Praesideo voice evacuation
Application Note: Shopping Centers

- 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 easily configured to meet the voice alarm, background music (BGM) and message requirements of large shopping centers. Its cost-effective system architecture uses a "daisy-chain" network topology, which allows system units to be located at any point on the network. Future expansion without major restructuring is possible.

Shopping centers typically have a large number of zones with varying output power requirements. The priorities are speech intelligibility and compliance with the EN 54-16, ISO 7240-16, EN 60849 and BS 5839:8 standards. The system should also provide background music (BGM) at appropriate levels to create a suitable atmosphere in specific zones.

Summary of requirements

▶ Exceptionally high-quality speech reproduction
▶ Unlimited number of individual and group zones
▶ Free allocation of call stations
▶ Variable power per zone-area
▶ Graphical User Interface with shopping center layout
▶ Background music in public areas
▶ EN54-16, ISO7240-16, EN60849 certified
▶ BS5839:8 compliant

Solution

Each shop is a separate zone. Using wall panels, personnel can choose their favorite music source and set the volume level. In total, Praesideo can handle 28 uncompressed simultaneous digital audio channels routed through the system. Praesideo amplifiers have built-in automatic volume control to ensure the volume of all loudspeakers is maintained for comfortable listening against the surrounding noise. Scheduled messaging can be used for commercial announcements and general information at pre-set intervals.

Individual zones are grouped in accordance with fire detection systems zones, making automatic and phased evacuations possible. Fireman's panels installed at strategic entrance points makes manual override of the evacuation possible.

Entrance
1   Call Station
2   Numeric Keypad
3   PC Call Station

Facility Manager
4   Call Station
5   Numeric Keypad
6   PC Call Station

Security Control Room
7   Call Station
8   Numeric Keypad
9   Control and logging software
10 Equipment racks

Emergency Exit
11 Fireman's Panel

System description

The Praesideo system is connected to the building's fire detection system. The zone size varies from single shops to department stores with several floors, so power requirement per zone is set accordingly.

Call stations are located at the reception and the security room. Furthermore, fireman's panels are located at the entrances.

At the reception counters, touchscreens are used in combination with PC Call Station to make zone selections and route audio. The PC Call Station's easy, graphical user interface is typically based on the shopping center's floorplan.

Spare amplifiers are used to automatically take over in case a power amplifier fails. Praesideo's "wire-free" loudspeaker supervision continuously monitors the correct functioning of all loudspeaker lines and individual loudspeakers at critical locations. Any fault condition in the system is immediately reported, allowing corrective action to be taken.

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 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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