

Bosch's combined Praesideo and Electro-Voice system chosen for Jaber Al-Ahmad Stadium



BOSCH

Invented for life

Industry:

Entertainment

End User:

Jaber Al-Ahmad International Stadium, Kuwait

The stadium which was built on an area of 130,000m² for soccer and olympic standard track and field athletic events, combines modern architecture with Middle East maritime tradition. Designed by Stuttgart-based Weidleplan Consulting GmbH, the main structure is in the form of the hull of a wooden Arab dhow. On two main concourse levels, including 48 business lounges, the stadium can host 65,000 spectators. The main building, on four levels, houses a sports museum, a VIP reception area, dressing rooms, administration offices, heating, cooling and security control rooms as well as training facilities including a swimming pool. Outside the stadium a parking space for 5,750 cars, with convenient access to the freeways, is provided.

Business Objective:

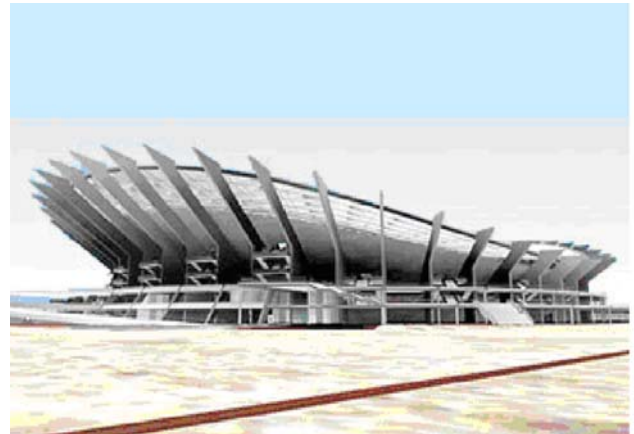
A stadium of this dimension demands special, complex security and emergency facilities to protect spectators, event participants, staff and the property itself. In order to meet these requirements a combined Praesideo Public Address and Emergency Sound system as well as an Electro-Voice Sound Reinforcement System provided by Bosch Security Systems was installed.

Solution:

The Praesideo Public Address and Emergency Sound system of the Jaber Al-Ahmad International Stadium comprises three interlinked Cat-6 CobraNet networks (two are inside the stadium; a third one covers the arena and catwalks). A Bosch network controller which has the function of controlling the information, configuration settings as well as pre-recorded audio messages is the heart of the system.

The built-in web server which constantly monitors all system components and reports any changes in status allows configuration, diagnostics and logging to a PC. External cables connected to the control inputs are also monitored for short and open circuit. Seven audio expanders allow the addition of extra audio inputs and outputs, such as additional BGM or microphone and line signals. DSP which acts as an interface with external equipment (e.g. alarm buttons and fire alarm systems) is available on all the inputs and outputs.

Additional sound support, prior to and during events, is provided by Electro-Voice (EV). The EV and Praesideo Public Address and Emergency Sound system amplifiers are all equipped with remote control and supervision cards. Hence, the entire network can be managed through one or more PCs running under Windows by EV's IRIS-Net (Intelligent Remote & Integrated Supervision Network) software. Through Crestron touchpanels remote monitoring and control can be carried out from one of the stadium's 23 separate control rooms.



Jaber Al-Ahmad International Stadium, Kuwait

Altogether the Praesideo Sound System includes 30 network controllers, 42 power amplifiers (500W, 250W, 125W), 20 19-inch equipment racks, 1050 ceiling loudspeakers in fire-proof housings, 510 projection loudspeakers, 145 loudspeaker cabinets, a wall-panel volume control of 160 zones as well as 5 call stations with touch-screen monitor control. Additionally the Electro-Voice Sound Reinforcement System consists of 56 weatherized speaker systems, 6 large-format horn speakers & 39 power amplifiers (1800W, 650W).

Result:

On the basis of the system's superior reliability, its wide functionality and the ease of use as well as the experience of the Kuwaitian installer Al Ghanim Industries in equipping similar large projects, this solution was chosen. The final choice was also based on the result of acoustic tests conducted by the Egypt office of Acoustic Design Ahnert (ADA).

Thus, Bosch's combined Praesideo and Electro-Voice public address and emergency sound system which was installed in the Jaber Al-Ahmad International Stadium is a perfect example of an efficient and secure solution for public safety in a large complex with both inside and outside facilities. Completed and commissioned within the required timeframe, the stadium is also an excellent reference for future installations of this kind.

Installed by:

Al Ghanim Industries
PO Box 223,
Safat 13003 Kuwait
www.alghanim.com

Robert Bosch Middle East FZE

Bosch Security Systems
PO Box 54307, Dubai, UAE
Tel: +971 4 2123350
www.boschsecurity.com/export