

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