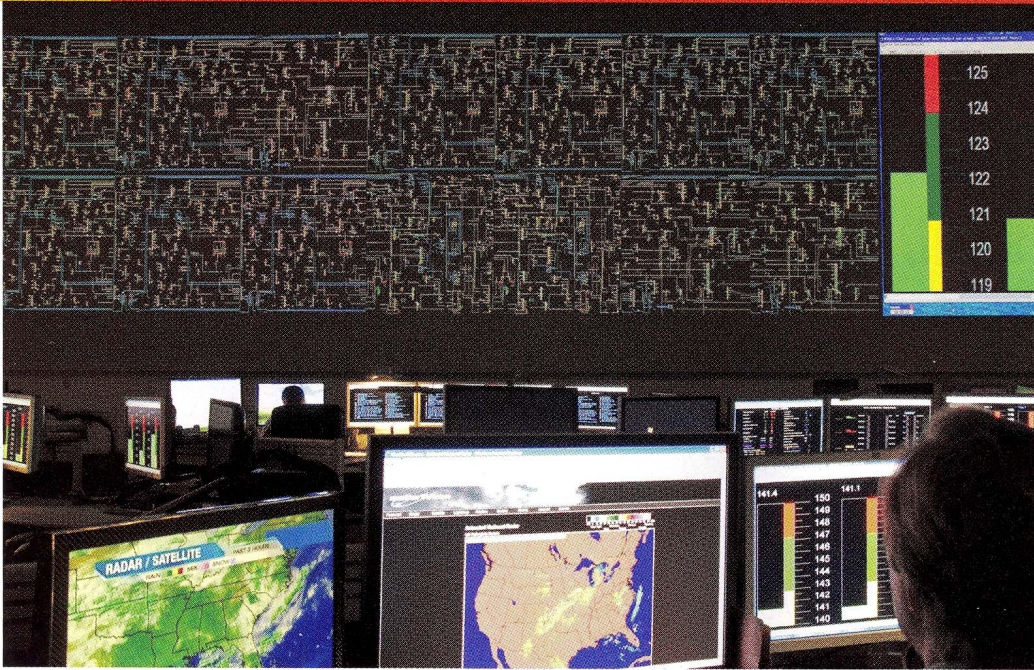


ProAV

INTELLIGENCE

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The Case for 4K

What could your clients do with 8.8 million pixels of video resolution? The AV world is starting to figure it out. **BY BRAD GRIMES**

PAT HERNANDEZ, PRESIDENT OF AV INTEGRATION FIRM IGI OF COMMERCE, MICH., hadn't envisioned himself attending the National Association of Broadcasters' annual trade show last month in Las Vegas. But there he and his firm were, helping conduct the 4K Forum with Sony, nVidia, Assimilate, and Da Vinci Systems. The Forum was meant to walk video and broadcast pros through an end-to-end workflow for using 4096x2160 video in their operations.

IGI made its mark building high-resolution visualization systems for Detroit's automakers, among others. Auto engineers could see their designs on-screen before building prototypes. "4K resolution gave them the aesthetic accuracy they wanted," says Hernandez. "They could see right down to the dials."

Proponents say 4K can be used for more. Sony, which has an interest in 4K through its line of SXRD 4K projectors, touts benefits for large venues, auditoriums, and post-production facilities. Andre Floyd,

Sony's marketing manager for SXRD, says 4K can help places like museums and theaters entice savvy audiences. "These locations need to differentiate themselves from the home theater experience."

Sony is readying a pair of new SXRD models, the SRX-T110 and T105, that offer more brightness (11,000 and 5,500 lumens, respectively) and a higher contrast ratio (2,500:1).

Interest in 4K should mean even more work for IGI, which formed a second company, Immersion Graphics, for handling general AV systems. Recently IGI finished a \$2.2 million project for ITC Holdings, an electric company in Novi, Mich. In addition to general AV, the firm installed a 4K projection system for ITC's control room (pictured above). Twin stacked SXRD projectors make it possible for operators to read ITC's intricate electricity distribution map from anywhere in the room. "The SXRDs took the place of 80 or 90 display cubes," says Hernandez. Cost savings? About 70 percent, according to IGI.



TOM ZEREGA: A one-time actor, Zerega is now CEO of Magnetic 3D, which develops 3D displays and players that work without glasses (NEC, Toshiba, and others are partners). The company evolved out of the digital signage market, where Zerega and partner James Zahakos handled display networks for nightclubs. For more Q&A from this interview, check out [PRO AV ONLINE](#).

PRO AV: Why 3D? What do we need it for?

ZEREGA: I'm sure you're seeing all the stuff in the press about 3D and how it's big for Hollywood. We're talking to advertisers all the time and that's what they're looking for, too. Sure, they can take their poster and put it on an upright display and let it play back. But they want to know how they're going to stand out. And that's where 3D technology comes into play.

PRO AV: There are two major flavors of autostereoscopic 3D—lenticular and parallax barrier. Why did you choose the 3D technology you chose?

ZEREGA: Barrier technology is like putting a screen door in front of an LCD or plasma. The color tones are off. The screens are not bright because you're knocking out 60 or 70 percent of the light; the viewing zones are [poor] because you're doing this pixel blocking. When we were working with advertisers on our NightVision Network, we knew this technology was limited. ... Lenticular was an obvious choice.

PRO AV: What's the price premium of a 3D network over a 2D network?

ZEREGA: We know it's a big investment for people to get into 3D, so all our screens are industrial-grade. If you took the same kind of industrial LCD monitors and then you chose ours [for 3D], the cost difference is probably about 50 percent. The players and software in both 2D and 3D are on par with each other. So it's the one-time 3D screen cost, but you don't only have to play 3D content. If you're just getting ramped up you can also play your 2D content.

PRO AV: Are there other commercial applications for this 3D technology?

ZEREGA: We're working on using this for CAD programs for visualization. You'll be able to take any CAD file and make it interactive. You just hook up your 3D screen to a computer and import the files and view them. So if you're an architect or an engineer, you can really show people what you're talking about and work interactively inside the image.