

Eastern Heights Church Solves Audio Nightmare

While waiting for completion of their new 1500-seat auditorium, Eastern Heights Church in Cleburne, Texas, decided to improve the sound system in their existing small, fan-shaped sanctuary. Jeff McLeod of Crouse-Kimzey Company in Grand Prairie, Texas was engaged to design the new system that would remedy several audio-related problems including loud stage volume due to improper main speaker placement, and feedback from the pastor's wireless headset. The original carpet-covered 15-inch two-way main speakers, located behind the platform, competed with the wedge monitors, causing major problems for the worship team and congregation.

McLeod's solution to redesign the system involved replacing the four 15-inch two-way main speakers with a centrally located speaker cluster directly above the platform. His choice of speaker was the TOA HX-5 Variable Dispersion Speaker. The HX-5 offers four adjustable dispersion angles (60, 45, 30 and 15 degrees) that can be easily changed in seconds. Powered by QSC's RMX Series amplifiers, with processing from a dbx Driverack PA, the new system includes three TOA HX-5W speakers and three TOA FB-120W subwoofers.

Using the Crouse-Kimzey design, the new system, which includes the church's existing Mackie SR32 mixer, was installed with the help of two of the church's members: Charles Bogusch and Keith Sepulveda. The new



centrally located cluster is designed to provide 100-degree vertical x 150-degree horizontal dispersion pattern.

According to McLeod, the new sound system delivers clear, even coverage throughout the room. And to his surprise, almost no equalization was required to accurately produce all the instruments and vocals. They no longer fight feedback, and the sound engineer can actually have control over the sound sources.

McLeod adds that due to the quality of this new system the church is already considering TOA line array cabinets for their new larger auditorium.

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The TOA HX-5 Variable Dispersion Speaker offers a radically different approach to speaker design with four adjustable dispersion angles — 60, 45, 30 and 15 degrees — that you can change in seconds! Best of all, you get pattern control below 1kHz in a compact and lightweight enclosure that's perfect for a multitude of applications. Think of it as the most versatile "building block speaker in your toolkit.

Features include high power handling (600 Watts continuous), lightweight polypropylene construction, available in black and white, plus Speakon and screw terminal connectors. The HX-5 can vertically or horizontally mounted with the built-in bracket or with optional wall, ceiling and stand-mount hardware. Other options include weather-resistant versions, FB-120 subwoofer and 70 volt matching transformer. The new HX-5 speakers are backed with a five year product warranty.