

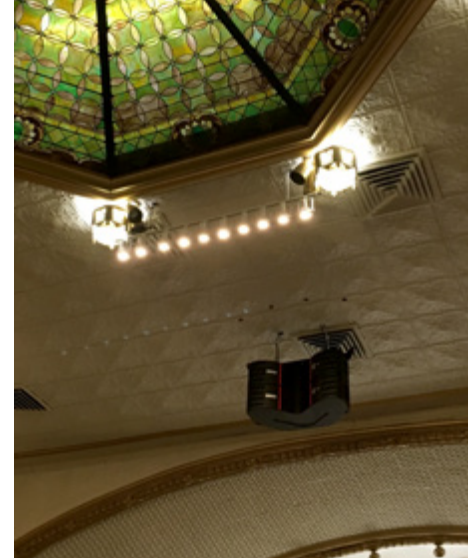
**FEAW** CASE STUDIES

# First United Methodist Church

Achieving better sound in a protected landmark with just two Anna modules

**ADAPTive**  
systems





## A bridge across the centuries with ADAPTive Technology

A historic 19th century sanctuary has solved a decades-old problem thanks to 21st century technology from EAW.

Founded as a hardscrabble mining town during the Pike's Peak Gold Rush of the 1860s, Cañon City's historic downtown district still reflects much of its original character. [First United Methodist Church](#) (FUMC) is a part of that history, having stood at the corner of Eighth and Main since 1899.

### Challenge

The church's sanctuary is classic period architecture, with high ceilings, soaring stained glass windows, and richly reverberant acoustics designed to enhance the sounds of pipe organ and Gregorian choir. Sadly, those same acoustics wreak havoc with spoken word intelligibility, and the church's congregation has struggled for literally generations to hear the sermons. The sanctuary's existing system, an older, underpowered center cluster, did little to address the problem, with insufficient and inconsistent coverage across the seating areas.

First United Methodist called on [DK Audio Video](#) of Colorado Springs, a consulting firm with a lengthy pedigree in worship AV. As DK Audio's president Lucas Lafferty explains, the building's protected landmark designation presented its own set of challenges.

"Because of the building's protected status, we were not permitted to drill into the walls or ceiling," Lafferty reveals. "Our only option was to use the existing rigging points from the old center-mounted system." Aside from potential weight concerns, the idea of hanging a large speaker array would have doubtless created aesthetics issues with the church's classic architecture.

The hall's broad dimensions added to the challenge. "We needed to design a system that would not just throw 120 feet to the back of the room, but also cover a seating area 140 feet wide," offers Lafferty. "And we had to do it using the existing hang points."

### PROJECT SUMMARY

FUMC was seeking to upgrade their sound system. Because of the historic nature of the building (listed in the Colorado State Register of Historic Properties), no drilling was allowed, requiring reuse of existing hang points. The new sound system needed to be installed exactly where the old cluster was positioned.

Additionally, the room is very reverberant, with significant reflections, posing a challenge for speech intelligibility. The coverage area was approximately 120 feet deep and 140 feet wide, and had to be covered entirely from the central cluster position.

The Anna solution provided the ability to cover the entire venue very precisely from existing hang points. Installation was simple, since no angle had to be applied to the array and only minimal cabling was required. Installation was further simplified through the use of Resolution to model and upload directivity.

### FIRST UNITED METHODIST CHURCH EQUIPMENT LIST

- [Anna](#) (2) in one array
- 1x Anna flybar

## Solution

To address the space's challenges, Lafferty turned to EAW's ADAPTive loudspeaker systems, designing a center-hung array comprising just two Anna loudspeaker modules. The newest member of EAW's ADAPTive Series, Anna modules integrate a high resolution array of 14 transducers, each with its own discrete power and processing. Utilizing EAW's Dante-based [Resolution™ 2](#) software, sound can be precisely controlled and directed for optimal coverage, without the need to physically angle or splay the loudspeaker module. A single flybar supports both modules, and a simple Dante network connection made for a smooth and easy installation.

Lafferty's familiarity with the ADAPTive Series and Resolution 2 software made the Anna system an easy choice. "I had attended an ADAPTive training seminar in Nevada last year, so I knew what the system was capable of, and was confident we could accomplish our goals with just two Anna cabinets." Each module's ultra-wide 100-degree dispersion provided more than enough coverage for the space. "Once we plugged our specifications and the location of our speaker cluster into Resolution, we were set," he recounts. "We used the built in DSP and had the system optimized in no time."

"No other loudspeaker system could have done what we've accomplished with Anna. And being able to dead hang the two cabinets with a single flybar and minimal cabling made the installation a breeze."

Lucas Lafferty

Addressing the challenges of designing an audio system within such restrictive parameters would have been no match for traditional loudspeaker technology, concludes Lafferty. "No other loudspeaker system could have done what we've accomplished with Anna. And being able to dead hang the two cabinets with a single flybar and minimal cabling made the installation a breeze."

Congregants and clergy are equally delighted. "People tell us they're amazed that they can finally hear the service. The church is beyond pleased with the system."



Dan Keller and Lucas Lafferty



### ABOUT DK AUDIO VIDEO

Founded in 1963, DK Audio Video has been providing high-end audio and video solutions for more than half a century. With offices in Kansas and Colorado, the company designs and installs AV systems in restaurants, retail establishments, and a wide range of other venues.

Worship AV is one of DK Audio Video's primary areas of focus, with the company's staff boasting a wide range of experience and expertise in church audio and video production, maintenance, and systems design. Many of DK Audio Video's staff are actively involved in technical and production roles with their own churches.

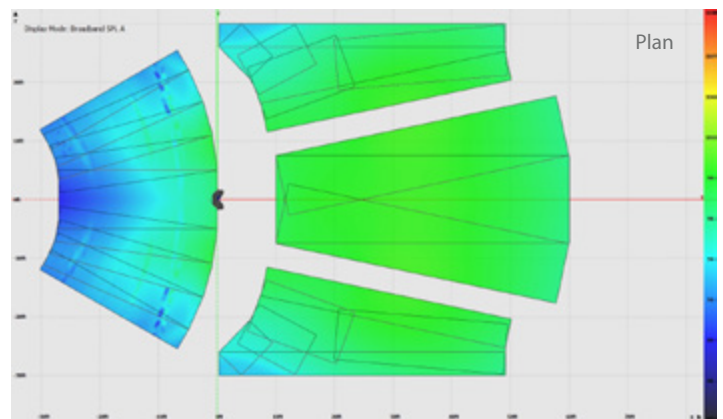
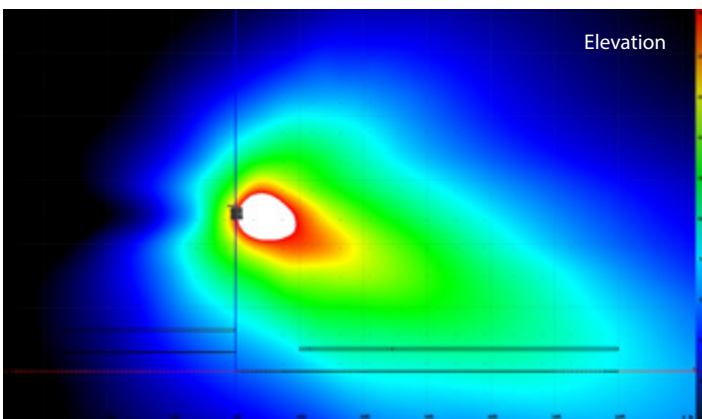
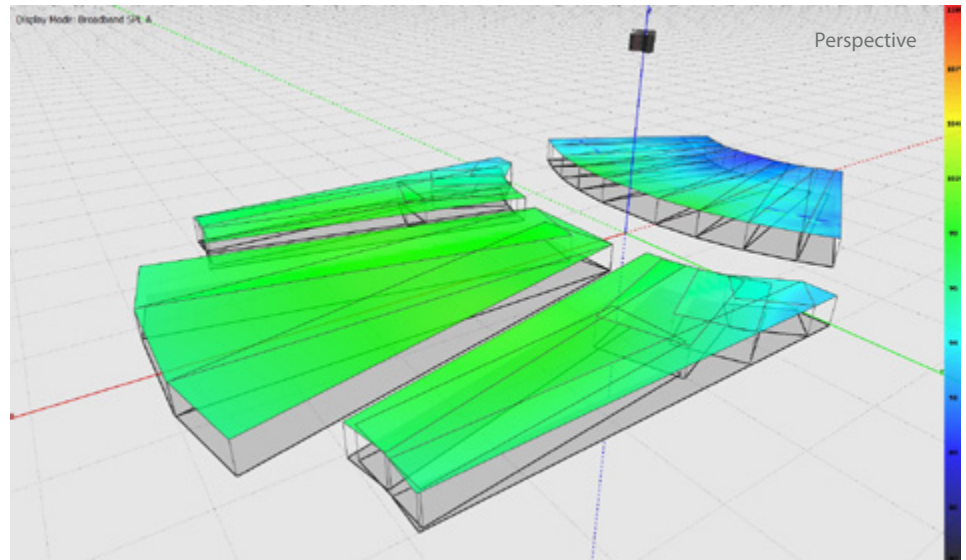
This deep knowledge of not only the technical aspects of system design, but of the worship experience itself enabled DK Audio Video to approach this uniquely challenging project with an eye toward a creative solution. The power and control of EAW's ADAPTive systems and Resolution technology empowered them to come up with a solution that not only met the church's needs, but saved time and money, and protected the integrity of this historical building.





Anna is the newest addition to EAW's flagship line of Adaptive™ Systems, providing all of the benefits of Adaptive Performance in a high-output mid-sized enclosure. Columns of Anna can be flown as mains or mixed with columns of Anya within the same array to extend Anya's outstanding fidelity to even greater coverage possibilities. 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 companion subwoofer for this system.

### Resolution models of Anna in First United Methodist Church



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