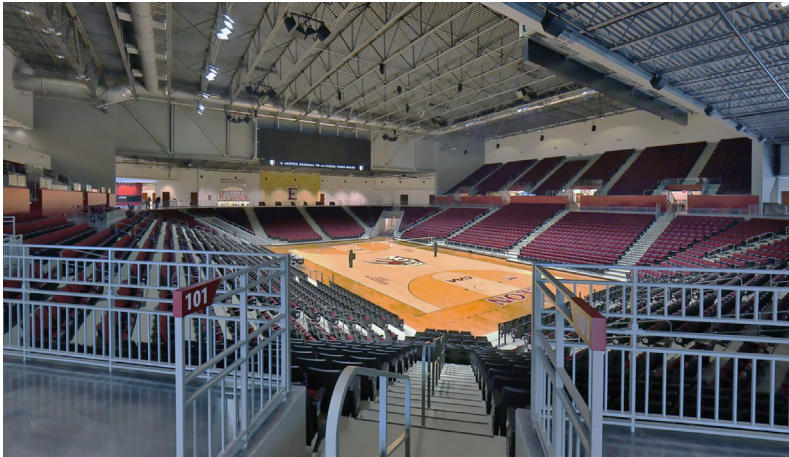


Elon University's Schar Center

Designed and Installed by Audio & Light Inc.



The Schar Center is the premier gathering place for major Elon University campus events and home to its NCAA D-1 basketball and volleyball programs. Greensboro, North Carolina's Audio & Light Inc. was selected to design and install a sophisticated, distributed sound reinforcement system for the new 160,000-square foot, multipurpose arena. Audio & Light's lead system integration engineer Brian Cox based his design on Fulcrum Acoustic's pattern control coaxial driver/horn systems and proprietary cardioid subwoofers.

Challenges

The arena required a high-output, high-fidelity sound system with precise directional control and the ability to easily configure coverage for programming ranging from athletic events and convocations, to guest speakers and galas.

Solution

"Like most arenas, the Schar Center's steel, wood, sheetrock and glass surfaces make for a very loud and reverberant space," explains system designer Brian Cox. "We specified Fulcrum Acoustic loudspeakers for their directivity, output and intelligibility."

"For the main system, we designed eight speaker clusters, each consisting of three Fulcrum AH96 full-range coaxial horns paired with a CS121 21-inch cardioid subwoofer," states Cox. The main clusters are flown above the arena's north and the south sides to cover the court and stands. The AH96s provide all the output we need and their fully horn-loaded design increases sensitivity for more efficient use of amplifier power to reduce overall system cost. Fulcrum's unique CS Series passive cardioid subwoofers deliver low frequency punch while minimizing reflections from the Schar Center's steel ceiling."

"Five Fulcrum DX1265 dual 12-inch coaxial loudspeakers serve as fills for the north side stands," continues Cox, "and we installed twelve GX1295 single 12-inch coaxial speakers above the arena's east and west ends for concourse and lower seating coverage. Fulcrum was very helpful with loudspeaker selection and confirming our thoughts on the system design."

"To ensure a flexible and reliable sound system, we required that each of its loudspeakers have the ability to be controlled individually," recalls Elon's assistant director of campus technology support Joe Davis. "This allows us to easily tailor the 49 loudspeakers' coverage for any use. The Athletics and Events departments, and support staff all love the system's sound and configurability. Audio & Light delivered an amazing sound system that adds to the Schar Center's wow factor, and is worthy of Elon's stature and commitment to excellence."

Project Details

Location

Elon, North Carolina

Category

Sports (arena/convocation center)

Project Type

5,100-seat indoor arena to host athletics and other events

Fulcrum Products

(24) AH96 High Efficiency Full-Range Coaxial Horns, 90° x 60°

(8) CS121 21 inch Subcardioid Subwoofers

(5) DX1265 Dual 12 inch Coaxial Loudspeakers, 60° x 45°

(12) GX1295 12 inch Coaxial Loudspeakers, 90° x 45°

Supporting Products

Linea Research 88C10 and 44C20 Dante-enabled Amplifiers

Symetrix Edge DSP

Yamaha TF-1 Dante-enabled Mixer

