

Praesideo voice evacuation

Application Note: Stadiums

- ▶ EN 54-16, ISO 7240-16 and EN 60849 certified
- ▶ Superb sound & speech reproduction
- ▶ Multi-zone functionality
- ▶ Easy-to-use: intuitive user interfaces
- ▶ Extensive integration possibilities



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EN54-16

EVAC Certified
Emergency
Voice Alarm

Introduction

Praesideo is the perfect solution for large venues with many zones such as stadiums. It handles message routing, public announcements, emergency voice evacuation, commentary for events and background music. Moreover, the system's daisy-chain network topology enables equipment to be located wherever it is required, and facilitates expansion without the need for re-wiring. Praesideo also features advanced signal processing for perfect speech intelligibility. The system's multi-zone functionality easily meets the

challenging requirements of today's large sports stadiums which are divided into public and nonpublic areas, each with their specific zone requirements. The public areas include the arena seating, parking garage, access roads, entrances and corridors, restaurants, food and beverage corners and VIP boxes. Non-public areas include the changing rooms, offices, and other facilities such as treatment rooms. What's more, stadiums often house additional businesses like local companies and retail outlets.



Summary of requirements

- ▶ Address a large number of zones
- ▶ Adapt to various acoustic conditions
- ▶ Centralized control and supervision
- ▶ Interface to fire detection and alarm system
- ▶ EN54-16, ISO7240-16, EN60849 certified
- ▶ BS5839:8 compliant

Solution

Praesideo equipment racks are distributed throughout the stadium and interconnected via optical cables. The main equipment rack is in the control center with a 24-channel mixer desk, call stations, wireless microphones and background music sources. Power amplifiers are located in rooms at either side of the stadium, allowing shorter conventional cables to the loudspeakers. The system also features built-in supervision and redundancy, including a redundant system bus and class-A loudspeaker loops with digital line and loudspeaker supervision.



- 1 Athlete area
- 2 Offices
- 3 Swimming pool
- 4 Restaurant
- 5 Medical treatment rooms
- 6 Parking
- 7 Food & Beverage corners
- 8 VIP area
- 9 Technical room
- 10 Control center
- 11 Security room

System description

The total Praesideo System comprises a network controller, audio expanders, multi-channel interfaces, power amplifiers and call stations. The Praesideo Network Controller manages the public address and voice alarm functions, and is connected to the stadium's fire detection system. For zones that do not require specific sound processing, a multi-channel interface in combination with Praesideo class-D Power Amplifiers is used, resulting in a flexible and more cost-effective solution.

Clear user Interface

The control center and security room are equipped with a fireman's call station and a touch-screen-controlled call station with a graphical user interface. This type of call station is simple to operate for stadium personnel and provides a clear overview of the system's status.



Certified solutions

As part of the Bosch Security Systems commitment to meeting international standards, Praesideo meets legislated requirements for voice alarm systems. Praesideo by Bosch is certified according to EN 54-16, ISO 7240-16, EN 60849 and compliant with BS 5839:8. The system is also certified for many local evacuation standards.

Complete security solutions

Bosch Security Systems offers a wide range of security, safety, and communication solutions that are relied upon every day in applications and places around the world, from government facilities and public venues to businesses, schools and homes.

For more information about the Praesideo Digital Public Address and Emergency Sound System, please feel free to contact your nearest Bosch representative or visit our website: www.boschsecurity.com.



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To learn more about our product offering, please visit www.boschsecurity.com or send an e-mail to emea.securitysystems@bosch.com

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PA-EH-en-06_F01U517411_03