

## PROJECT PROFILE

# First Lutheran Church

Installed by Tricorne Audio



Over the course of its 100 year history, First Lutheran Church has transitioned from a traditional ornate worship space, featuring organ and choir music, to a more contemporary and diverse musical palette. To accommodate their evolving needs, First Lutheran constructed a multi-purpose worship space for services, concerts, and other community events.

### Challenges

- The loudspeakers needed to provide sound for a 600 person congregation while fitting into a 3 foot vertical space to avoid blocking projection screens.

### Solution

The new multi-purpose worship space was designed for a line array sound system. Yet when construction began, the amount of space for the loudspeakers was minimized due to the placement of the projection screens. Additionally, the beams in the ceiling prevented the loudspeakers from being hung outside of the screens without creating a wider splay in the audio. "These constraints required us to consider a different system configuration," says installer Dallas Anderson. "We entered the project into EASE and saw that the FH series from Fulcrum Acoustic would be the perfect choice."

Tricorne Audio deployed Fulcrum Acoustic's FH1566 Full-Range Coaxial Horn with the CS121 Subcardioid Subwoofers to match the output of the Line Array system initially planned for this job. Fulcrum's unique TQ Processing allows for exceptional clarity and precise transient response, even at the high sound pressure levels necessary for a space as large as First Lutheran Church. The FH's compact trapezoidal shape allowed it to be mounted close to the ceiling with minimal visual obstruction while providing the necessary output and pattern control for the space. The light weight of the CS121 cabinet and variety of mounting points allowed the subwoofers to be mounted on their side and flown directly behind the FH1566 speakers to fill out the low end. "We had about three inches of extra space without blocking the screens," says Anderson. Fulcrum Acoustic provided a custom finish for the speakers to match the ceiling, aptly titled "Amazing Gray," so the loudspeakers could seamlessly blend into the space.

"I've used Fulcrum before but not these particular models," says Anderson. "Pattern control, gain before feedback, and sustain before output were on our minds when we added the cardioid subs and the system performed just as I expected. It sounded amazing."

### Project Details

#### Location

Fargo, North Dakota

#### Product Category

Worship

#### Project Type

Worship Space for 600 people

#### Fulcrum Products

- (4) FH1566 Full-Range Coaxial Horn 60° x 60°
- (2) CX1226 Compact 12" Coaxial Loudspeaker 120° x 60°
- (4) CS121 21" Subcardioid Subwoofer
- (2) Sub215L Dual 15" Direct-Radiating Subwoofer

#### Supporting Products

Lab Gruppen C48-4 Amplifiers  
Symmetrix Prism DSP  
Allen Heath dLive Mixer

