

PROJECT PROFILE

Pentacle Theatre

Designed and Installed by Rain Pro Media



The Pentacle Theatre is a community theater that seats just under 200 people. For more than 50 years, they have put together plays and musicals for a devoted community in Salem, Oregon. As live production technology continues to advance, the technical staff update the sound system accordingly.

Challenges

- The horseshoe shape of the theater led to midrange buildup causing feedback.
- The low ceilings of the smaller theater exacerbated reflections causing fidelity and intelligibility issues for the audience.

Solution

Kyle Anderson from Rain Pro Media chose Fulcrum Acoustic's CCX Series to provide the strict pattern control necessary to control dispersion and reduce reflections. The compact shape of the CCX also greatly reduced any possible visual obstructions. "The coverage and the passive cardioid were our main considerations when selecting loudspeakers for this job," says Anderson.

Fulcrum Acoustic's Patented Passive Cardioid technology provides up to 10dB of rear cancellation, making the CCX1295 Coaxial Cardioid Loudspeaker with the CS118 Subcardioid Subwoofers, an ideal choice for Pentacle's sound system. Typical 12" 2-way speakers become omnidirectional at 300-400 Hz. When loudspeakers are installed near the ceiling and aimed downwards at the audience, low frequencies can build up and reflect, resulting in intelligibility issues and feedback. This can be especially problematic in smaller rooms with low ceilings such as the Pentacle Theatre. "The late energy build up was particularly challenging in the 250-400Hz range," says Michael McIntosh, Technical Director for the theater. "The rear cancellation and focused pattern control of the CCX1295 meant that we did not require any radical EQ to balance the system. The mid-range is much better with these new Fulcrum speakers."

In addition to the CCX1295 mains, installer Kyle Anderson also utilized Fulcrum Acoustic's CX826 8" Compact Coaxial Loudspeakers to provide 180 degrees of surround sound coverage in the theater. "We were amazed at how good everything sounded while staying under budget," says McIntosh. "Everyone who has heard the system so far has a similar reaction. They are quiet for a few moments and then they say 'this is unbelievable!'"

Project Details

Location

Salem, Oregon

Product Category

Performing Arts

Project Type

200 Seat Community Theater

Fulcrum Products

(6) CCX1295 12" Coaxial Cardioid Loudspeaker, 90° x 45°

(6) CX826 8" Compact Coaxial Loudspeaker, 120° x 60°

(2) CS118 18" Subcardioid Subwoofer

Supporting Products

Powersoft Amplifiers

QSC Core 110f DSP

