

Auburn University Arena

Designed and Installed by Daktronics



The Auburn University basketball arena seats more than 9,000 and guarantees every fan a close view of the action. With the furthest seat just 43 feet away from the court, Auburn Tigers basketball games are an exciting and clamorous experience.

Challenges

- Reverberation and high crowd noise levels interfere with speech intelligibility and music clarity.
- The compact design of the arena results in increased build-up of crowd noise.

Solution

Daktronics deployed AH High Output Coaxial Horns as the main loudspeakers for their combination of high output and excellent pattern control. The AH's were deployed in vertically arrayed pairs to cover the lower seating area and the middle section.

26 CCX 12" Coaxial Cardioid Loudspeakers were distributed around the upper seating areas to provide supplemental coverage for the upper seats. Fulcrum's Passive Cardioid Technology reduces excess low frequency radiation from the rear of the CCX loudspeaker, an important feature for delay speakers. "Without Passive Cardioid, the sound coming off the back of the speaker will cover a greater area than what goes out the front, thereby degrading clarity and intelligibility," says designer Dave Sturzenbecher. "Fulcrum's cardioid products avoided leakage for the upper delays."

Fulcrum's Prophile P 8" Coaxial Loudspeakers provided high output and wide dispersion to cover the last rows in the back of the main section. These rows were shadowed from the main loudspeaker arrays by the upper level of seating so supplemental coverage was required.

The US221-4 Direct Radiating Subwoofers were flown in two closely coupled vertical arrays to provide wide low frequency dispersion to the crowd. Each box had a slight delay added for steering low frequency energy away from the ceiling.

"It's an incredibly articulate and intelligible system overall," says Sturzenbecher. "What's really remarkable is how good it sounds without a crowd to dampen any reflections. It provides impressive fidelity that is much beyond what they had before."

Project Details

Location

Auburn, Alabama

Product Category

Sports Stadium

Product Type

9,121-seat capacity arena

Fulcrum Products

- (18) AH65 High Output Coaxial Horn 60° x 45°
- (6) AH96 High Output Coaxial Horn 90° x 60°
- (26) CCX1226 12" Coaxial Cardioid Loudspeaker
- (50) Prophile P 8" Coaxial Loudspeaker
- (12) US221-4 Dual 21" Direct-Radiating Subwoofer

Supporting Products

QSC Q-SYS DSP

Dynacord IPX Amplifiers

