



North Carolina Church Gets Much-Needed A/V Upgrade

As part of a major renovation to its Sanctuary and Fellowship Hall, the 60-year-old Hayes-Barton United Methodist Church in Raleigh, North Carolina received a much-needed A/V upgrade. This installation included a number of Extron products that now provide the bulk of the signal distribution, switching, and video scaling for the church. Although it's now considered a very successful install by both the church and the integrator, the large scope of this project, compounded with architectural constraints, construction delays, and tight deadlines, made for a challenging installation. Much of the A/V integration had to be concurrent with the construction because neither could wait for the other to finish if they wanted the project to be completed before the church's busiest season - Christmas.



The church's Sanctuary has well-hidden A/V throughout. Can you spot the speakers mounted on the columns at the front?

The audiovisual contractor for this project, Cary, North Carolina-based AVCON, is accustomed to challenging installs in both the corporate and worship arenas. "We were prepared for working around construction and weren't surprised to see that they gutted the entire space," says AVCON President Frank Yarborough. "We had to concentrate on one area at a time for an install that included extensive A/V systems in the Sanctuary, Fellowship Hall, and the parlor/cry room with overflow capabilities, including complete connectivity between all three."

In essence, the church wasn't simply doing an A/V upgrade, but an entire new installation that would broaden the church's conference, educational, and worship-related capabilities. According to Yarborough, "This was a very exciting project that required careful planning, communication, and compromise as key elements to keep the client satisfied and meet the church's needs."

Careful planning included choosing the right products for the install and Yarborough chose only the companies he felt comfortable with, those he knew

he could trust. Extron was at the top of the list for all signal routing and switching needs. "It's all about relationships and trust," Yarborough says. "Extron and AVCON have worked together for years, and I know Extron always delivers the goods and backs them up with terrific communication and support."

The Control Room

At the heart of the church's A/V systems is a control room located above the Fellowship Hall in a loft area. This room contains the control system, and a controller/switcher for the three Sanctuary

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The control room hosts all of the control and switching components plus a video editing suite.

cameras, as well as video editing and sound processing equipment. The control room also houses an array of Extron technologies for switching, routing and distribution, including two Extron ISM 824 MultiSwitchers – one for the Sanctuary system and one for the Fellowship Hall system - and an Extron VSC 700 scan converter used to down-convert high-resolution computer video for the Church's computer-based video editing system. "The VSC 700 is ideal for this application," Yarborough says. "Not only has this scan converter proved to be bulletproof in many other AVCON installs, but its compact size made this choice easy."

ISM 824 - A Perfect Fit

Yarborough talks about why they chose the ISM 824. "Choosing the ISM 824 was easy," Yarborough says. "It had the flexibility that the system demanded and the benefit of multiple scaled outputs."

Rack space was also a concern. "We had to fit a lot of gear into a small control room, and the ISM 824 saved substantial rack real estate," Yarborough continues.

"The ISM 824 is a one-box solution for what would ordinarily take several boxes, and the space-saving benefit just makes it that much more attractive."

The modularity of the ISM 824 also makes it easy to upgrade and expand as system needs change and grow. "The ISM 824's flexibility opens the door for greater capabilities in the future, as Hayes-Barton plans to expand its outreach ministry through streaming video services on the Web," Yarborough says. "With the ISM 824 we will be able to accommodate

these upgrade plans without having to install all new equipment. This cost-saving feature is a major benefit for the church."

For each ISM 824, AVCON chose a Dual Output Wideband Board and a Universal Scaler Board. "The scaler boards are used to optimize the output resolution for the displays and other technologies, assuring all the video signals are brought up to a resolution that looks best on each display," Yarborough says. "The dual output wideband boards allow us to send standard optimal-resolution output feeds where we don't need seamless switching, such as to the display in the parlor/cry room."

Stealth A/V

The church made it clear that maintaining the aesthetics and elegance of the main Sanctuary was a primary concern. The church wanted superior video and crystal clear sound, but didn't want worshippers to be able to see the technology that made it happen. Yarborough realized that this meant that optimal cable runs were being forced off this install's wish list.

With this in mind, he looked to Extron MTP Series twisted pair transmitter/receiver pairs and distribution amplifiers to ensure the signals could be transmitted long distances with high-quality results.



ISM 824 Modular Integration Scaling MultiSwitcher

"We chose Extron CAT 5 products and DAs to ensure signal integrity over these long runs," Yarborough says. "We knew Extron gear could ensure the various signal types reached their destination so we felt good about those choices, but our problem wasn't just sending signals from point A to point B, it was routing them so that the cables weren't noticeable. This meant drilling through concrete as there were vaulted ceilings and no plenum space to hide anything."

Yarborough continues, "We added hundreds of feet to many signal runs as we went through walls, up columns and around beams, making every attempt to keep all cabling hidden. But, in the end, the Extron DAs and CAT 5 transmitters and receivers did exactly what they were supposed to do, even with these unconventionally long runs."

A True Success Story

Yarborough takes a serious view of the partnerships AVCON makes. "We have

worked very hard for AVCON to become the largest locally owned and operated audiovisual systems integration firm in central North Carolina," he says.

"Every decision we make reflects on our business and our relationship with our customers. Choosing Extron has always benefitted these relationships, and I'm very pleased with this partnership."

"This turned out to be a real success story," Yarborough says. He and a few members of his team visited the church a couple of months after the project was completed. "It was a thrill to see all of the A/V operating smoothly after all the tuning, tweaking, and testing. Feedback from the church's A/V technicians confirmed we achieved ease-of-use and unattended functionality, while hiding all the A/V very well," Yarborough says. "It's an elegant facility and an exciting project. Most importantly, the church is thrilled with their new capabilities." 🏡

Extron Equipment List – Hayes-Barton United Methodist Church	
Model	Quantity
ISM 824 MultiSwitcher	2
Dual Output Wideband Board	2
Universal Scaler Board	4
DA 3AV RCA	2
DA2 RGBHV	2
Cable Cubby 300S (Black)	2
MDA 3V	2
MTP R AV	2
MTP RL 15HD A SEQ	6
MTP T 15HD A	4
MTP T 15HD A WM	2
MTP T AV	2
MTP U R RSA SEQ	2
SYM BNC/F/0.5 6	2
VSC 700	2
VTR001	2
VTT001	2



In the parlor/cry room an NEC 40" LCD monitor in a decorative frame helps accommodate overflow by providing a video feed from the Sanctuary.