Alliance Consulting Engineers

COLUMBIA, SC

➡ Challenge

Provide highly collaborative communication and presentation systems with simplistic operations, for a service-orientated civil engineering company.

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➡ Solution

Base the high-tech systems on a backbone of Crestron DigitalMedia™ and Crestron control technology.

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We are fighting above our weight, performing not as a company with 75 people, but with at least 100. The technology makes us more efficient, helping us provide better training, avoid unnecessary travel, save time within the meeting, and better interface with our clients."

— Deepal Eliatamby

Alliance Consulting Engineers, Inc.

Working Outside the Box

Consulting engineers link high technology with personal approach

How do you provide exceptional service in a high tech age?

"We always have someone greet you personally, whether on the phone or at the door," says Deepal Eliatamby, President of Alliance Consulting Engineers, Inc. of Columbia, SC. "We are big believers in technology, but we don't want it to be the focal point of a meeting. That should always be the people."

Thus, when Eliatamby led an effort to build a new boardroom for the company's expanded headquarters last year, he asked that all the technology be hidden when not in use. "When you walk into that room, the last thing you'll see are large-screen displays, cameras, or microphones, but they are all there when you need them." Not only is the latest technology available, but it's also very easy to access and to operate.

Crestron control and Crestron DigitalMedia technology, integrated by Columbia-based Advanced Video Group, make that possible.

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Fast, consistent growth

Founded just 11 years ago, Alliance Consulting Engineers has grown rapidly, expanding to 75 people at five offices in North and South Carolina. Specializing in civil and environmental engineering, they provide infrastructure designs for industrial and residential developments, including water supply and wastewater systems, roadways, railways, and storm water management.

"I like to say we provide everything up to and over the box that is the building, but not inside the box," Eliatamby explains. "We design the infrastructure that architectural and structural engineers connect to with the internal systems of a home, factory or office building."

The new boardroom at Alliance is used for many purposes—client meetings, staff and management meetings, and training—and the technology it includes is powerful and comprehensive.

There are four displays and multiple video sources available to users via a Crestron DigitalMedia network. At one end of the room is a 5100-lumen Sony® widescreen projector and Da-Lite® screen, both mounted on lifts to retract into the ceiling when not in use. At the opposite end are an 80" Sharp® AQUOS BOARD® interactive display and two 39" LG® displays, hidden in the millwork until needed. There's a pan/tilt/zoom camera and a cloud-based Easymeeting TWS video conferencing system.

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We have been a Crestron partner for more than 20 years. We recommend Crestron technology because it is proven, tried, and true.

— **Adam Dox**

Advanced Video Group

There are also 12 sets of motorized shades programmed to work individually or as groups. One group covers outside windows that, when open, offer spectacular views of the state capital and the University of North Carolina campus. Another covers an internal glass wall, and a third two doors to the room to provide complete privacy when required. Ten zones of Crestron lighting control provide the flexibility needed for the many ways the room is used.

Although the technology is hidden until used, Eliatamby says it's rare for a meeting to take place at Alliance without the use of the projection system, interactive display or video conferencing, if not all three. "We may have a client in the room, going over

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plans laid out on the table, but most often we'll want to display the CAD drawings or a 3D model and mark them up for changes," he explains. If the company is working on a site analysis, they may study a satellite image and overlay drawings. While Eliatamby prefers face-to-face meetings whenever possible, he understands how inefficient it can be to travel every time someone meets with a client or a co-worker. "Very often we'll collaborate with an engineer from another office or working from his or her home via video," he says. Because the conferencing system ties into the interactive display, a presenter can be located anywhere, and marked up designs are immediately available to anyone with network access.

Adam Dox, Vice President of Sales for Advanced Video Group, says Eliatamby had an unusually complete vision of what he wanted this room to include. "He very clearly laid out his objectives in terms of display technology, connectivity, LED lighting, shading, and the location of these devices," Dox explains. "Yet he relied on us exclusively to meet those demands, and to make sure the technology functioned simply and seamlessly." It was Dox and his design team who recommended Crestron technology to tie the room together, and to tie into the company's four existing conference rooms.

Proven, tried and true

Dox says that the challenge for the Advanced Video Group integration team was to design a room with "a tremendous amount of technology and functionality, while still maintaining a simplistic user interface and user experience." To do so, the team leveraged

Crestron control and its ability to combine complex tasks and trigger them with the touch of a single button.

One very basic need was a way to deal with an unusually large number of inputs and outputs. There are 22 seats at the boardroom table, and eight or more additional chairs are available for larger meetings. Participants are served by four hard-wired Crestron input plates built into the table with digital and analog inputs, plus wireless connectivity through Apple TV® and Barco® ClickShare®. In many cases, Eliatamby says, everyone in the room will have a laptop or tablet and something to share on one of the displays.

The Advanced Video Group team used a Crestron DigitalMedia network with a large matrix switcher to allow anyone in the room to project to any of the display devices. "We can watch one image at a time on all four screens, or four different images, each on its own screen," Eliatamby says. The DM® network ensures that every device, even new 4K laptops, projects at the highest possible quality.

Inputs and outputs are not limited to the boardroom. "When we have training sessions in Columbia," Eliatamby says, "we might have 45 – 50 people participating. We don't have any single room to accommodate them, so instead we send the audio and video to our other conference rooms, and we may bring in people from our other offices using video conferencing."

Dox suggested that all of the routing and switching, plus operation of individual devices, such as Apple TV, the video conferencing codec and camera, plus lighting

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and shading be simplified using a Crestron 3-Series Control System®. "When we looked at the entire scale of the project, Crestron was the only company that offered a full solution for the control and integration of those systems."

"When we specify products," he adds, "we look at ease of deployment and ease of maintenance. Because we were able to use Crestron for lighting control, dimming modules, and shading, as well as AV transport, switching, and operation, it was a lot easier to design, integrate, and program; and it will be a lot easier to troubleshoot if we have any problems. We have been a Crestron partner for more than 20 years. We recommend Crestron technology because it is proven, tried, and true."

Another reason Dox wanted to use Crestron was its ability to provide the same user experience via an Apple® iPad® interface as with its own proprietary touch screens. "It's important to us," Eliatamby explains, "always to use the latest technology when we interact with our clients. Using the iPad makes it easy and inexpensive to upgrade our control device to the latest model, whenever models change." Eliatamby also appreciates the fact that the same iPad used for room control can be used for Internet access and for making presentations. He often makes his iPad 2 available to guests who may not have brought their own. The Advanced Video Group team also installed a third control device, a 10" Crestron touch screen in the equipment rack, to provide redundancy.

Eliatamby says the installation "went fantastically well. Adam and the staff at Advanced Video Group have a can-do attitude and were very attentive. They and their level of service were just fantastic."

Dox says that in this case his team served as the electrical systems project manager, making sure that the proper conduit and high voltage lines were installed to serve the various systems. "That was easy to do because we were able to rely heavily on Crestron to provide assistance, giving us the information we needed on power loads and other requirements."

"We just love the finished boardroom," Eliatamby says. "The video and audio quality are very high, and it's absolutely as easy to use as we had hoped."

"We are fighting above our weight," he adds, "performing not as a company with 75 people, but with at least 100. The technology makes us more efficient, helping us provide better training, avoid unnecessary travel, save time within the meeting, and better interface with our clients."

He expects the combination of high efficiency, high technology, and a continued emphasis on personal service to propel Alliance to even stronger growth.

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Integrator
Advanced Video Group
www. avgroup-sc.com

Photos: Kevin Meechan, Meechan Architectural Photography

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