



Case Study: Recreation

Boardwalk Casino & Hotel

Avitech Systems Delivers an Integrated Background Music and Voice Evacuation System to a Multi-building Entertainment Complex

Located in Port Elizabeth, the Boardwalk Casino and Entertainment Complex is one of South Africa’s largest tourist attractions, having attracted well over 30 million visitors to date. The new 5-star Boardwalk Hotel, Convention Centre and Spa capture the details of Victorian architecture, whilst incorporating every modern convenience. The Casino offers everything from the latest slot games to casino card classics. The 3,000 square meter Boardwalk Convention Centre provides ample space for meetings of many sizes and is able to handle conferences for 1,680 attendees. The Centre features a multi-divisible 2,000 square meter ballroom, 4 sub-divisible multi-purpose meeting rooms, and a pre-assembly area.

Because of the integration between the background music and the voice evacuation, **there was only one solution for us: the AudiaFLEX and Vocia combination.**

—Lawrence Bricknell, Owner & Project Manager at Avitech



THE CHALLENGE

When operators Sun International embarked on the recent \$100 million upgrade to the Boardwalk Complex, they appointed QA Technology Consultants and Avitech Systems to engineer and install a new network-based background music and voice evacuation system that met the specific needs of the hotel, restaurant, casino, conferencing, and retail spaces.

The previous sound system was installed in 1999 and consisted of racks of analog audio processing and routing hardware. The system was very difficult to maintain, and the operators were frequently spending money to have AV contractors travel to the site to configure the system for specific events.

BOARDWALK CASINO & HOTEL SYSTEM REQUIREMENTS

- ... { The facility needed an upgraded system that addressed their following criteria: } ...
- 1 Offered high quality music reproduction commensurate with a 5-star hotel. 
 - 2 Was flexible enough for use in multi-functional, sub-divisible conferencing spaces. 
 - 3 Was simple to use. 
 - 4 Was network-based. 
 - 5 Complied with emergency regulations. 
 - 6 Did not require duplication of equipment for background music and voice evacuation functionality. 
 - 7 Stayed within budget parameters. 

Traditionally, contractors would have installed two independent systems: one for background music and one for voice evacuation. On this project, however, Avitech Systems was able to show them that savings could be achieved by combining the systems, while still complying with voice evacuation standards and not compromising the quality of sound and functionality.

THE SOLUTION

The challenge was the integration of a background music system with a VES without compromising the degree of control that was needed for multi-zoned volume and source selection.

Lawrence Bricknell, owner of Avitech Systems, managed the AV installation. Avitech designed an integrated system using a combination of Biamp® products: Audia® DSPs provided the routing and control flexibility, while Vocia® provided the compliant voice evacuation functionality. Biamp's daVinci™ software was used to create user-friendly interfaces for controlling the system via PCs and wireless tablets throughout the complex.

SYSTEM SPECIFICS

Components:

Audia:

- AudiaEXPI
- AudiaFLEX
- AudiaFUSION
- RED-1
- daVinci Control Software

Vocia:

- CI-1 Control Input Device
- DS-10 Desk Station Microphones
- ELD-1 End of Line Device
- LSI-16 Life Safety Interface Device
- MS-1 Message Server
- VA-8600 Amplifier
- VO-4 Output Device

AudiaFLEX provided the front-end routing and control flexibility and also gave the end user the ability to create easy-to-use software control interfaces with daVinci. By adding the AudiaFUSION to the mix it increased system efficiency by allowing processing resources to be shared. The AudiaEXPI further expanded the power of the Audia system by providing eight additional inputs without having to install additional units.

The Vocia system was used for monitoring the system health, through the use of End of Line (ELD-1), Life Safety Interface (LSI-16) and Control Interface (CI-1) devices. This meant that the amplifier, inputs/outputs, and speakers were automatically monitored for any issue that would have impacted audio quality. Vocia's CobraNet(R) bridge allowed six physically separate sound systems to be interconnected, share background resources, and have access to live audio feeds from promotion areas.

AN INTEGRATED SYSTEM ENABLES SUCCESS

The Avitech team used the AudiaFLEX for room combining, audio routing and source selection, which then fed background music channels to the Vocia system. Vocia processes the channel as a background priority, so it can override the music broadcast in the event of an emergency situation. This was the perfect solution for the client's needs, wrapped up into one complete system.



The existing Casino has been using Audia and daVinci for a year now. We still love how much easier it is to use than our old analog system. **For the first time in many years, we finally have control of our audio systems.**

-Mark Ransom, QA Entertainment Technology Consultants

ABOUT BIAMP SYSTEMS

Biamp Systems is a leading provider of innovative, networked media systems that power the world's most sophisticated audio/video installations. The company is recognized worldwide for delivering high-quality products and backing each product with a commitment to exceptional customer service.

The award-winning Biamp product suite includes the Tesira® media system for digital audio networking, Audia® Digital Audio Platform, Nexia® digital signal processors, Sona™ AEC algorithm and Vocia® Networked Public Address and Voice Evacuation System. Each has its own specific feature set that can be customized and integrated in a wide range of applications, including corporate boardrooms, conference centers, performing arts venues, courtrooms, hospitals, transportation hubs, campuses and multi-building facilities.

Founded in 1976, Biamp is headquartered in Beaverton, Oregon, USA, with additional engineering operations in Brisbane, Australia. For more information on Biamp, please visit www.biamp.com.