

'Let The Children Come To Me'

Only the best for Ash Creek Baptist Church's youth center.

By Dawn Allcot

There's a philosophy, at least among leaders of smart, growing churches, that focusing on children is the best path to growth. No amount of technology, outreach or monetary investments will change that. Children are the future. (Of course, this is true in any field, but few industries have the opportunity that churches do to begin reaching out to youngsters before they can even speak.)

Jesus said, "Let the Children Come to Me" (Mark 10:13-16 ESV), and today's churches are doing just that, and calling on their local AV integrators for help. Although every church may take a different approach that reflects its individual vision and "DNA," putting money into technology and outreach can help attract the next generation of churchgoers to ensure a church's longevity *and* fulfill its savior's request.

Although Ash Creek Baptist Church (ACBC, www.ashcreekbaptistchurch.org) in Azle TX has offered traditional worship for 135 years, it didn't stop the leaders from building a contemporary worship space and youth center across the street from the traditional 500-seat sanctuary. They weren't afraid to invest enough to do it right, either.

"When we talked about doing



The contemporary worship center and youth "Meeting Place" resides across the street from Ash Creek Baptist Church's main facility.

sound, video, lighting and IT systems totaling \$250,000," said Jeff McLeod, Managing Director for Church Audio Video (www.churchaudiovideo.com) of Grand Prairie TX, the AV design/build firm that completed the project, "I told the decision-makers at the church, 'You realize you're spending \$1000 per seat, right?'"

ACBC AV Media Tech Marcus Hapenstall was able to get budget approval because the church leaders understood just how important the technology is in creating a useful, contemporary worship space that would double as a youth center.

According to McLeod, "The church has, essentially, two congregations: contemporary and traditional. When they built this facility across the street, they were able to create a contemporary worship venue that would attract growing numbers of worshipers, which could also double as a youth center."

The AVL systems in the space are a far cry from the analog mixing board and speakers-on-sticks the contemporary congregation endured when they

worshiped in the fellowship hall.

Although \$250,000 may sound like a decent budget for a small building, McLeod and his Church Audio Video team took care to spend the dollars wisely. A design/build firm that is part of ProAudio.com, Church Audio Video, along with a designer and an installer, often fills the role of AV consultant for small-to-mid-size houses of worship that cannot afford to hire an AV consultant. McLeod explained, "As a design/build firm, we provide 80% to 85% of the services a typical church AV consultant provides. And, typically, the church doesn't need the other 15% to 20%."

Church Audio Video traditionally takes a customer from project planning to design, then installation and fine tuning; however, in this case the firm made a small exception. The lighting system designs were drawn up by ETC and installed by Church Audio Video, "with a few minor modifications to account for the loudspeaker placement," McLeod said. For the state-of-the-art audio/video systems, Church Audio Video completed the

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This 24'x9' screen offers the "wow" factor today's churches seek.

entire design and installation, with some product recommendations from the client. "Marcus Hapenstall, the volunteer AV media minister we worked with, is actually an AV media professional for Lockheed Martin. He is an engineer in every sense of the word and had some very specific

product requirements in some cases. We were more than happy to oblige."

In other cases, Church Audio Video made some suggestions that, although they may not have been typical solutions many AV professionals would recommend, saved the church money and resulted in high quality sound and

video systems that filled all the church's needs.

The term "multiuse" or "multipurpose" facility often gets a bad rap for being able to perform a variety of functions, but none of them well. That's not at all the case with this 250-seat, fan-shaped auditorium dubbed "The Meeting Place."

Like the technology systems within, it's far from your run-of-the-mill multipurpose space. It excels as a venue for contemporary worship, youth services and ministry conferences that might not require all the chairs provided in the traditional, larger sanctuary across the street.

The client required versatile AV systems that would provide crystal clear spoken word, amplified praise band music with bass that rivals a super club, and dynamic video and lighting systems to reinforce the message. A package that includes a Yamaha M7CL-48, a collection of TOA Electronics' HX-5 variable-array speakers, Bag End subs and QSC amplifiers de-

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livered on the audio side, and a 24'x9' Da-Lite custom screen and Digital Projection E-Vision Series edge-blended projectors created the "wow" factor so many churches seek today.

An ETC Ion console and a collection of ETC fixtures provides the high-end lighting experience the church needs for contemporary worship and youth services. Church Audio Video also specified and installed distributed AV and networking throughout the building, with networking capabilities connecting The Meeting Place to the main building across the street.

Let's dig a bit deeper in to the systems that make it all happen.

McLeod and his team, which included Lead Designer and Project Manager Mark Helms, specified the HX-5 variable dispersion loudspeaker array from TOA Electronics, a mono system he calls "the Swiss Army knife of speakers for small churches." The array is not your typical line array made of four separate modules. Instead, the 8 ohm box includes four



The industrial-style ceiling offers plenty of room for lighting and projection systems.

segments, with a five-inch mid-range and low driver, and three 0.75-inch dome tweeters per cell. "Because it's not horn-loaded," McLeod said, "it doesn't create all that reflective beaming or ping high frequencies off the walls quite as much."

This was significant because only minimal soundproofing was provided for the space due to budget constraints. The dispersion of the speakers can vary from 15° to 60° (in increments of 15) on one axis, and is fixed at 100° on the other.

One of the challenges for the design team was placing and tuning the speakers for the best dispersion while minimizing reverberation for clear spoken word. Church Audio Video installed five HX-5s, two on each side and one in the center, with the center boxes offering tighter dispersion to reach the sound booth at the front-of-house position. Integrator-designed custom subs, SB121is, provide low end down to 80Hz, while Bag End subs located in boxes encased in the

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front of the stage address subsonic frequencies. "It's a very rich sound for contemporary worship," McLeod said.

The speakers are powered by QSC amplifiers, and digital processing is accomplished through a BSS BLU-100.

The choice of front-of-house mixer, the Yamaha M7CL-48, also took some careful consideration. The client requested the M7CL due to its



The variable array provides even sound coverage throughout the auditorium.

reputation and capabilities. Especially for a multiuse venue with a small volunteer tech staff, the ability to save and recall settings is invaluable. But the church originally requested the ES version, using the Yamaha Digital Snake. Acting in the role of AV consultant, McLeod recommended against a full digital system. "Typically, the consensus is that digital is better than analog," McLeod said. "And in many cases, that's true. But when we measured the distance between the amp rack room where the digital input modules would be housed, it was shorter to run analog cable from the stage to the mix position than to run analog cables to the amp room and, from there, run a digital snake to the FOH mix position. The church saved a lot of money and had shorter analog cable runs without compromising audio quality."

The church requested iPad control of the M7CL, which Church Audio Video provided through the Stage-Mix iPad app. "The room is small enough that they don't need it, but they wanted to make sure they had

all the technology they could afford," McLeod said.

Sony wireless mics, Radial DIs and an Aviom personal monitor mixing system round out the audio systems.

A contemporary worship venue, the church didn't mind speakers visible on the ceiling, or even the exposed catwalks housing the lighting fixtures, which give the auditorium an almost-



Lighting gobos project onto the walls for atmosphere.

industrial vibe. They still paid great attention to detail and aesthetics. The church commissioned a custom cabinet-maker to create a wooden media booth and custom wood enclosures for the Middle Atlantic equipment racks at the FOH mix position. "There wasn't even an eighth-of-an-inch play or clearance between the edge of the furniture and the metal rack. We put a lot of time and effort into confirming the exact dimensions because, once it was done, it would have been costly to go back," McLeod told *Sound & Communications*.

Inlets and outlets in the cabinetry, along with fans in the racks, provide adequate cooling. Amplifiers are housed in a separate Middle Atlantic rack (minus the custom wood cabinetry) in a climate-controlled equipment closet.

The giant 24'x9' Da-lite screen in a custom frame, which easily spans the length of the stage, is used to display song lyrics, videos and other visuals for ambiance during services. Dual E-Vision edge-blended projectors from Digital Projection, paired with an Analog Way DiVentix II video proces-

sor and edge blender, create an image large enough for the screens. An iMac running ProPresenter worship software supplies content.

The building also houses a large lobby and several classrooms where teens can gather before youth services.

The client supplied a collection of LG monitors for the lobby and classrooms, along with Mac mini computers.

Church Audio Video hung the screens and put the computers on the network by means of a WatchGuard router and Cisco small business wireless access points.

The screens all receive distributed AV through a Contemporary Research Q-Mod modulation system, so people can watch services from the lobby or any of the classrooms. Additionally, the Mac minis are configured for

gaming. Visitors can select a game from the church's media library and play it on any screen in the building. "You don't see this type of interactivity in every church integration project," McLeod said.

Nor do you see most AVL firms providing the IT systems integration, but this scenario is becoming more common as the lines between IT and AV blur. It benefits a church to have one company that fulfills all of its IT and AVL needs, and it definitely benefits integrators to provide these technology services as up-sells for clients that rely on building relationships with the companies they hire. When they find someone they can trust, they prefer to call on that firm as much as they can for products, service and support.

Church Audio Video Project Manager Mark Helms said, "In this case, we were originally just asked about structured wiring for the new building but, as the needs and systems progressed, it became clear that a campus-wide master plan was the end goal anyway. It made more sense to address it now rather than having to redo things later." ■