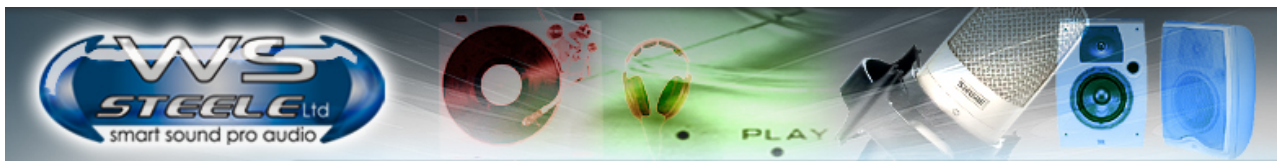




SOUNDWAVE ROOMDEVICES©2010



Ambient background noise affects speech intelligibility and the concentration of room occupants. Student and teacher performance is proven to be better in low ambient noise conditions.

Long reverberation times (typical in older school buildings) adversely affect speech intelligibility, especially at a distance from the source of sound (usually the teacher's voice).

Ambient noise and reverberation time are the most important parameters to know.

73,000 teacher days lost to voice strain every year

A new survey of primary school Head Teachers, jointly conducted by Soundart Pro AV Design Systems and RNID, estimates that the UK loses up to 72,875 teacher days due to voice strain... **Daily Mail Article 17.10.09 regarding Voice Strain Using Inferior Classroom Systems**

Thousands of teachers are using pop star style headsets in lessons to help protect their voices. One in 10 suffers voice problems as a result of speaking so much and so loudly to teach and maintain order in noisy classrooms...

Q. What does Soundwave Room Device© system do?

A. It takes a teacher's voice, via a wireless microphone, enhances speech frequencies for better intelligibility, amplifies and distributes the sound to carefully located speakers around a classroom. It delivers the teacher's voice clearly, at a comfortable level, to all pupils wherever they are seated in the room.

Q. What are the components of a Soundwave Room Device system?

A. In a fixed system we install a Soundwave Chanel 38 Microphone by SHURE, cabling and four or more wall- or ceiling-mounted speakers. The teachers wears a light wireless microphone, as used in broadcast and live presenting, Pupils can be given an optional pass-around microphone for interactive lessons. In a portable Front Row to go system the receiver and amplifier is combined with two speakers in a self-contained unit for use anywhere.

Q. Why do we need a Soundwave Room Device system?

A. The level of a teacher's voice perceived by a child depends on where the teacher and child are positioned. Without Soundwave Room Devices, the children near the teacher hear well, whilst those further away can struggle because they receive a greatly reduced 'signal'. In addition, background noise around the child combined with reverberation makes speech perception difficult. A Soundwave Room Device system cuts straight through the barriers to clear communication; delivering a comfortable, comprehensible voices signal every time. In addition the system is made up of professional components delivering the highest audio clarity, which is currently lacking with lesser audio teaching systems.

AUDIO VISUAL SYSTEMS | DESIGN | CONSULTANTS | SALES&HIRE | TRADE SUPPLY | SOUND INSTALLATION | SERVICE

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Q. What are the long-term effects of a poor acoustic environment without Soundwave Room Devices to help?

A. Noisy conditions produce a number of effects in a learning environment: reduced speech intelligibility; lack of concentration; long-term noise-stress in children and staff; rowdier behaviour; poor motivation of pupils and less willingness to work hard; vocal strain for teachers; slower language development; reduced inclusion for hearing-impaired children.

Q. What are the long-term benefits of a WSS Soundwave Room Device© installation in each classroom?

A. Higher test scores and improved academic performance. A calmer class atmosphere makes a lesson more enjoyable and productive – with much less stress for everyone. Teachers suffer much less voice strain – so feel better, take fewer sick days off and achieve more. Almost without exception children perform better in quiet classrooms enhanced by a Soundwave Room Device system.

Q.

A. Yes. Research shows that poor behaviour in class can be the result of poor listening, as a result of immature hearing and language skills, ear infections, etc. So it follows naturally that a system designed to deliver the optimum listening environment can improve behaviour. If children are more engaged with their lessons and can hear their teacher better, with fewer repetitions of instructions, they suffer less from boredom, stress and misunderstandings.

Q. Who benefits from Soundart Designs and Soundwave Room Devices ©

A. Everyone! Children love it because it makes everything the teacher says much easier to hear, making learning easier and more fulfilling. All children feel included in the class activities. Teachers love it because it increases comprehension levels, reduces voice strain and makes classes much easier to manage. Schools love it because academic results and test scores go up measurably, whilst the academic 'atmosphere' improves. Schools and LEA's also love it because reduced levels of vocal and general stress mean lower replacement staffing costs and much less disruption to the curriculum through sick leave. Parents love Soundwave Systems because it gives their children the optimum environment to learn and develop – not just academically but also in their language, social and mental skills'. **Isn't Soundwave Room Devices © just for hearing-impaired pupils?**

A. No. True, Soundwave Room Device is often introduced to schools to support access for a hearing impaired child, at which it excels of course. But early studies of Soundwave Room Device © systems soon showed that all children within a class benefited enormously. Soundart Design have also partnered with Claude systems (A hearing Impairment authority to provide BS standard compliant Induction Loop systems to Classrooms, as a greater benefit, this is Because no child's hearing develops fully until their teen years, they aren't as good at hearing and listening as adults – you could say that all children are hearing-impaired to a certain degree until they grow up. Remember also that all children can suffer from temporary serious hearing impairment – through colds, glue ear and throat infections. So, studies have shown that whole-class scores in tests improve, in a measurable way, when Soundwave Room Devices© are used it is the only true intelligent system to communicate with the Classroom.



SOUNDWAVE ROOM DEVICES© THE ONLY CHOICE FOR CLASSROOM COMMUNICATION

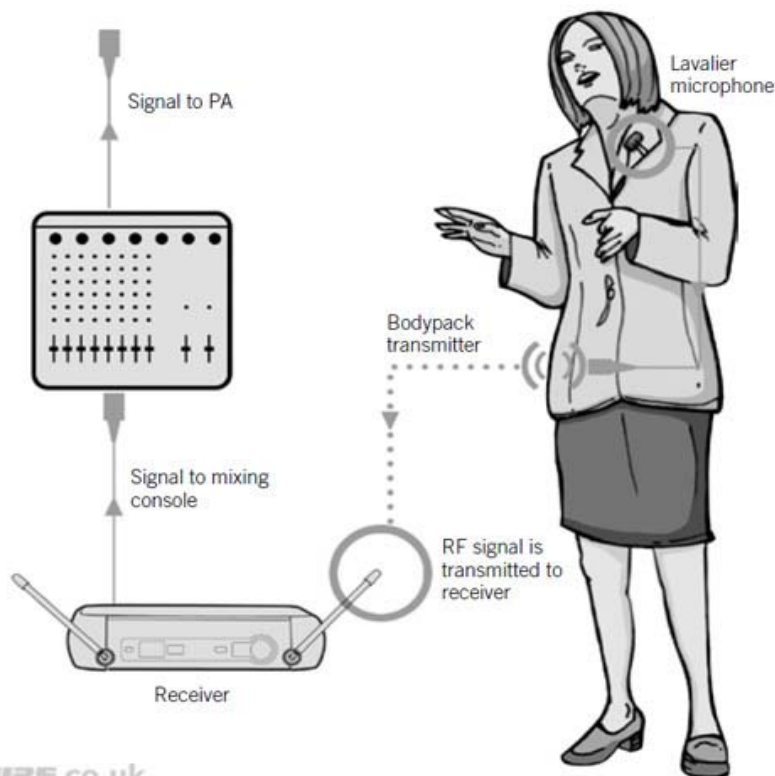
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Condenser Microphone: **HEADBAND VERSION USED IN**

ALL SOUNDWAVE ROOM DEVICE SYSTEMS. Condenser microphones are more sensitive, give a smooth, natural sound and need to be powered. They use an electrically-charged diaphragm & backplate assembly to form a soundsensitive capacitor. When sound sets the diaphragm in motion, the distance between the diaphragm and the backplate changes. This variation in spacing changes the capacity of the capacitor, and produces the Electrets signal.



THIS DIAGRAM SHOWS EXACT POSITIONING FOR TRUE DIVERSITY SOUNDWAVE ROOM DEVICES © OPTION OF LAVALIER MICROPHONE; DO NOT CONFUSE THESE SYSTEMS WITH LESSER BRANDS WHICH ONLY HAVE LIMITED COVERAGE CAUSING DROP OUT AND LOSS OF SIGNAL, RESULTING IN POOR INTELLIGIBILITY AND QUALITY.

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