Vol. 51 No. 5

May 23, 2005

50 Years 1855-2005

# SOUND & COMMUNICATIONS

INFOCOMM SHOW ISSUE

AV FOR SYSTEMS INTEGRATORS, CONTRACTORS AND CONSULTANTS

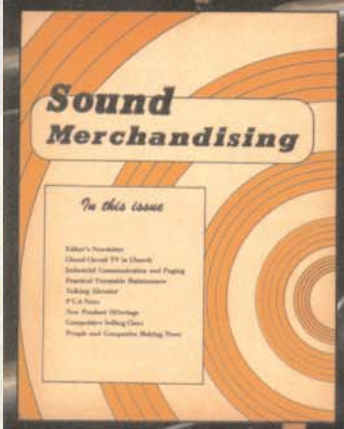
## MULTIMEDIA AUGMENTS CLASSROOM LEARNING

MESSIAH COLLEGE'S BOYER HALL SUPPORTS COMMUNITY AND SOCIETY.

## LARGE SCREEN EXPERIENCE

QUEENSBURY'S PLASMAS CATCH EVERY STUDENT'S EYE.

## INFOCOMM NEW PRODUCT SPOTLIGHT




## INSIDE:

## SPECIAL SECTION:

50 YEARS OF SOUND AND COMMUNICATIONS

# MULTIMEDIA AUGMENTS CLASSROOM LEARNING

**Messiah College's Boyer Hall supports community and society**

*The 70-seat tiered classroom*

Steve Hulbert, Steve Hulbert, Inc.

***BY JIM STOKES***

Messiah College's Boyer Hall, home to the Boyer Center, in Grantham PA epitomizes the mission of building a quality school supporting community and society. Ernie Boyer, namesake of the new building and a distinguished alumnus, affirmed his vision of nurturing intellect, character and faith within and beyond this college.

Specific to the mission, Boyer Hall is the newest and largest building on campus. The 98,000-square-foot, four-floor academic facility contains 23 multimedia classrooms, four interview suites, two observation rooms, a 70-seat classroom, and three seminar/conference rooms. Furthermore, Boyer Hall allows Messiah College to connect even more extensively with the surrounding community, particularly through the Parmer Cinema, the building's new premier surround-sound film and digital media projection facility, which is comparable to a film studio screening venue. Students learn all facets of cinema in a four-year degree program.

Boyer Hall houses the college's school of education and social sciences, school of humanities, psychology faculty and related classrooms, as well as the aforementioned Boyer Center. The audiovisual systems designed for the new building play a major role in augmenting the school's educational mission. The design to budget for the educational technology systems was $1 million.

We'll cover the building's multimedia classrooms, 70-seat classroom, Parmer Cinema, interview and observation rooms used especially by the psychology department, and seminar and conference rooms.

## Project Evolution

After a large campaign drive, Messiah College retained Baltimore, MD based architectural firm Ayers Saint Gross to plan Boyer Hall. In keeping with the goal of bringing the latest technology into the building, Dennis Lynch of Ayers Saint Gross brought in higher education technology design specialists Convergent Technologies Design Group (CTDG), Baltimore. Thus, CTDG handled all aspects of project management for technology systems design including audiovisual systems, telecommunications cabling systems, and acoustics, noise and vibration control.

"We wanted to give Boyer Hall a solid foundation for developing a future-proof solution that would grow with the needs of the school, its faculty and students," said Paul Corraine, principal designer for audiovisual & telecommunications cabling systems at CTDG. "We helped Messiah College to identify and implement new and emerging technologies that would enhance teaching and learning not only for now, [but] for years to come."

---

*Contributing Editor Jim Stokes has been involved in the AV industry for 33 years as an AV technician and recording studio designer among other areas.*

Regarding the Crestron access choice, he noted "the IP addressability and the kind of convergence of this remote-control setup, and the diagnosing and monitoring and automation effectiveness over the LAN [local area network] has really set a new standard there for the folks at Messiah."

## Few 'Smart' Classrooms

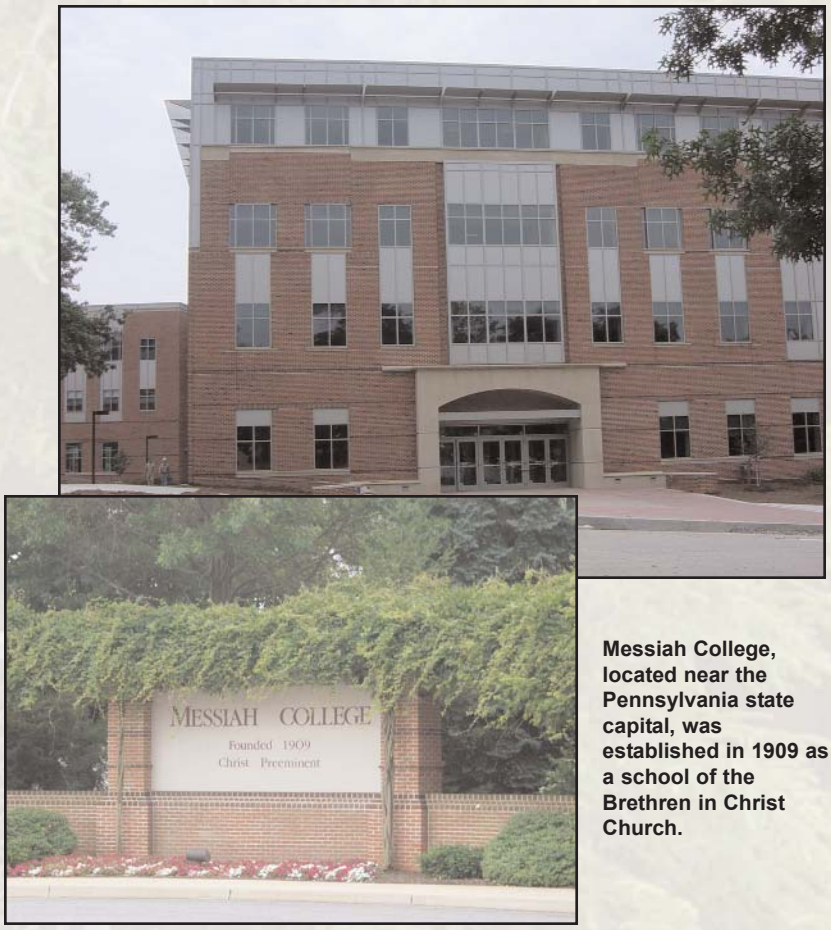
Although the school had only a few "smart" classrooms and lecture halls, the new Boyer Hall would take Messiah College from a technology-shy school that used mostly overhead projectors and videos to advanced AV technology that the instructors would grow to love. Furthermore, media services became enamored with Crestron's RoomView, which saves them time in solving classroom equipment problems.

"CTDG were the folks who steered us to Crestron," declared Bob Weaver, the college's assistant director of media services. "RoomView allows me to do service calls from my desk. Before we had this system, I probably left my office at least a dozen times a day. It has cut service calls to less than half. We're actually able to see what the instructor sees in the classroom. And we can allow them to push the buttons. So we're actually training them because we have a phone in each classroom by the instructor's desk. They can call in and we can talk them through it. If they're confused and in a big hurry, we can do it for them." He noted that his boss, IT director Rick Dent, was responsible for adding a "help" line in the classroom, by dialing #2222.

Regarding the touchpanels themselves, Weaver pointed out "there are no hard buttons. It's all software changes. When you re-do something, you don't have to have a new panel engraved."

Pro-Com Systems' Philadelphia office was the dealer/installer. Mike Morgan, who has since left the company, was project manager for most of the install. Russell Lynch, Pro-Com's quality assurance manager, reported that they subcontracted the actual writing of the Crestron code to Dave Johnsrud of DuraCom, Brooklyn NY, who did all of the programming including RoomView.

Remote access was a boon to integrator Pro-Com as well. Lynch pointed out that Messiah College "allowed us access into their firewall from our Philadelphia office, which is about a 220-mile round trip to the college. And when they had questions or training issues, they let us in and we had access to web pages and RoomView to see exactly what was going on to solve problems early. We also had a few bugs that were discovered in the system that were solved completely over the internet and by phone."




Bill Holaday

**Messiah College, located near the Pennsylvania state capital, was established in 1909 as a school of the Brethren in Christ Church.**

## Multimedia Classrooms

Each of the 23 multimedia classrooms is equipped with a stationary teacher's station, which includes a Samsung document camera, Panasonic DVD/CD and VCR players, Crestron TV tuner and a computer. A ceiling-mounted Panasonic LCD projector provides images shown on a large screen. A Biamp mixer/amplifier drives four Tannoy speakers located throughout the room. VGA, NTSC and audio signals are Extron switched/routed. Then there are the classroom accoutrements of telephone and blackboards. AV equipment is accessed via a Crestron CT-1000 touchpanel.

"We fasten the teacher's station to the floor," explained Weaver, "because when people move them around they cut off the wires. So we don't want roll-around carts. And we do not give out any hand remotes. People change settings and they leave with the remote. With the Crestron, when people shut down the system, it goes back to default. And you start at square one."

Document camera acceptance took some time with the faculty. "At first, we couldn't get anybody to use a document camera," continued Weaver. "But we made a decision in this new building that we put in document cameras. And they're going to have to live with them. Now they want them everywhere! In fact, they want them in all the other buildings that we didn't have them in."

Messiah College has a strong commitment to disability services. At the start of each semester, the campus disabilities department sends an e-mail to media services stating which classrooms disabled students will be taking classes in. "We turn on the (TecNec) closed-caption decoder boxes on the tuners for those rooms," said Weaver. "At the end of the term, we turn the decoders back off."

## Large Classroom

The 70-seat multipurpose classroom is about twice the size of a typical Boyer

Hall classroom. Designed for large groups, Weaver explained that "it's a little fancier classroom used for lectures, guest speakers and chapel services." The half-moon-shaped space has tiered seating with laptop connections for the students. In addition to the teacher's station equipment found in the multimedia classrooms, this room has an Electro-Voice podium mic, Sennheiser wireless mic and a Williams assisted listening system. There are eight Tannoy ceiling speakers for the speech-reinforcement system and a separate program sound system with Atlas Sound left and right screen speakers.

In addition, the room has a high-brightness Panasonic LCD projector to accommodate the larger attendance. For showings, the room can be darkened completely via blackout shades, which are controlled from the podium.

Weaver noted that the room's TPS-3000LA Isys six-inch screen touchpanel allows the instructor to preview. "Let's say you have the document camera showing on the room screen. Then you can cue up a tape on the VCR. All you have to do is press the touchpanel's upper right hand corner and change from the preview screen to the big room screen." Conveniently, there's a Sony eight-inch preview monitor in the room's AV closet, which is set up for an AV tech videotaping a lecture or other event.

## Interview, Observation Rooms

The four interview and two observation rooms allow psychology students to participate in practice counseling/interviewing connected with classes, to observe children at play, or to work with faculty members on research projects. Principal AV equipment in an interview room consists of a ceiling-mounted Panasonic dome CCTV camera and a ceiling-hung Audio-Technica undirectional microphone. Other equipment used, variously, for interview/observation rooms and instruction includes TV monitors and VCRs for recording/playback of sessions as well as a podium mic, combo CD/cassette recorder and monitor amplifiers. In addition, a camera controller, video switcher and matrix switcher are in the signal chain.

Steve Hulbert, Steve Hulbert, Inc.

## Conference, Seminar Rooms

The conference and seminar rooms are similarly equipped with LCD projection, screen, VCR, laptop connection and a closed caption decoder. In addition, the cozy 16-seat conference room has a Polycom VSX-7000 videoconferencing system. Weaver said that the college's phone technicians installed the Polycom. "The conference room is for distance learning or for use by a specific department."

It's rather obvious that Weaver is happy with the Boyer Hall project. It's adaptable for the future in that the infrastructure will enable Messiah College to easily accommodate additions and modifications. "We went through training [with Pro-Com] the first few days we had the building open," he related. "I thought it was going to be a nightmare and it turned out to be a dream! We went from pushing buttons [on equipment] to using remotes."

## Convergent Technologies Design Group

Convergent Technologies Design Group (CTDG), headquartered in Baltimore, MD, provides technology design consulting services to support technology initiatives within educational institutions and districts across the country. Design services include audiovisual systems, telecommunications cabling systems and acoustics, noise and vibration control. The firm also has offices in Phoenix AZ and Buffalo NY.

With more than 80% of their work coming from higher education clients, consultants at CTDG draw from years of "hands on" project management/engineering experience when assisting faculty, students, technical staff and administrators in planning technology design options and performance specifications. The firm continually maintains the goal to deliver quality technology design solutions that complement the institutional objectives and the pedagogical mission.