



Pace Perspective



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We welcome any comments or questions regarding articles featured in the *Pace Perspective*. Please contact Herb Steininger at hsteininger@pace-systems.com or by phone at 630-395-2212.

Thin is Green (Thin Client, that is)



The world is going green. Just look around. Green is everywhere. Almost every grocery store now promotes the use of reusable bags. Time magazine devotes space every week to a "green" column. And if you still aren't convinced, here is my overwhelming proof: Oprah has done a "green" show.

It's not only individuals that should measure their carbon footprint. Businesses have a responsibility as well. In a recent article, [Thin is in: Considering the green impact of desktop virtualization and thin clients](#), ZDNet blogger Heather Clancy presents compelling support for the assertion that Thin Clients and server virtualization are important components in a comprehensive "green" policy. Are you looking to reduce your carbon footprint? Are you looking to reduce contributions

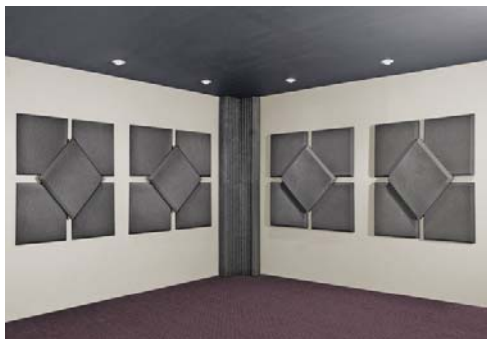
of electronics to land-fills? Thin clients and virtualization may be a part of the answer.

Recent research concludes that the use of Thin Clients can reduce power consumption by up to 24 percent as compared to full desktop PC's. Thin Clients also last up to twice as long as regular desktop PC's. This equates to significant cost savings for your company, and saving money while helping the environment is just good business. Read the above article to see if virtualization or Thin Clients might be right for you. If you'd like to explore the possibility of utilizing either of these products in your organization, please contact Pace Systems and let us provide a proposal for you.

Acoustics: "Can you hear me now? Good."

"Can you hear me now? How about now?" For most of us, this series of questions calls to mind a ubiquitous television commercial having to do with cell service. However, for those of you involved in facilities management, they may also be questions you find yourselves asking far too often as you go about your daily work. For instance, do you find yourself asking these questions during typical teleconferencing and videoconferencing sessions? Or, maybe during board meetings and conferences? Are conversations or presentations difficult to understand? If so, you may be experiencing problems with the acoustics in your environment which are degrading

the level of speech intelligibility. Treating these acoustical issues in your rooms may not be as “sexy” as purchasing the latest and greatest piece of conferencing hardware, but until the acoustical issues have been fixed, you may find your expensive equipment never works to its fullest potential.



Some common issues that can cause problems with your room’s acoustics are:

- Reflections between hard wall surfaces
- Reflections between hard ceiling and floor surfaces
- Lack of focus in the low to mid range of the audio spectrum

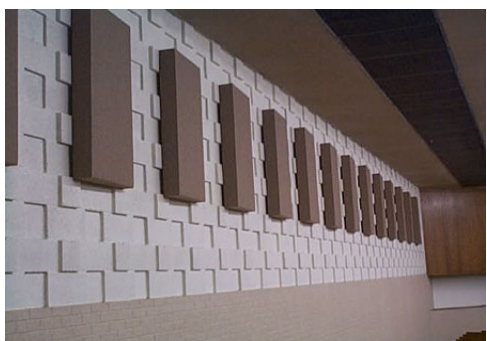
Overly reflective surface material is a common problem that can cause degradation in the intelligibility of vocal consonants. Since consonants play a much more significant role than vowels in speech intelligibility, when consonants are difficult to distinguish, speech intelligibility suffers. Speech intelligibility will also suffer if there is a lack of focus in the

low to mid range audio spectrum where consonants live.

Fortunately, many acoustical issues (and therefore speech intelligibility issues) can be rectified by taking a few simple steps. For reflection issues, if your problem room has bare walls you might try hanging drapes or other fabric over the wall surfaces in a decorative fashion. Covering these bare, hard surfaces is especially critical if the wall surface contains large stretches of glass. If the room has bare floors, try laying carpeting over some of the floor’s surface area.

Low to mid range room problems can be more difficult to detect and fix. However, one remedy you may find successful is to place commercially available “bass-traps” in the corners of the room. Bass-traps are especially effective in absorbing low frequency sound waves and can help to clean up the low to low-mid frequency range.

If you decide to try any of these DIY fixes for yourself, one important thing to keep in mind is that natural wool materials are more effective than most synthetic materials at managing out of control sound waves. This is because natural wool contains fiber of differing lengths, density and thickness which serves to vary the frequencies absorbed and diffused. Because synthetic fibers are consistent in length, density and thickness, only specific frequencies will be absorbed and diffused.



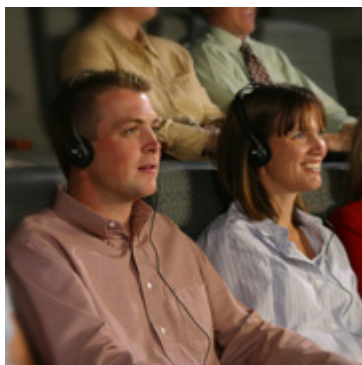
If you find your room still has intelligibility issues even after taking the simple steps outlined above, it may be time to call in a professional for consultation. The best solution for a room with intelligibility problems is to have treatments designed for your room by a trained acoustician. A trained acoustical engineer can have custom treatments designed that will enhance your room acoustics while also correcting specific acoustical problems. Hanging custom designed acoustic treatments can be a simple yet very effective remedy for almost all common acoustical nuisances existing in commercial facilities.

As an alternative to onsite consultation, Pace Systems provides a service by which the room acoustics are modeled using computer algorithms to determine problem areas and possible resolutions. Using this service, Pace Systems personnel record the dimensions

as well as the surface materials of the room. This information is then plugged into the computer modeling software. Based upon the results of the computations, a trained engineer is able to detect or confirm problem areas and also make recommendations as to how to solve these problems.

If you suspect you have a conference room or boardroom that is not living up to its acoustical potential, please request a visit from Pace Systems. Pace Systems can recommend and install acoustical treatments for your problem rooms. Give us a call today.

Technology Highlights



Your moment is finally here. The presentation you worked on for weeks is polished and perfect. The auditorium is filling up. The whole sales team is counting on you to convey the intricate details of the proposal. You need to make the sale. Here goes...

Yes – you did it! Your presentation was flawless. You hit all your points. The ball is in their court now. They haven’t called. Patience – they’ll call. Just send a quick e-mail to see if they have any questions. Great - they replied. No sale? What happened? How could that be?

What happened was your audience could not hear every word so your message went unheard. Sound familiar? Don’t let your presentations go unheard. “Whether in a theater, a house of worship or at a sporting event, individuals want to experience every word, every moment. That’s what they come for, and they deserve to participate by hearing every sound. Although most

people can suffice with a standard sound system, there are inevitably several in every gathering who could use a little help, or who want an enhanced auditory experience.”

Pace Systems was recently authorized to sell a unique audio wireless solution from Listen Technologies. “Listen’s products are

designed to provide an easy to use and convenient wireless sound solution for your patrons who want to make sure they don't miss a thing." Listen sells a wide variety of audio enhancement tools for business and entertainment needs. "Listen's solutions enhance the auditory experience for every individual in many applications – not just assistive listening. Listen's exclusive line of state-of-the-art products and technologies are diverse enough for use in tour groups, soundfield, conferencing or language interpretation. Whatever the application, Listen provides an enriching auditory experience."

If your facility is in need of help in meeting ADA compliance standards, improving the intelligibility of your conferencing services, or if you just want to extend audio capabilities to a location without the cost of cable installation services, Listen Technologies has a product for you. And Pace Systems has the design and installation services that can help bring it all together. Give us a call today for an assist with your audio enhancement needs.

Installation News



If an emergency should arise in our community, we have a reasonable expectation that the local government has planned ahead and is prepared. However, one local village wasn't completely sure their emergency center was in good shape, technology-wise. Pace Systems was recently awarded a contract to provide video switching capabilities to a local village Emergency Operations Center (EOC). The system which the village had been using was outdated and had been cobbled together utilizing consumer grade video switching equipment. This was not a system the village desired to rely upon in the midst of a possibly desperate emergency situation. Village personnel needed to replace the system with something exceedingly reliable, and which would give them the flexibility their existing system was lacking.

When the village asked Pace Systems to design a new system, Pace engineers turned to Extron Electronics for premier professional grade switching equipment. Pace carefully designed a new video system centered on the Extron ISM482 matrix switcher. The ISM482 is a video matrix scaling switcher that includes 8 fully configurable video and audio inputs for RGBHV, RGBS, RGsB, component video, S-video, or composite video on female BNCs. The switch also includes two independent, high-resolution, video and audio outputs. Each output provides its own high-performance video scalar capable of outputting 33 different scaled rates.



Pace also provided 2 individual Extron remote controls which were wall mounted to provide easy, convenient access to the front panel controls of the matrix switcher. Each remote included a 10 key numeric keypad with a simple menu system for remotely controlling the functions of the matrix switch.

Once the system was designed and proposed, village management quickly signed off on the project. The functionality and flexibility provided by the new switching system was exactly what had been needed.

Operation of the equipment was simple and easy to learn. In fact, discussions have already begun regarding the expansion of the new system so that the village can incorporate more of the EOC's key emergency personnel workstations.

About Pace Systems

Pace Systems has been providing turn-key solutions for Security, A/V, Structured Cabling, Wireless and Data network integration in the Northern Illinois region for over 24 years. Services include Video Surveillance, Access Control and Life Safety, as well as A/V Consulting and Integration for Commercial and Gov/ED customers. Please call us at 630-395-2180 or take a look at our website, www.pace-systems.com if you would like more information regarding some of the cutting-edge Safety, Security and Digital Signage products we represent.



2040 Corporate Lane

Naperville, IL 60563

ph. 630-395-2255

fx. 630-395-2250

www.pace-systems.com

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