



A Civic Centerpiece





A Bose[®] sound system provides a single solution for a variety of needs.

the venue:

A 3,300-seat facility hosting a variety of events from high school plays to the Oklahoma Music Hall of Fame ceremonies.

t<mark>he ch</mark>allenge:

Ensure better speech intelligibility and provide clear, powerful sound for concerts and other large events in a highly reverberant space. In addition, provide paging and background music in the adjacent hallways and meeting rooms.

t<mark>he so</mark>lution:

Bose and High-Tech-Tronics used Modeler[®] 6.0 software to design the system. Panaray[®] LT loudspeakers, FreeSpace[®] loudspeakers and a ControlSpace[®] ESP-88 engineered sound processor deliver the desired performance and allow the system to be used for a variety of events.



"As far as quality and performance, we couldn't be happier. The Bose system is rock solid." – Troy Hicks, Director, Muskogee Civic Center From conducting city business at a mayoral conference to honoring the performers of the Oklahoma Music Hall of Fame, the Muskogee Civic Center provides the ideal forum for nearly any event. Because sound is essential to accommodating every function, the civic center relies heavily on its Bose sound system.

"The Shrine circus, church conventions, concerts, even banquets and meetings – we host just about anything in here," says Troy Hicks, the Director of the Muskogee Civic Center. With such variety, Hicks acknowledges that what groups need from the sound system can differ greatly, but he adds, "The Bose system we have not only works for all those types of events, it's also very easy to operate and configure, no matter what we have going on." The system also provides paging and background music for the facility's meeting rooms and hallways.

"When they turned up the system, one member said he couldn't believe we were getting concert-level performance."

> Troy Hicks Director, Muskogee Civic Center

Delivering this level of performance, flexibility and ease of use was the work of High-Tech-Tronics, an authorized Bose dealer in Oklahoma City. Marc Bradley, CEO of High-Tech-Tronics, recalls, "After we sat down with the management team at the Muskogee Civic Center, we felt that a Bose system would deliver what they wanted."

A unique advantage from Bose.

A unique part of the Bose[®] solution was Modeler[®] 6.0 sound system software. High-Tech-Tronics used the software to create an accurate acoustical model of the facility. "We configured the model for all types of events and immediately could see how the proposed system would perform," said Steve Covey, A/V Design Specialist for High-Tech-Tronics.

Along with design, the Modeler[®] program showed loudspeaker placement from multiple angles. Bob Patten, Bose territory representative adds, "Not only will Modeler allow you to accurately design superior sound systems, it also lets you view the speaker clusters or speaker placement to see if they conflict with any aesthetic concerns."

Covey and his team also relied on the expertise of their Bose field engineer, Stephen Payton. "Having access to Stephen was a huge advantage for us," Covey says. CEO Bradley agrees, adding, "There are many companies providing speakers and electronics, but Bose is unique with the level of engineering support they provide."

The civic center's system uses clusters of Panaray[®] LT 4402,[®] 3202[®] and 9400 loudspeakers for mid/high frequencies in the arena. A cluster of Panaray LT MB24 modular bass loudspeakers provides the low-frequency sound. This solution helped to control reflections and unwanted reverberations.

For the meeting rooms and hallways, High-Tech-Tronics used FreeSpace® Model 16 loudspeakers. These ceiling-mounted loudspeakers are designed for the music and speech reproduction these areas needed.

Performance, versatility and ease of use for a variety of civic center events.

At the heart of the Bose system is the ControlSpace[®] ESP-88 engineered sound processor. It provides powerful, flexible,

sophisticated signal processing that was easily configured to meet the audio demands for the different events in the civic center. A ControlSpace CC-64 control center on each side of the arena, plus one more in the sound booth, provide easy access and control. "We can go from hosting a job fair to a church convention just by turning a knob and pressing a button," says a delighted Hicks. A CC-16 zone controller in the office allows similar control and paging for the meeting rooms.

"There are many companies providing speakers and electronics, but Bose is unique with the level of engineering support they provide."

> Marc Bradley CEO, High-Tech-Tronics

Hearing the Bose difference.

The civic center restoration committee was the first to hear the results. "We were all astonished at how clear the system sounded," Hicks recalls. The group then got to hear how powerful the system was. "When they turned up the system, one member said he couldn't believe we were getting concert-level performance." Hicks says.

Along with hosting the regular variety of events, the civic center now attracts more business with its new Bose system. "Some groups wouldn't come here because they had to bring in their own sound system," Hicks says. "Now they can plug in easily to our system, and they sound great." Hicks adds that in nearly every instance, groups who used the sound system commented on how clear the sound was and how easy it was to operate.

Just as importantly, audiences have noticed the difference. "I've heard nothing but compliments about the sound," Hicks says. The civic center director also has been very pleased working with an authorized Bose dealer. "High-Tech-Tronics were outstanding to work with from design through installation," he remarks. "And as far as quality and performance, we couldn't be happier. The Bose system is rock solid." Professional sound systems demand an uncommon expertise and specialized products. More than four decades of research help Bose design products and technologies to meet the unique requirements of the professional sound industry, and to provide training and support for Bose subsidiaries, distributors and dealers worldwide. You'll find Bose[®] sound throughout the world in houses of worship, stadiums, restaurants, retail stores, corporate buildings and hospitality establishments.

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