

Praesideo

Digital Public Address and Emergency Sound System



Security Systems



Communication you can rely on

BOSCH

The ideal combination: a sound system for emergency and public address



Without always being aware of it, public address systems are all around. The places we go to learn, work, relax, travel, spectate, participate, shop or even worship generally function much more efficiently through using one.

But in the event of an emergency, a new definition is required of the relationship between the public and what they listen to. It is no longer a question of just entertainment and information. Issues like urgency, clarity and complete reliability become of utmost importance.

Of course, it would be nice to have one sound system, for both public address and emergency. Which is why Bosch developed the Praesideo. Now you can have the best of both worlds. Safe and sound.

A strategic partner... with over 50 years experience in public address

Bosch Security Systems is synonymous with quality and innovation in public address, and is uniquely positioned to translate customer requirements and wishes into products. How?

Proven track record

With over half a century of experience and know-how to call on, we make systems that are easy to understand, economical to install and a pleasure to operate.

Dedicated in-house development

Our own team of public address specialists is constantly looking for new ways of harnessing technological innovation for the benefit of our customers.

Innovative technology, world-class solutions

The Bosch organisation is renowned for developing products using the latest available technology, providing its customers with innovative, high quality solutions that are backed by world-class reliability and customer service.

Strategic partner

We don't just produce for you, we think with you. The Praesideo is another example of a system designed to meet the requirements of the market. Your requirements.



Get the message across - wherever, whenever, whatever



Although it combines public address and emergency, the Praesideo is more – much more – than just two systems rolled into one. It offers freedom in system configuration, extraordinary simplicity in installation, real power for the user, and quality at all times.

The name stems from the Latin Praesideo which means protect, support and assist. And that's exactly what it does.



Public Address Plus

In its everyday role as a public address system, the Praesideo is also in a league of its own. Some of the system highlights (explained in more detail on the following pages) include:

World's first fully digital public address and emergency sound system

Working in the digital domain brings unparalleled functionality and virtually limitless possibilities, as well as superb audio quality. And fibre optic cabling ensures signal integrity and allows considerable distances to be covered.

Networked for ultimate installation convenience

The Praesideo's ingenious network configuration means all elements are simply connected at the appropriate point in the network cabling. No extra wiring, no fuss. The entire system can be (re-)configured from a PC. Even remote access is possible via TCP/IP (Ethernet).

Distributed processing power brings incredible flexibility

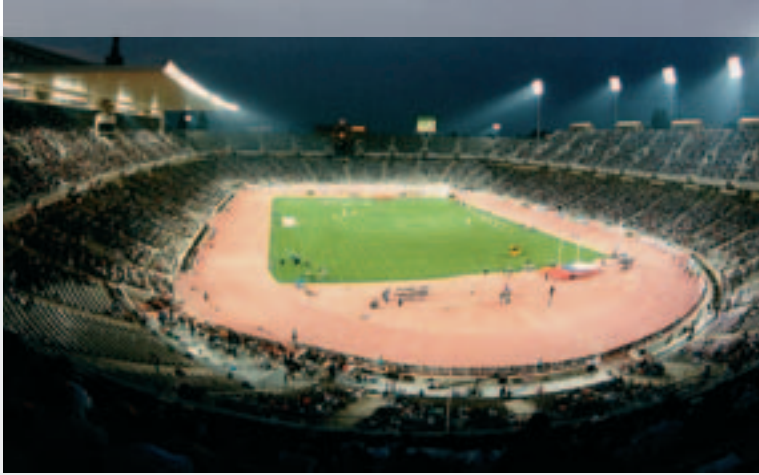
Virtually every system element has its own DSP (digital signal processor). This localized processing power means each unit can be optimised individually for the ambient acoustical environment and/or required functionality.

The Praesideo also:

- **Accepts many different types of input – call stations, microphones, music sources**
- **Provides multiple outputs – route messages to single or multiple zones**
- **Offers amazing variety – as many as 28 different uncompressed audio signals can be broadcast simultaneously**
- **Incorporates all the standard PA facilities such as priority calls, chimes and time signals, and playback of pre-recorded messages.**



Better sound quality, more options, greater distances that's digital



By keeping all audio processing, communication and control functions entirely in the digital domain, Praesideo moves public address and emergency onto a higher plane altogether. And remember – no other system does the same.



Digital means audio quality

Digital audio signals to CD quality make sure that messages are just as clear coming out of the system as they are when they go in. A vast amount of customized messages of all length can be recorded and stored – depending on the size of the flash-card. Another bonus is that the quality of digitally stored messages is guaranteed and its content is continuously monitored.

Digital innovation brings programming power and scalability

Messages can be selected for broadcast from any call station or control input. The system is fully programmable, which brings outstanding flexibility in terms of zone assignments and numbers, call stations, audio inputs and outputs, control inputs and outputs – and much more. And by incorporating DSPs and input/output contacts in virtually every element (node), you get true scalability.

The system's digital signal processing power and capabilities expand in tandem with the system itself – so you always have exactly what you require. This gives a major advantage in price.

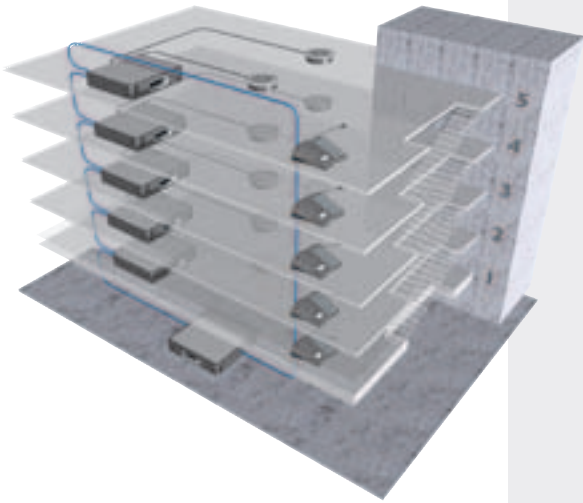
Optical distribution network for signal integrity

High reliability, redundancy and freedom from interference is ensured by the use of fibre optic network cabling.

Plastic or glass cabling – depending on the distance – is used, and a single network cable transmits all audio and control data.



The Praesideo network architecture means easier system design, greater reliability and improved performance



Freedom in locating equipment

Unlike traditional PA systems, the Praesideo uses a network configuration rather than having all system elements connected to a central controller. This architecture gives real freedom in system design. The 'daisy-chain' network topology means system elements can be connected (and added at a later date) to virtually any point.

The optical system cabling carries all signals, so no extra wiring is ever necessary.

Smaller systems can easily be expanded to match changing requirements, for instance creating new zones. And the flexible system architecture allows any type of equipment to be located wherever is most suitable in the building (e.g. power amplifiers closer to loudspeakers).

**Greater reliability**

What's more, by connecting the network ends together, a 'redundant' loop is created so any break in the cable doesn't affect operation – an important consideration in an emergency system. Automatic switching to spare elements in the system is possible if equipment operation is disrupted.

Distributed responsibility means better performance

Another feature of this network architecture is that the processing of audio input and output signals takes place in the individual system elements themselves. This brings amazing flexibility, because each unit can be individually optimised for its particular surroundings and required functionality.

This also allows the central system unit – the network controller - to concentrate on other activities like routing announcements and playing pre-recorded messages. This gives a much higher level of system optimisation than with centralized signal processing.

Designed for easy connection to the outside world



Easy interfacing with external equipment

The Praesideo is not just advanced in terms of its own system network architecture. By accommodating Ethernet as a standard interface, it interconnects easily with many other brands and types of third-party systems and peripherals: from simple contact inputs/outputs right up to Internet. Systems for fire alarm, remote control, automatic announcements, plus passenger information displays, can all be interfaced. As an example of the benefits this can bring, the Praesideo can be configured to automatically broadcast voice alarms on receiving input from a fire alarm system.

Simple (remote) configuration and diagnostics

The Praesideo uses web-based technology to enable authorized users to access and monitor the system from any location.

The network controller has an integrated web server, so system (re-)configuration is carried out quickly and easily from a PC running a standard Internet browser and logged into the network. This software-based configuration of all functional parameters means no programming is required at the equipment end, and also eliminates time-consuming changes in the system. The result: drastically reduced installation and commissioning time.

For instance, the software allows configuration of:

- Routing of all zones and audio inputs
- Priority levels (up to 256)
- Naming of all devices
- Sequences of messages & music
- Audio processing (e.g. parametric equalization)

And a great deal more besides.

Remote diagnostics and logging can also be carried out, which can lead to significant reductions in travel and reaction time.

Easy to use at all levels

And it's not just installation and configuration that's been made simple. Even user elements like call stations and the associated keypads combine elegance and functionality with straightforward operation.

The call station offers 'press to talk' operation, and the keypad can be pre-programmed so call sequences (macros) and message routing can be activated by pressing a single button.





A secure solution

IEC60849 certified

The Praesideo fully meets the requirements of many of the world's main standards for emergency sound systems (which include voice alarm and evacuation). In fact Praesideo is the first system which is certified according to the IEC60849 standard. To do so it must conform to many stringent conditions, and in some cases it even goes beyond: automatic and regular system monitoring, for instance, is carried out from the microphone capsule all the way to the loud-speaker – further than is actually required. This is typical of the Praesideo: it goes beyond just meeting standards. It sets them.

Solas certified

There is more. For the offshore market Praesideo is Solas certified by the renowned certification agency Germanischer Lloyd's. It meets the most stringent requirements for environmental conditions. No compromises as you can expect from the market leader for public address systems in the cruise-ship market.



Additional features include:

- Reach everyone: verbal alerts, pre-recorded messages and alarm signals can be broadcast throughout the entire premises – or to selected areas
- Meets evacuation requirements for fireman's call stations
- Constant, total system self-checking means it is always ready should an emergency arise
- Automatic switching to back-up equipment if operation is disrupted (redundancy)
- Redundant loop network

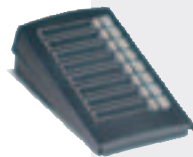
Everything you need for a total PA/emergency solution

The simple system philosophy behind Praesideo is demonstrated by the amount and total intercompatibility of system elements. By combining multiple functions in the units, the number of different system elements is kept to a minimum, thus simplifying both ordering and installation. Specifying and putting together a top-class public address and emergency sound system has never been this easy.



Call station

- Easy 'press to talk' operation, with loudspeaker and even a headset socket for monitoring
- Built-in DSP equaliser and limiter
- Stylish appearance



Call station keypad

- Connects to a call station for greatly increased functionality
- Eight pre-programmable selection keys allow for one-touch selection of messages, alarm signals, music, routing (zones) and a whole lot more

Network splitter

- Can be inserted anywhere in the system cabling
- Allows extra branches in the network to be created

Fibre interface

- Ensures optimum signal integrity for longer cable interconnections
- Conveys signals from plastic to glass fibre cabling or vice versa

Call station (keypad) kit

- Handy kit for building call station functionality into custom-made units, control desks or fireman's call stations



Network controller

- Heart of the system: stores all control information, configuration settings as well as pre-recorded audio messages
- Allows easy configuration of even the most complex systems from a PC
- Built-in web server allows configuration, diagnostics and logging from remote locations
- Constantly monitors all system components and reports any changes in status
- Provides general purpose audio inputs and outputs with digital audio processing
- Provides control inputs and outputs



Power amplifiers

- High-efficiency Class-D amplifiers generate less heat and allow for closer stacking in a 19" rack
- Digital audio processing and adjustable delay per channel
- Amplifier and loudspeaker line monitoring and spare amplifier switching
- Ambient microphone connection enables output level adjustment for maximum intelligibility
- Control inputs and programmable output relays for functions such as local volume control override
- 5 different models available



Audio expander

- Enables extra audio inputs and outputs to be added, so for instance additional background music, microphone or line signals can be fed into the system
- Digital audio processing for each input and output
- Control inputs and outputs act as an interface with external equipment such as alarm buttons, fire alarm systems and telephone exchanges

Bosch Security Systems
For more information please visit
www.boschsecuritysystems.com

Data subject to change without notice
Printed in The Netherlands
PA-EH-en-01_4998143941_02

Tradition of quality and innovation

For over 100 years, the Bosch name has stood for quality and reliability. Bosch Security Systems proudly offers a wide range of fire, intrusion, social alarm, CCTV, management and communication systems and components to help you find the solution for any application. We are the global supplier of choice for innovative technology backed by the highest level of service and support. When you need solutions you can rely on, choose Bosch.

Communication you can rely on



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