What I like about Q-SYS, is that it’s so intuitive to design, and because it is software-based, we’ll be able to easily add features and functionality in the future.

Drew Breland
Design Engineer at ESB Group
Challenges

Enhancing Overall Experience

Alabama-based integrator ESB Group needed to design a comprehensive audio-visual system that would enhance the current guest experience. Additionally, they needed to ensure that the system was flexible enough to accommodate any future additions and modifications. The ESB Group also needed to design a system that is easy to use, with intuitive controls. This allows the aquarium to make changes and adjustments to the system quickly and easily, ensuring that the guests always have the best possible experience.
Solutions

**Immersive Audio**

To handle these challenges, ESB Group designed the system around a Q-SYS Core 510i processor (now available as the updated Q-SYS Core 610) which manages audio and control processing throughout the facility. The integrator upgraded the audio multi-track player (via Q-SYS Feature License) to play back as many as 32 simultaneous audio tracks of exhibit content and background music that were being routed to any of the aquarium’s zones. ESB Group also integrated several wireless microphones that presenters can walk around with and be heard in each zone.

To deliver immersive audio to the various exhibits, the aquarium chose a mix of pendant, ceiling, and surface-mount Q-SYS AcousticDesign Series loudspeakers pairing them with CXD-Q network amplifiers, which offer control and advanced telemetry without the need for complicated programming. The AcousticDesign Series loudspeakers maintain remarkably similar characteristics across form factors, ensuring that no audio transitions are heard as guests move between zones.

**Ideal User Control**

With the help of the Q-SYS UCI Deployment feature license, the integrator created a user control interface (UCI) for the aquarium’s AV support team, which provides access to zone-specific volume and track controls, along with signal meters for the venue’s amplifiers. This provides a simple, birds-eye view into the system, and didn’t require any programming. “What I like about Q-SYS, is that it’s so intuitive to design, from a DSP and control perspective,” explains Drew Breland, Design Engineer at ESB Group. “And because it is software-based, we’ll be able to easily add features and functionality in the future, which will help enable the great experience that the aquarium is delivering.”

**Innovative Solutions for Themed Entertainment**

Q-SYS is proud to offer immersive audio solutions and intuitive control to the themed entertainment industry, particularly to those organizations that promote animal research, conservation, and public education.