

Background music and paging in small to medium size businesses



Security Systems



Typical applications:

- Retail stores and supermarkets
- Leisure and sports centers
- Car dealerships with workshop
- Small factories and offices
- Schools

The Plena All-in-One is part of the Bosch Plena public address (PA) range. It contains a high-performance dual-zone 120 W mixing amplifier, a multi-format CD player (audio and MP3) and a digital FM/AM tuner in one box. The All-in-One is designed for small to medium sized applications requiring background music (BGM) plus easy to use facilities for paging personnel or making announcements. Being a 'one-box' solution, it occupies little space behind the sales counter or in the reception. This application note describes a basic configuration, plus a larger configuration that uses more of the standard built-in functionality.

Requirements:

Retail shop

- Non-stop BGM from CD or radio
- A hand-held microphone to call for assistance or inform customers about special offers

Solutions:

Basic Plena configuration

The Plena All-in-One has three microphone inputs. Input 1 has a selectable voice-activated (VOX) input with a convenient connector on the front panel.

For making announcements, a hand-held microphone is plugged into this input. Upon talking into, the BGM volume drops to a preset 'ducking' level.

The CD player can provide up to a whole day of music from MP3 files recorded on a single CD-R, or just play conventional CDs. The CD player also has random and repeat modes (for both audio-CD and MP3).

The FM/AM tuner has 15 presets for tuning to favorite stations and will automatically take over when the CD player is not active.

Requirements:

Bowling alley

- Loud BGM in one area and softer BGM in another area
- A microphone in reception or office for making announcements to selected areas
- A hand-held microphone for personnel to page customers

Solutions:

Full Plena configuration

The All-in-One has three microphone inputs. Input 1 has a priority feature for use with microphones with a remote switching contact. When this input is active, all other inputs, including the background music, are muted. This is used for making important (emergency) announcements. Microphones connected to input 2 or 3 are mixed with the music and can be used for paging customers.

The dual-zone amplifier in the All-in-One has two outputs that allow announcements from microphone input 1 (if not in priority mode), input 2 and 3 and BGM to be routed to one or both areas (or 'zones'). The level can be set separately for each area; for example, louder for the bowling lanes and softer in the bar. Announcements made with microphone input 1 set in priority mode will automatically be routed to all areas (or 'zones') at full level. A third output is also provided for announcement only (no BGM), for example in administration offices where music is not required.

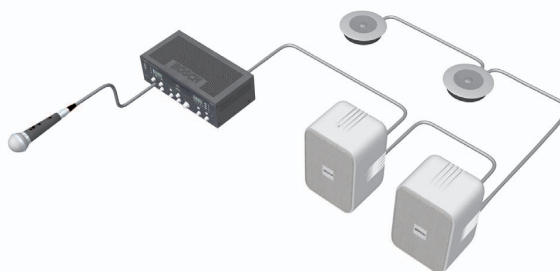
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PA accessories:

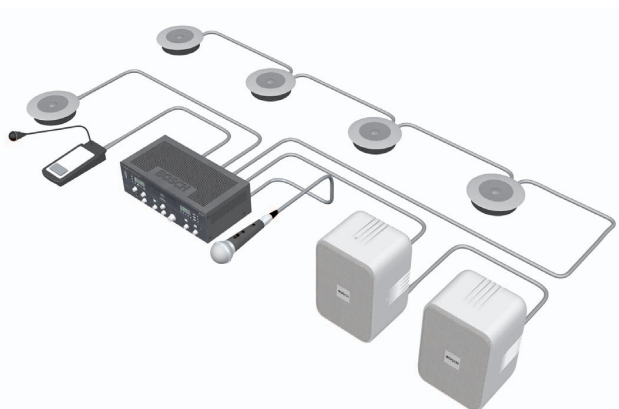
Bosch produces a wide range of microphones, loudspeakers and accessories for PA applications. Typical examples are given in the configurations in this application note, but there are many more suitable products in the Easy Line catalog.



Basic configuration		
Mixing amplifier	Plena BGM/paging system with	LBB 1970/00
CD player	VOX microphone input and	
FM/AM Tuner	MP3/CD-R compatible CD player	
Hand-held microphone	For paging and making announcements	LBC 2900/15
Loudspeakers	10 W (rated) ProSound cabinet speaker with high-frequency tweeter and dual voice coil woofer for music reproduction	LBC 3410/01
	6 W (rated) ceiling loudspeaker with a wide opening angle for excellent coverage	LBC 3951/01



Full configuration		
Mixing amplifier	Plena BGM/paging system with priority microphone input, dual-zone output and	LBB 1970/00
CD player	MP3/CD-R compatible CD player	
Table-stand microphone	For receptionist or manager to make priority (emergency) announcements	LBB 1950/10
Handheld microphone(s)	For the personnel to page customers, or customers to make a celebration speech	LBC 2900/20
Loudspeakers	10 W (rated) ProSound cabinet speaker with high-frequency tweeter and dual voice coil woofer for music reproduction	LBC 3410/01
	6 W (rated) ceiling loudspeaker with a wide opening angle for excellent coverage	LBC 3951/01



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