# **Plena Voice Alarm System** Application Note: Factories

- EN 54-16, ISO 7240-16 and EN 60849 certified
- For small- to medium-sized applications with up to 60 zones
- ► Built-in intelligent message manager
- ▶ Plug-and-play installation with PC configurability
- ► Interconnects via CAT5 cable





## Introduction

The Plena Voice Alarm System is the ideal sound management solution for small to medium sized factories. Factories and other manufacturing facilities require public address systems with background music (BGM) and message routing in various zones. The sound level requirement per zone is determined by factors like the height of the ceiling and the ambient noise level.

Nowadays new national and international regulations often demand upgrades to voice alarm functionality. The Plena meets all these needs, offering full public address functionality including call stations, flexible BGM routing and built-in message management, plus a future-proof upgrade path.

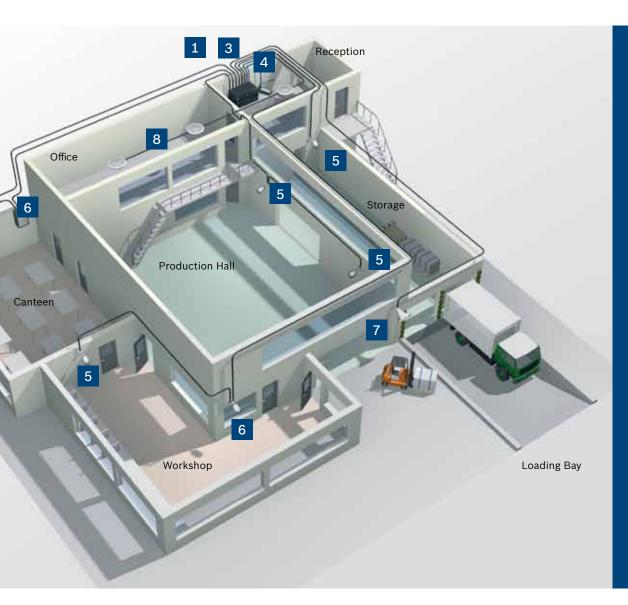


## **Summary of requirements**

- ► Typically up to 6 zones
- ► Facility for paging visitors and employees
- ▶ Background music (BGM) in selected zones
- ► Good speech intelligibility in a noisy environment
- ► Simple operation
- ► Low initial investment
- ► EN 54-16, ISO 7240-16 and EN 60849 certified

## Solution

A typical factory or manufacturing plant has a production hall, workshop, stores, loading bay, offices and canteen. The Plena Voice Alarm Controller accommodates up to six zones, but can be easily expanded to a large number if more zones are required. It is also easy to install using standard materials such as CAT5 cabling.



- 1 Plena Voice Alarm Controller
- 2 Plena Mixer Amplifier
- 3 Background Music Source
- 4 Plena Call Station
- 5 Sound Projector
- 6 Prosound Cabinet
- 7 Horn Loudspeaker
- 8 Ceiling Speaker

## **System description**

The Plena Voice Alarm System requires no additional power amplifiers as its integrated 240 W power amplifier is sufficient to drive loudspeakers in all six zones. A Plena BGM source is connected to the controller and can be routed to the different zones like the canteen and work areas. BGM volume levels can be set per zone. A call station is installed in the reception.

Loudspeaker requirements are easily met from the extensive Bosch range. This includes ceiling models for offices, cabinets for the canteen, sound projectors for work areas with high ceilings and horns for the outside loading bay. The canteen can be equipped with a Plena Mixer Pre-Amplifier, a local BGM source and microphones for special events.



## **Future-proof upgrade**

Little external equipment is needed to upgrade to an EVAC-compliant voice alarm system. The Plena Voice Alarm System is fully supervised, has a built-in message manager and an integrated emergency microphone. It can also be interconnected to the building's fire detection system for automatic evacuation.

#### **Certified solutions**

The Plena Voice Alarm System is EN 54-16, ISO 7240-16 and EN 60849 certified.

## **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 Plena Voice Alarm System, please feel free to contact your nearest Bosch representative or visit our website: www.boschsecurity.com.





**EN54-16** 

**Bosch Security Systems** 

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