



Performance Media Industries, Ltd.

The Great Divide
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by A. Grimani

There exists a great divide in the audio industry – a divide greater than analog vs. digital and greater even than 2-channel pure music vs. multi-channel home theater! It's the divide between consumer and professional audio.

Each segment has its own trade shows, its own technologies, its own distribution channels, and its own brands. A few companies, such as JBL, Genelec, and Yamaha have managed to be players in both segments. They have done so with strong internal division, where the products, engineering, and marketing groups are very distinct. I guess the segregation comes from historical backgrounds as well as the founders' interest poles.

And so who cares? If you are on the residential side, and don't give a rodent's behind about what goes on in the marketing channels for studio equipment, why should you lose sleep over it? Well, you really shouldn't loose sleep over any of this audio stuff since we aren't saving peoples' lives, but know this: The main professional audio tradeshow, called the Audio Engineering Society Convention (AES) is also home to a biannual meeting where all the scientists doing pure research in the fields of audio electronics, acoustics, transducers, etc., present their latest findings to their peers. Their work is conducted in all fields related to audio, including concert halls, consumer systems, digital coders, microchip designs, speaker and room measurements, etc. Most of the research reports are thick, with long mathematical equations filled with symbols most people don't even know exist. However, they contain crucial information that advances our understanding of the state-of-the-art in sound quality and purity. Some of the reports are even written in mostly plain English and have information gems that can be directly useful to us right here in the land of home theater. Case in point is the research Todd Welti of Harman International conducted on subwoofer placement (presented in Munich, April 2002, and New York, October 2003). Todd goes through painstaking and methodical analysis of the best layouts for subwoofers in rooms, shows the mathematical models, and shows the actual measured results. With info of this kind, we can design rooms on paper and know that they will work when we build them...if only we are willing to read what scientists are working hard to figure out. Every year

the Convention reports are filled with nuggets of info that I use to better my design work, or refine the quality of my calibration processes. These Convention reports are available to you, too. All you have to do is go to the Convention or at least order the research paper pre-prints (now available on CD-ROM). You can also join the Society and get the monthly journal in which selected works are published. The AES Convention also has an exhibit floor that will surprise you. About half the size of a CEDIA Expo floor, it is filled with gear you've never even heard of. The brands and products used by this crowd are clearly different. There are lots of computer-based products, lots of digital this, and high-tech engineered that. Most of them are only just starting to get into multi-channel sound. That, for me, is the rub from the other side. These guys have no idea what we have all been doing in the last ten years of residential high-performance multi-channel sound and high definition picture playback systems. The professional folks never come out to a CEDIA Expo or CES, and they are not in touch with the capabilities of the clientele. Most of them think that multi-channel audio has only just started to exist, and that there may be a few thousand households with it. (Try 25 million!) Broadcasters think that, in any given market, there are only 50 to 100 households with HD displays. (The CEDIA channel alone installs more than that every month!) Record labels are still holding back on releasing multi-channel mixes because there's "no market" yet. Clearly, many of their production decisions are misguided!

So we all loose out from this divide. The cutting edge technical info doesn't get to the residential folks, and the market data doesn't get to the professional folks who are creating the program material that we end up playing on our systems. It's a bad, bad vicious cycle. Also, some of the technologies that flourish in one of the sides don't show up in the other. For example, the pro guys are using IEEE1394 extensively these days for multi-track audio connectivity, but we haven't seen much of it at home until just recently. On the other hand, we have speakers and subwoofers that would make the studio guys cry because they sound so good.

I attended the latest AES Convention in New York this last October and saw a grand total of about five consumer industry folks there. Two were manufacturers, one was press, one was a consultant, and one was a dealer/installer. I'm sure there were a few others, but considering how much is to be learned from being at the most important science fair for audio geeks, I think the numbers are just plain low. By the same token, I rarely see the usual suspects from the professional arena at any of the consumer shows. Who ever said that Audio Engineering only belongs to a secret Society of pro audio folks? And who ever said that the production community should altogether ignore the brands, products, and markets that make up the lion's share of residential use?

I suggest that we reach out to the pro audio community. Invite some of the AES governors to attend the next CEDIA Expo, and give them the royal treatment. I suggest

that as many of us as possible investigate the local chapters of AES. (There's one in every region.) Further, we must start paying attention to the science evolving out of the seminal work presented in the AES reports. We have a lot to gain from closing the gap: Imagine all the networks transmitting HD video with Surround EX all the time!

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