

EAW CASE STUDIES

Abundant Living Faith Center

Anna Delivers Seamless LCR Coverage

ADAPTive
systems





Adapting for varied services and events

With a congregation of 30,000, [Abundant Living Faith Center](#) (ALFC) built a new campus on the west side of town and needed to be sure 1,800 more celebrants could hear every word spoken and every note sung.

Challenge

As institutions of the people, churches often have humble origins. In 1977, the ALFC held its first service in a railroad union hall. By 2017, the non-denominational, multicultural church occupied a large, modern campus on the east side of El Paso. But the church was still growing and decided a new campus on the other side of town would save many congregants from a crosstown drive and offer new members a choice of worship locations.

Central to the new campus is the 1,800-seat, fan-shaped sanctuary. Churches often use LCR (left/center/right) systems to deliver praise music and, of course, the pastor's words, but fan-shaped rooms pose a challenge to obtaining smooth coverage to all seats.

Integrator [Michael Garrison Associates](#) knew that ALFC had previously used distributed, horn-loaded systems, and wanted instead to install a system of modern design in order to attain even coverage while maintaining a low profile that would not interfere with sightlines to video screens, provide enough power to reach people in the furthest seats, and have the flexibility to adapt to the needs of different kinds of services and events.

As a final incentive, the church was concerned that a change in ownership at the manufacturer of their previous system might mean a more distant relationship, while the church prefers staying close to their technology vendors. EAW's strong customer orientation was therefore quite attractive to them.

Solution

MGA understood how EAW's ADAPTive technology worked and that it would yield performance superior to other systems in delivering even LCR coverage in a fan-shaped venue.

PROJECT SUMMARY

ALFC's new 1,800 seat sanctuary features a fan-shaped room and required even coverage for sermons and music to the entire congregation, so a LCR system of ADAPTive Anna and Otto was chosen. The church offers different kinds of services and events and the system needed to be adaptable while providing uniform SPLs.

Because the system needed to be in place before construction was complete, signal routing was pre-configured, and thus, system tuning would be challenging in an incomplete room. But this is never a hurdle for Adaptive technology. Minimal final adjustments were made, and special attention was given to Otto being summed consistently throughout the room, providing even LF coverage everywhere.

ABUNDANT LIVING FAITH CENTER EQUIPMENT LIST

- 26x [Anna](#) 3-way Full-Range Array Module
- 4x [Otto](#) Subwoofers

"Normally, even with a standard wide-coverage array, SPL levels from each channel do not typically match everywhere in the room, so precedence (the Haas effect) is still usually localized to the closer, louder channel, which hurts the spatial image," explains Michael Garrison of MGA. "The EAW ADAPTive system provides much more even SPL from each channel to every seat, so the time arrival difference from each channel is less of an issue, and good imaging is maintained at all seats."

Garrison hung LCR arrays comprised of a total of 26 Anna 3-way full-range array modules, plus four Otto subwoofers to add low-frequency punch.

"The system had to be installed before construction was complete," Garrison recalls, "so primary signal routing was configured to allow the system to be commissioned. This presented challenges like tuning the system in a room that had missing carpet, plastic covered chairs, no video screens, and so forth. We left it in a state that sounded as good as possible with the given environment, but system tuning may get tweaked once the building has had people in it and ALFC has used it a little."

"I opted for a time alignment where (subwoofer) summation was about the same everywhere. This assists in feeling the same low-end coverage in every seat."

Michael Garrison

Garrison put special attention on making sure low-frequency coverage from the Otto subwoofers was smooth, as he details: "When time aligning the subs with the left/right arrays, rather than finding a middle spot, achieving maximum summation there, and having none elsewhere, I took careful measurements throughout and opted for a compromised time alignment where summation was about the same everywhere. This assists in feeling the same low-end coverage in every seat."

With the whole system in place, ALFC proudly gave the new West Campus its grand opening on May 21, 2017.



Michael Garrison



ABOUT MICHAEL GARRISON ASSOCIATES

Michael Garrison launched His Sound in Portland, Oregon in March 1976, specifically to address the acoustical and sound reinforcement needs of churches. This was a novel and risky concept at the time, as church leadership then was only beginning to realize their own need for well-conceived audio systems that delivered both good speech intelligibility and high-quality music reproduction.

Starting out mostly with upgrades to inadequate systems churches had purchased at music stores, His Sound graduated after several years to designing and installing system for new construction.

After 10 years in the Pacific Northwest, His Sound moved to Fresno, California, and became Michael Garrison Associates. Since then, MGA has partnered with faith-based organizations across America, providing assembly space consultation, design, project management and technology installation services to those with a message, working with projects seating from 150 to more than 11,000.

Today, MGA has offices in Fresno and Springfield, Missouri, and has expanded its reach into Central and South America.

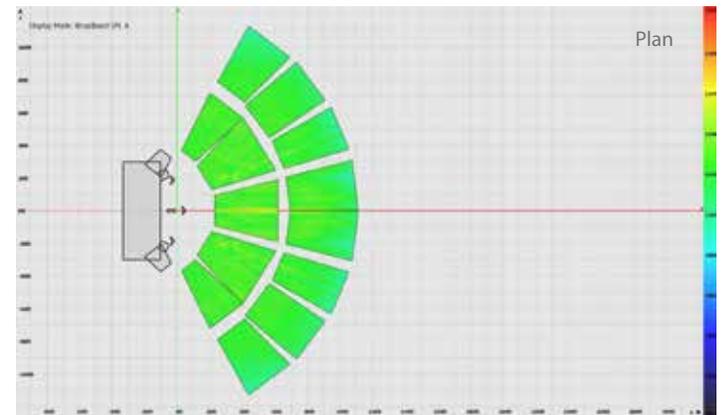
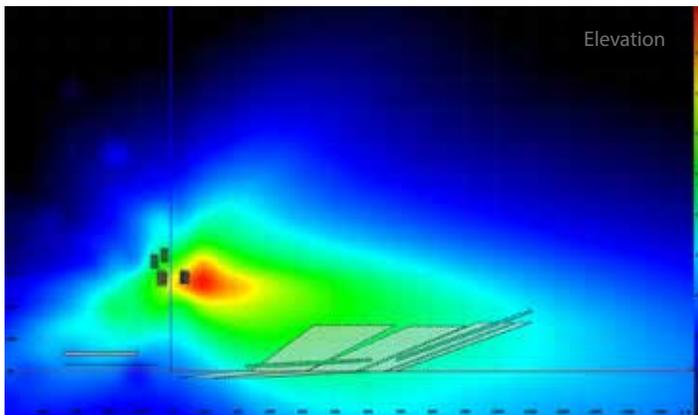
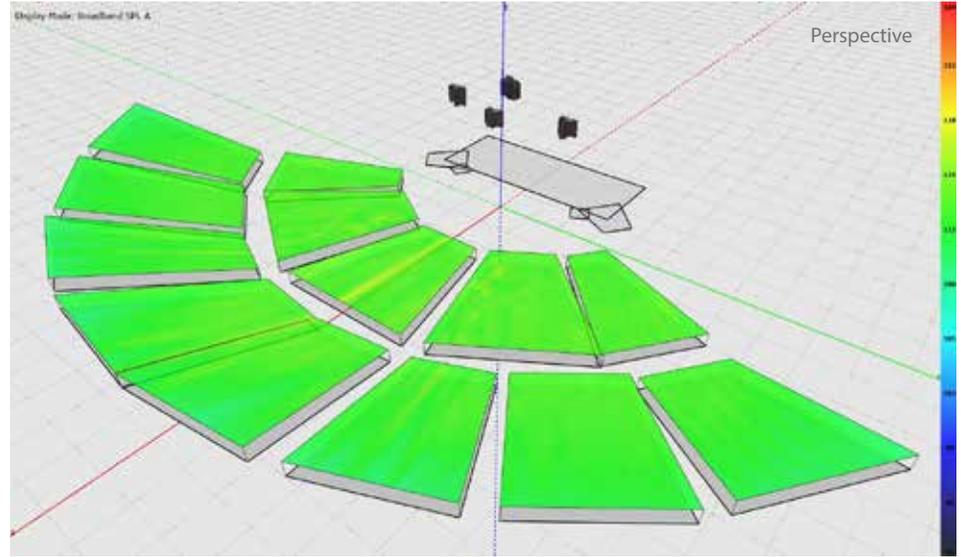




Anna provides all of the benefits of Adaptive Performance in a high-output mid-sized enclosure. Like all Adaptive Systems, Anna is controlled via Resolution™ 2 software over the Dante™ network and utilizes the same standardized power and data infrastructure.

Otto is the world's first Adaptive subwoofer. Utilizing two Offset Aperture-loaded woofers with independent on-board amplification, processing and networking, it perfectly balances LF coverage with cancellation to suit your requirements; omni, cardioid, hyper-cardioid or anywhere in between from just a single module. In arrays, Otto provides nearly endless possibilities in LF pattern control.

Resolution models of Anna/Otto in ALFC



National Accounts

Jim Newhouse, *North American Director of Sales*
James.Newhouse@eaw.com
774 280 9297

Northeast

Jim Bobel, *Regional Sales Engineer*
Jim.Bobel@eaw.com
508 789 8207

Southeast

Paul Lamarre, *Regional Sales Engineer*
Paul.Lamarre@eaw.com
508 789 7934

West

Josh Garcia, *Regional Sales Engineer*
Josh.Garcia@eaw.com
425 686 5728

EMEA Accounts

Ken Dewar, *EMEA Sales Director*
Ken.Dewar@eaw.com
508 266 6211

APAC Accounts

James Bamlett, *APAC Sales Director*
James.Bamlett@eaw.com
60 12 2205020

Sales Administration

Sales.Admin@loudtechinc.com
800 258 6883, ext 1620

Application Engineering

Design@eaw.com
508 234 6158 or 800 992 5013, ext 2

For Design Assistance, submit your projects at
www.eaw.com/design-request



Eastern Acoustic Works

One Main Street | Whitinsville, MA 01588 | USA
tel 800 992 5013 / +1 508 234 6158

www.eaw.com