

2004's Coolest Products

Pro AV integrators and consultants pick their favorite products of the year.

By Tom Zind

Some new products are clearly the best in their category. Others are simply “me-too” products, with few factors differentiating one brand from another. And then there are what most AV professionals refer to as “cool” products. You know the ones — those devices that are truly noteworthy for their design and unique functionality. When you see one at a trade show, in an installation, or advertised in Pro AV, you immediately think to yourself, “Now that’s cool!” Whether the product performs as promised almost becomes secondary because the concept and design has intrigued and attracted your attention. It’s that critical point at which design and performance converge that ultimately defines a really cool product.

In many respects, the AV products industry is about innovation, says Todd McCandless, president and CEO of SAVI, a St. Louis-based systems integrator who still marvels at the industry’s ability to see over the next hill. “I think our industry is really enjoying a life outside the chrysalis right now,” he says. “We are applying all the technology that these wonderful manufacturers have developed. Our firm has always been on the converging edge of AV and IT, and with manufacturers realizing this convergence it makes it easy to exceed our clients’ expectations. My hat goes off to the manufacturers that have always put risk, R&D, and convergence somewhere in the profit and loss equation.”

McCandless adds that more than ever, product development is all about responding to market needs, not just developing a product for the sake of adapting and utilizing new technology. “I have rarely seen any product searching for a market in our industry,” he says.

In that spirit, Pro AV magazine takes a look at some of the coolest products introduced this year, as identified by a group of veteran pro AV integrators and consultants. See what they consider to be the coolest products of 2004 and why.

Biamp Systems Nexia

Like many emerging AV technologies, digital audio signal processing has broken most of its new ground in large-scale applications in which affordability and scope make it more feasible. But as DSP technology matures, a



broader range of applications are possible, leading some systems integrators to hail new products that make the democratization of that cutting-edge technology a reality.

For McCandless, Biamp Systems' new Nexia family of digital audio products is a great example of technology being tailored to new needs, making this line one of the coolest introductions of 2004 in his mind. Designed to complement Biamp's popular Audia line for larger, more complex applications, the Nexia line, which starts around \$2,000, is geared toward mid-level installations in which price and scalability are important. "The venues we use Nexia in are very reliant on speech intelligibility, and it's a crucial weapon in the communications arsenal of the companies we serve," he says. "Nexia is a perfect match."

Nexia, McCandless says, has found a home in conference/boardroom applications in which speech intelligibility is a bigger concern than sound quality, and clients want to avoid the overkill that's associated with a bigger system. "You can daisy chain the Nexia units together and expand as needed," he says. "It's a great workhorse unit."

He also credits Nexia's Nexlink software for being intuitive and easy to set up. "Houses of worship, for instance, can add on later without paying for future expansion upfront in unused matrix mix positions," he says.

As long as economic conditions keep users focused on getting more bang for their buck, while at the same time taking advantage of emerging technology, McCandless says products like Nexia will find a good reception. "The combination of function, simplicity, and capacity make Nexia a great choice for us," he says.

Chief Manufacturing CMA-347 Vibration Isolation Mount

For every innovation, there's typically a downside. Take projectors as an example. They may be getting lighter, brighter, and more compact without compromising performance, but there's a rub, says Ron Lubbers, director of sales for Data Display A/V Co., a Houston-based AV sales/rental/installation/service company. "As installed projectors get lighter, they're becoming more susceptible to vibration caused primarily by air-handling devices in buildings," he says. "In probably one of every 15 projector installations we do, this issue comes up."

Now, a new product — low-tech, but well-conceived — promises a low-cost solution to projector vibration challenges, Lubbers says. It's the CMA-347 vibration isolation mount from Chief Manufacturing. "We've installed it with one client, and it completely did away with the vibration," he says. "Now we're racking our brains for which customers have complained in the past about a shaky picture in a conference room due to the interference of air-handling systems. If they call back with a problem, we'll have the answer."

The CMA-347's unique design, which employs 15-inch arms that have weights on the end to absorb vibration, has been shown in Chief Manufacturing's tests to reduce image movement on the screen by almost 3/8 of an inch.

Priced at \$299, the vibration-dampening accessory is easily mounted, taking less than 30 minutes to install in the client's conference room, Lubbers adds. Weighing 35 pounds, the mount is designed to be fitted between a ceiling plate or a ceiling-mounted adapter bolted to concrete and the projector bracket.

With this long-overdue Chief innovation, Lubbers says projectors may have a fighting chance to perform against increasingly intrusive building systems. "A 12-ton air handler versus a 6-pound projector is a situation we run across fairly often," he says. "In my mind, of all the new products I've run across this year, this would be the number one because it really solves a common problem."

DNF's The Analyst RS422/RS232 Tester

As an engineer with New York-based Court TV, Mitchel Silberbush is responsible for making sure nothing stands in the way of getting the station's programming on the air — and keeping it there. Often, that's easier said than done. Communications interface problems frequently crop up between master control computers and essential broadcast components such as video tape recorders, video servers, still stores, and editors. Identifying the exact

nature of an RS422 interface problem and fixing it, however, can be challenging and time consuming, resulting in potential programming downtime. For Silberbush, the challenge is heightened because 16 floors of the station's building separate the components and master control computers.

But a new product from DNF Controls has come to Silberbush's aid. DNF's The Analyst RS422/RS232 Tester allows him to quickly and easily isolate, identify, and resolve RS422 interface problems. "Every television station or AV installation with remote-controlled devices has a reason to have a product like this," Silberbush says. "We have 25 pieces of equipment that are controlled by a master computer. The tester lets you know quickly whether you're getting communication in both directions."

According to Silberbush, this compact, handheld device which lists for \$1,250, enables quick and reliable testing. "Timesavings is probably the most important feature of this product," he says. "Plus, it eliminates a lot of confusion as to the source of a problem, and it's very easy to set up and use. By using it, you eliminate the need to disconnect wires. The electronics inside the box accomplishes the same thing as switching wires."

Electro-Voice Polar Choice Satellite Microphone

The emergence of reliable wireless microphone technology has led to a surge in demand for the untethered, hands-free approach to group audio communication. So far, though, not all venues have had the option of easily merging onto the wireless freeway. That's been a thorn in the side of Stewart Randall, co-founder of Communications Design Associates, a Norwood, MA-based AV design, engineering, and consulting firm, and his clients for years. "There's been a lot of interest in the AV consultant community to addressing problems related to having to open floors up for wired fixed mic systems, and making Swiss cheese of the building in the process," says the 25-year industry veteran.

Now, a new product from Telex Communications' Electro-Voice line — the Electro-Voice Polar Choice Satellite microphone — has enabled Randall to offer a more workable solution for these customers. The product, a freestanding gooseneck mic with a wireless transmitter built into its base, is allowing some clients to go wireless where it was never before feasible. "We recently finished installs for two clients — a college and a Federal Reserve Bank — where we were able to save them money on construction costs by not having to open up floor boxes and at the same time give them a lot of flexibility on how mics in the room are set up," Randall says.

With the Polar Choice Satellite system, users aren't tied to one type of pick-up pattern. Like Electro-Voice's wired Polar Choice models, the Satellite allows you to select the polar pattern (omni, cardioid, supercardioid, and hypercardioid). "It allows a lot of different choices that you'd normally have in a wired environment to be used in a wireless environment, too," he says.

Randall says the system's frequency agility is also a key feature. "We were able to install a wireless solution in some large spaces utilizing a large quantity of mics, and not have them interfere with each other," he says. "Electro-Voice has come out with a system in which you can use a variety of mic styles and pickup patterns customized based on the room configuration, and make them all work wirelessly."

Available in three lengths, the gooseneck mic is priced at \$498, while the transmitter is priced at around \$600. For clients who've deployed the system, the cost has proved to be far less than that for installing wired microphone systems, Randall says.

Luidia eBeam Interactive

As manager of multimedia classroom design at the University of North Carolina-Chapel Hill, Joe Schuch is constantly searching for technology that will permit better group communication. While his focus is mostly on the classroom environment, he's also interested in interactive communications technology that adds value to other collaborative environments like meeting or conference rooms.

A new product introduced this year that intrigued him is eBeam Interactive, the latest idea-capturing system from Luidia, San Carlos, CA. Utilizing Bluetooth wireless data transfer protocol technology, the product enables computer-generated information and data displayed on a plasma or LCD, and any annotations made to it with a special stylus, to be wirelessly transmitted to Bluetooth-enabled computers or PDAs meeting participants may be using. “eBeam has made whiteboard capture devices for years, but this year they’ve come out with this product that uses Bluetooth and a USB-capture device that can be attached to a plasma screen of any size,” Schuch says. “Using a special stylus, you can interact directly with the computer like you can with a traditional whiteboard overlay. But at about \$750, this is probably a third of the price of an overlay used with smartboards.”

In meeting situations, Schuch says the ability to mark up documents and ensure that all of the changes and annotations are captured by all participants is essential. “People who do project management or planning tend to use whiteboards a lot for that reason,” he says. “But with this product you simply load the driver onto the computer that’s feeding the display, and you can capture and annotate any computer image, using the computer as an electronic whiteboard and drawing and saving notes to a PDF file or sending everyone home with a hard copy of the saved images. Everyone gets a copy of the handwritten notes. It’s really a slick product.”

Silicon Optix Image AnyPlace

In an ideal AV world, projectors would be perfectly aligned with a projection surface, making the projected image neatly centered, squared off, and clear. But Lubbers knows that’s rarely the case — especially nowadays when demanding real-world environments test the functional boundaries of how image projection is supposed to work.

For that reason, Lubbers, a 25-year AV industry veteran, is fascinated by the Silicon Optix Image AnyPlace video scaler, which gives users greater latitude in not only positioning projectors but also in selecting the types of projection surfaces they’re paired with. Utilizing Image Geometry Correction technology, the product has helped Data Display address challenging projector placement issues for clients who’ve used projection in trade show booths. “The Silicon Optix product allows you to place a projector off-center of the screen and still have the image perfectly squared,” Lubbers says. “With one of our petrochemical company clients, the way their trade show booth was structured it didn’t take projection angles into account, so one of the three projectors in use couldn’t hit a screen straight on. With a demo unit Silicon Optix sent us we were able to have that off-axis projector hit the screen nice and square.”

Priced at \$2,495, Image AnyPlace may provide companies with dynamic and changing trade show booth needs, a cost-effective alternative to physically remaking booths to accommodate standard projector alignments, Lubbers says. “It could be a lot less expensive than redoing an existing booth or renting one.”

In addition to allowing projectors to be mounted at the top, bottom, or either side of a screen, Image AnyPlace allows images to be projected onto cylindrical, spherical, and even irregularly shaped objects. Its versatility means users can look to use image projection in environments where static graphics and plasma displays may have been the only option. “We tried every way we could to not make it work, but it worked like a champ,” Lubbers says. “I think it’s going to be a fit for installs in venues ranging from night clubs and bars to churches where there’s a concern for open space and in which ceilings can be of a weird height and screens have to be in unusual places.”

Xantech Commercial Touchscreen Display

As AV consumers continue to watch their budgets, but still pine for the latest user-friendly technology, AV systems integrators like Smith Audio Visual in Topeka, KS, keep an eye peeled for innovative technologies.

Owner Larry Heilman, a longtime AV systems integrator and 21-year owner of the company, found a product this year that is just as cool as it is valuable. The latest in Xantech Commercial’s line of SmartPad keypad control products, this product has proven a hit with a couple of customers whose more modest AV device control needs ruled out purchase of a more complex control/switching system.

Designed as standalone controllers with the ability to output IR commands onto a standard Xantech four-wire IR bus, the touchscreens give the user the ability to control devices such as projectors, VCRs, DVD players, and even screen up/down movements. Available in four different dimensions — 3.9-, 5.7-, and 6.4-inch diagonal color graphic, and 6.4-inch diagonal video — the touchpanels can be built into a podium, lectern, or wall. “It’s an ideal product for classroom or small meeting room applications where you need a little bit of control for not a lot of money,” Heilman says. “You have to make a bit of a sacrifice in terms of how much you can control, but if it’s just a few devices, it’s an ideal solution at a price of about \$750.”

The product made sense for one of Smith’s clients, Washburn University Law School in Topeka. Interfacing the product with an Extron MPS 112 switcher, the school installed the Xantech touchpanels into custom-designed podiums for use in classrooms. “They’re controlling eight devices easily with the touchpanels, without having to use a larger AMX or Crestron-type product. The touchscreens are small, but the beauty is that you don’t want something obtrusive in that kind of classroom environment,” Heilman says. Heilman sees more applications for the product down the road. “We’re planning to put one in a hospital auditorium, where there will be a huge demand for the kind of control that this product offers,” he says. “It’s a scaled-down product that meets the needs of many customers.”

Year in review

The products described above attest to the fact that the new product pipeline is alive and well in the AV industry. Manufacturers, spurred on in large part by the continuing convergence of AV and IT, have brought new and improved products to market at a fast clip this year. Still slow to rebound from the dismal business environment of the past few years, end-users continue to put great stock in seeking out the most innovative products introduced each year, otherwise known to most of us as the coolest products on the planet. It will be exciting to stay tuned for what comes next.

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