

The video control and edit bay employs a variety of monitors including Panasonic HD LCD displays and Apple Cinema displays. Panasonic PTZ cameras are switched via a Panasonic multiformat switcher.

Inset: Temple of Greater Beth-El audio director Isaac Newman at the VENUE Profile console.



The moment you catch sight of the Temple of Greater Beth-EL (TGB), Solomon Award winner for “Best Design, Implementation and Operation: Video Equipment/System” at WFX (Worship Facilities Conference & Expo) 2008 in Houston, you know to expect the unexpected.

The massive Lincoln Memorial-inspired structure is an anomaly amongst the modest, single-story homes in this older, working class west Phoenix neighborhood, but the building is set so far back from the street that you could almost drive right by it. It's a modesty that belies the global reach of the organization behind it, and the powerful technology inside.

Founded in 1981 by Bishop Gregory Newman, TGB has quietly evolved from a small neighborhood church to become a major force whose reach extends well beyond its geography, all the while retaining a humble quality that seemingly contradicts its size and stature. Since going online in May 2008, the church's website receives an average of half a million hits per month, with visitors tuning in from across



# The Global Neighborhood Church

BY DANIEL KELLER

Phoenix's Temple of Greater Beth-EL Reaches Beyond the Block



Sanyo projectors and acoustically transparent Draper Cineperm screens provide images for video in the sanctuary.

WFX  
SOLOMON  
AWARDS  
2008  
WINNER

*The Temple of Greater Beth-EL Church received the Solomon Award for “Best Design, Implementation and Operation: Video Equipment/System” at WFX Fall 08 in Houston. The award recognizes church teams and individuals who have been instrumental in achieving excellence with their facilities design, management, marketing, usage and audio visual production.*

“Every Sunday I go in and capture the service, edit the [audio] tracks in Pro Tools and the video on the Avid system. I’ve gotten it down to a science...” —Gregory Newman, bishop, Temple of Greater Beth-EL, Phoenix

the globe to be a part of the church’s wide range of sermons and services, delivered in high-definition audio and video.

**GETTING THE MESSAGE OUT** is accomplished via a state-of-the-art audio and video system rivaling any of the world’s well-known mega churches, and even many broadcast networks. The system is the brainchild of John Gibson of EAR Professional Audio/Video of Phoenix and Newman’s son Isaac, TGB’s audio director.

Isaac mixes the live service on a Digidesign VENUE D-Show Profile live sound system, which is based around a D-Show Profile control surface with a FOH Rack and Stage Rack processing and I/O system.

**A PRO TOOLS | HD SYSTEM** is integrated with the VENUE system for capturing the high-resolution multitrack audio. After the service, he moves to an adjacent workstation, where he edits and polishes the audio files using the same Pro Tools | HD system, controlled by

an ICON D-Command recording console. Audio monitoring is accomplished via sets of JBL LSR6325p1 monitors at all three workstations (FOH, video and audio recording).

**VIDEO IS EQUALLY HIGH QUALITY**, with three remote-controlled Panasonic AKHC1500G PTZ high definition cameras capturing the services to the Avid Unity MediaNetwork shared storage system. Isaac edits the files in an Avid Media Composer system. For video control and editing Newman



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“I always tell people, ‘I’m working for the boss of the planet, and it’s our job to represent Him in the best possible light.’ I couldn’t justify posting tinny sounding audio files or low-budget video.”

—Gregory Newman, bishop, Temple of Greater Beth-EL, Phoenix



Equipment racks with audio amplification and processing and video processing are housed in a soundproofed, climate-controlled environment.

uses an assortment of displays including a Panasonic 26-inch HD/SD LCD monitor, four Panasonic HD/SD 17-inch monitors and two 23-inch Apple Cinema displays. The files are converted to Avid’s DNxHD, DNx145, which allows the HD

files to be at SD bandwidth sizes so editors can work with HD-quality throughout the production, without having to worry about increasing storage requirements. The entire system is networked via high-speed Ethernet, enabling control of

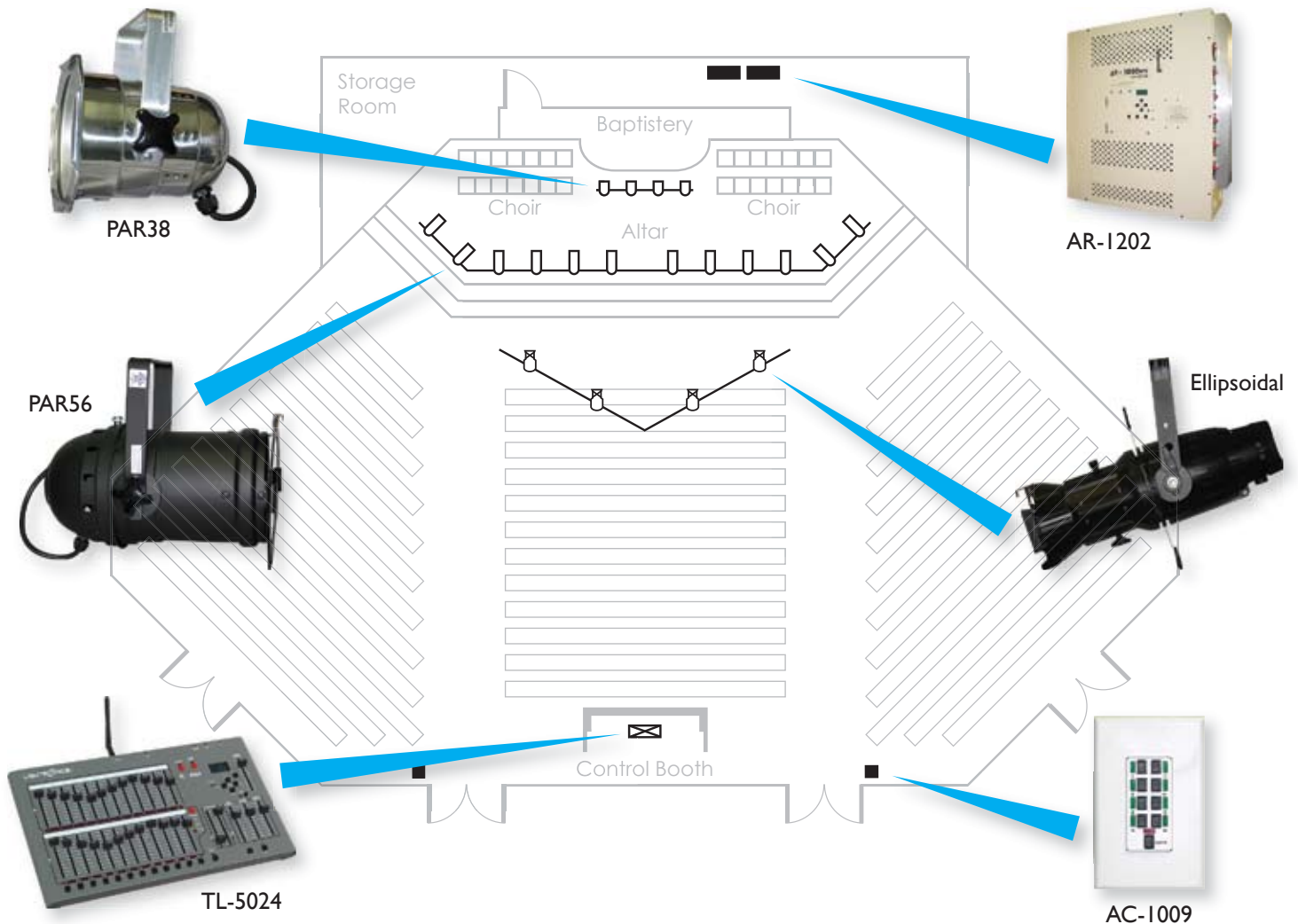
any aspect from anywhere on the bridge, or even in the auditorium. Once finished, the audio and video is compiled to DVD for sale the following weekend, as well as uploaded, generally in shorter form, to the website for subscribers.

“Every Sunday I go in and capture the service, edit the [audio] tracks in Pro Tools and the video on the Avid system,” Isaac says. “I’ve gotten it down to a science, and the workflows are so intuitive, the whole thing takes me maybe two to three hours. Then I take it and make DVDs to sell at the following week’s service, and put together smaller files for the website. We have a subscription service where people can tune in to a live webstream. We’ve got people from all over the place, even people logging in from

#### QUICKLINKS

APPLE CINEMA DISPLAYS, (800) 692-7753, WWW.APPLE.COM | AVID UNITY MEDIATELWORK SHARED STORAGE SYSTEM, (800) 949-2843 (OPTION #1), WWW.AVID.COM | AVIOM IN-EAR SYSTEMS, (610) 738 9005, WWW.AVIOM.COM | CROWN I-TECH AMPLIFICATION, (574) 294-8000, WWW.CROWNAUDIO.COM | DIGIDESIGN VENUE D-SHOW PROFILE LIVE MIXING CONSOLE, (800) 333-2137, WWW.DIGIDESIGN.COM | DRAPER CINEPERM SCREENS, (800) 238 7999, WWW.DRAPERINC.COM | EAR PROFESSIONAL AUDIO/VIDEO SALES AND SERVICE, (800) 473-6914, WWW.EAR.NET | JBL VERTEC LOUDSPEAKER ARRAY, (818) 894-8850, WWW.JBLPRO.COM | PANASONIC CAMERAS AND MONITORS, (800) 524-1448, WWW.PANASONIC.COM/BROADCAST | SANYO PROJECTORS, (888) 337-1215, WWW.SANYOPROJECTORS.COM | SHURE MICRO-PHONES, (800) 257-4873, WWW.SHURE.COM | TEMPLE OF GREATER BETH-EL, PHOENIX, (623) 845-0310, WWW.TGBLIVE.ORG

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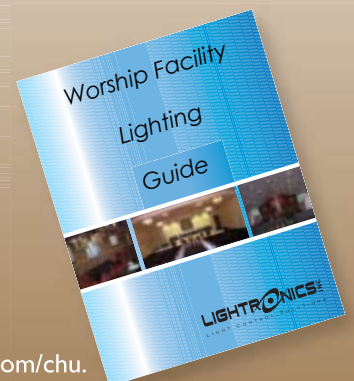
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“Some churches glorify the technology, so much so that it almost becomes the thing that’s worshipped. “

*Gregory Newman, bishop, Temple of Greater Beth-EL, Phoenix*

where they’re stationed in Iraq. We’ve also got files they can download, Bible studies and other stuff.”

### LEARNING BY IMMERSION

For Isaac, the all-Avid network is the product of years of preparation and research to determine the most complete and integrated audio/video workflow. “I started out as an audio guy, doing live sound,” he explains. “As our live situation in the church began to evolve, I pretty much threw myself headlong into learning everything I could about digital technology.” In 2001 his search for knowledgeable sources led him to EAR and John Gibson. “EAR was the only place in town that carries the caliber of gear I was looking at. I probably drove John crazy with all my questions.”

“Actually, Isaac’s a really quick study,” Gibson argues. “He does his research, and when he calls he’s already pretty clear on what he needs to know. He tends to ask intelligent questions.”

By 2006 Isaac’s quest for knowledge brought him to Phoenix’s Conservatory for Recording Arts and Sciences. “I went there specifically to learn about Pro Tools,” he

says. "I'd been looking at all these digital consoles, and John was telling me about all the stuff we could do with the VENUE system. I knew that was the way we wanted to go. So there I was, the only guy in my class who was interested in using Pro Tools for live stuff. I didn't care about getting an internship in a studio, I had my own thing going on here at the church. I wanted to know about time code, I wanted to learn about video, I was like a kid in a candy store."

"Isaac would call me after school and ask me about stuff he'd been working on that day," says Gibson. "We were having meetings and sending emails back and forth, talking about plans for the system. The more he learned, the more he wanted to know."

Isaac points to his early interest in digital technology as an advantage in gaining an understanding of the big picture. "A lot of audio guys used to approach video as almost an afterthought, and vice versa," he says. "Nowadays there's so much more of a common thread, with both sides of the equation based so much on non-linear editing. For someone like me, I think that's made it easier to grasp, with both audio and video sharing so much in terms of workflow. And with a system like ours, where all the Avid-based technologies are so well integrated, it really makes it easier to maintain a continuity between audio and video, rather than having to treat them as separate worlds. At the end of the day, that results in better sound, better visuals, and a better product overall."

The sanctuary itself is outfitted with a JBL Vertec array comprising three VRX932 boxes and two VRX918 subs per side, powered by Crown I-Tech amplification. On-stage monitoring is courtesy of JBL VRX915M wedges, complemented by Av-

iom in-ear systems. Mics have been mainly Shure UHF systems, though as Isaac explains, "I'm waiting for the dust to settle in February before we upgrade."

A pair of Draper Cineperm acoustically transparent screens flank the stage, fed by Sanyo PLV-WFW10 projectors. Video switching is handled via a Panasonic AV-HS300 multiformat HD/SD live switcher.

### GROWING SMARTER

Isaac's father, Bishop Newman, is a soft-spoken man with a glint in his eye that makes you want to lean in close and pay attention. Many years spent as a computer executive have made him unabashedly comfortable around technology, embracing its usefulness but not obsessed by it. For him, the investment in new media technology is based on a pragmatic plan.

"As our congregation began to grow, we noticed that many of our members were not coming from the immediate surrounding area," he recounts. "Most of our growth has been through word of mouth. We've got members who drive 30 or 40 miles every week, and we kept hearing from others who wanted to come but were either too far away or unable to get transportation. It just made sense for us to invest in ways to expand our message, to not just bring people to the church but bring the church to the people. We're in the business of communication, after all, and we want to communicate as widely and efficiently as possible."

As the bishop explains, they looked into television but found that the

» Continued on page 96.



DVA T4 - Active 3-Way Line Array Module



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