

# Adding Speech to a Performing Arts Center Sound System

By: David Barbour

NJPAC was designed for everything but the spoken word; a small, but crucial, adjustment changed that

Having opened in 1997, the New Jersey Performing Arts Center—or NJPAC, as it is familiarly known, has provided a home for a broad array of arts programming designed to lure people from all over the state. As this is being written, upcoming attractions include a dual concert by Herbie Hancock and Lang Lang, the modern

Opera, and Broadway tours. NJPAC is a true multi-purpose house. Such buildings are often fine illustrations of the rule that if you try to please all, you end up pleasing none—and, as Mike Sinclair, of the firm Audio Incorporated, notes, there was room for improvement in the venue’s sound system.

The New Roselle, New Jersey—

conies and a very, very large upper fourth balcony, which is a huge distance from the main stage,” Sinclair notes. “They were having difficulty—especially at orchestral and opera performances—with having a sound system available for announcements, discussions, and things like that.” The theatre is equipped with a large-scale sound system; however, Sinclair adds, “It is rather imposing, and it doesn’t blend in with the architecture. We were charged with the responsibility of coming up with a system that would blend in with the architecture and would also get speech up to the very, very back of the house, which is a very, very long way away.”

After reviewing the available options, Sinclair says, “We came up with the idea of using three sections of [Renkus-Heinz] Iconyx IC24 speakers, attached to the proscenium arch.” Designed for any number of applications, including houses of worship, transport terminals, stadiums and arenas, convention centers, and museums, as well as performing arts centers, the product offers two distinct advantages. The long, narrow units fit into the theatre’s proscenium arch; they have also been custom-fitted to blend in with the room’s décor. “When we painted them the same color as the structural steel, they all but disappeared,” Sinclair adds.

The Iconyx IC24 features 24 transducers and 24 amp channels. It offers



Above: The auditorium. Opposite: The Iconyx speakers in place.

dance company Urban Bush Women, Ravi Shankar, the New Jersey Youth Theatre production of *Sweeney Todd*, Melissa Etheridge, the hip-hop star Maxwell, and the comedienne Mo’Nique.

Given the above, plus a list of regular constituents including the New Jersey Symphony, New Jersey State

based firm Audio Incorporated, founded in 1994 by Sinclair and Stephen Tolve, offers a broad array of services, from equipment rentals to audio system design to event management and system integration. The company was brought in to address a very specific problem: “They have a rather large house that incorporates three bal-

# Digital Beam Steering Meets Live Sound




Once we had done it, the client was absolutely amazed at how clear it could be at that distance, without any delays.” The latter fact was especially fortunate, because, he says, “There really is no place in this room to put any delay speakers for the upper balconies, and we found that we didn’t need to do it.”

Control of the loudspeakers is facilitated by other aspects of the in-house system, says Sinclair. “The distribution of audio from the house digital mixing board is in CobraNet. It’s a BSS London system. The inputs to the six cab-

inets are individual CobraNet runs; we can individually address each one of these cabinets—for equalization and in terms of beam steering in real time, during a performance.” The house console is a Yamaha O1V.

The system was tested before it was chosen. “As part of the design process, we brought in a demo system and put a single Iconyx IC24 in the middle of the stage,” says Sinclair. “We listened to that, up to the second balcony, but we really didn’t have the ability to hear it up to the fourth balcony, until we did the installation.

The system has worked out better than anyone expected, Sinclair adds: “They’re using it at graduations from the police academy and local colleges and universities; as a component of those ceremonies, they’re playing some light music or they may have bands playing accompaniment. They’re continually surprised at how well the music reproduces, bearing in mind that they were looking for a speech-only solution. But they’ve found themselves with a system that they can use for a good percentage of their non-musical events.” Thanks to the addition of the Iconyx loudspeakers, New Jersey’s main multi-purpose arts center is now equipped to handle an even broader range of needs. 

inets are individual CobraNet runs; we can individually address each one of these cabinets—for equalization and in terms of beam steering in real time, during a performance.” The house console is a Yamaha O1V.



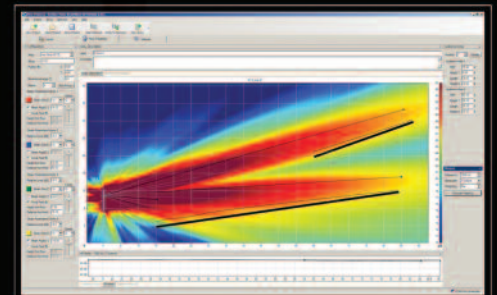
## IC Live

IC Live brings digital beam steering to live sound in a portable, powerful and flexible package. For the ultimate in clarity and intelligibility, IC Live is the perfect solution.

Experience what IC Live can bring to your business of corporate events, live concerts, theater and more.

**RHAON**

(BeamWare - Beam Design Software)



**rh RENKUS-HEINZ**

GIVE YOURSELF THE ADVANTAGE

[www.renkus-heinz.com](http://www.renkus-heinz.com)