



Hauppauge High's Auditorium is top of the Class with Renkus-Heinz

Riedel Audio and Acoustics chose Renkus-Heinz to rise to the challenge of creating a sound system for a multi-performance auditorium, with grade A results

Above and above right: Hauppauge High School's auditorium is designed to operate as one or three separate rooms, with a 1,500-seat capacity



When you mention the phrase "High School Auditorium," images come to mind of multi-purpose rooms crammed with folding chairs and a patchwork of audio and video equipment. But Hauppauge High School's main auditorium not only refutes that notion, it smashes it to smithereens.

The 1,500-seat facility has been designed for versatility – capable of operating as one space or three separate rooms, hosting events ranging from theatrical presentations and musical concerts from all over the school district, to major annual fundraisers, and movie nights for the community.

"Hauppauge has a huge commitment to the arts," explains Rich Reidel, owner and President of Riedel Audio and Acoustics, and lead A/V designer for the project. "Between the school district and the local community, they use this auditorium for dozens of different events every year. I was very impressed with the quality of their musical programs and orchestras."

Riedel worked closely with Farmingdale, NY-based Advance Sound's Al DePace, Gerard Verdi, John Ruggerio and Thomas DePace, who contributed manpower to install and tune the system in the face of tight construction schedules. Advance Sound is a very experienced systems integration firm and has been a Renkus-Heinz authorized dealer for many years.

As Reidel observes, the biggest challenge was designing a system with the flexibility required to work within the wide range of program material, both as a single system and as multiple spaces. With large drama and music departments and a music recording program all sharing

the space, Reidel knew the audio system would need to be powerful as well as versatile, so he began his design with a system based on a center line array of five Renkus-Heinz PNX102LA loudspeakers, with two STX7/64 loudspeakers for sidefill, and a pair of TRX121T loudspeakers for delay.

Augmenting the main system are six TRX82 two-way cabinets, arranged in a left-center-right array, and six more TRX121 systems placed evenly to cover surround sound during cinema nights, as well as doing double duty as effects speakers during theatrical presentations. Renkus-Heinz provided custom color-matched cabinets to ensure all the speakers blended in with the ceiling color scheme, providing a system that was both visually and aurally pleasing. Lab Gruppen amplification powers the system, with DSP provided by Biamp AudiaFlex.

Much of Riedel's design concept began with acoustical modeling using EASE technology, which was key to helping him and his team to pinpoint notable dead spots and slapback from the rear of the facility. "One of the biggest complaints previously was that there were certain zones in the audience where it was extremely difficult to hear," Reidel reports.

"But the new system eliminates that entirely, creating a smooth, uniform response throughout. Had we just bolted up a few additional speakers, we could have still achieved an acceptable result, but with the complete overhaul we did, I think we gave them something much better that they'll be pleased with for quite a long time." 