

Boyne City High School Auditorium

Designed by Hamilton AV
Installed by Division 16



Boyne City High School selected Hamilton AV to design new audio, video, and lighting systems to replace the original system installed more than twenty years ago. Hamilton AV selected Fulcrum Acoustic loudspeakers to deliver high fidelity audio for performances.

Challenges

- School officials wanted consistent coverage and high fidelity sound while maintaining clear sight lines to the stage.
- The proximity of the line array and subwoofers to the wall requires broad band directional control to keep low frequency energy from reflecting off the wall or building on the stage.

Solution

Tim Hamilton from Hamilton AV selected two arrays of seven FL283T Dual 8" Subcardioid Line Array Modules from Fulcrum Acoustic for the main loudspeakers. Division 16 installed the line arrays on both sides of the stage to provide uniform coverage throughout the auditorium without visual interference. "The FL283T delivers the consistent coverage and 'in-your-face' sound without the need for delay speakers," says Hamilton. "This was essential to the project as the administrators did not want loudspeakers to interfere with the lighting or distract from the stage."

Fulcrum Acoustic's low profile CS218L Dual 18" Subcardioid Subwoofers were installed sideways to minimize the visual impact. "I'm happy Fulcrum Acoustic incorporated their Passive Cardioid technology into their low profile subwoofers," says Hamilton. "It was a good fit for this project."

The FL283Ts and CS218L subwoofers both incorporate Fulcrum Acoustic's patented Passive Cardioid Technology to reduce rear low frequency radiation from the enclosure. Without this control, low frequency energy would build up on stage reducing gain-before-feedback and reflect off of the proscenium and side walls degrading speech intelligibility and musical clarity. "An active cardioid array would require more equipment which they wanted to avoid for this project," says Hamilton. "They wanted the simplest system they could find and Fulcrum Acoustic helped me deliver."

Project Details

Location

Boyne City, Michigan

Product Category

Performing Arts

Project Type

620 seat auditorium

Fulcrum Products

(14) FL283T Dual 8" Subcardioid Line Array System

(2) CS218L Dual 18" Subcardioid Subwoofer

Supporting Products

Allen & Heath Mixing Console

Powersoft Quattrocanali Amplifiers

QSC Q-SYS Core 110 DSP

