HIGH-PERFORMANCE COMMERCIAL AUDIO SOLUTIONS

INTRODUCTION

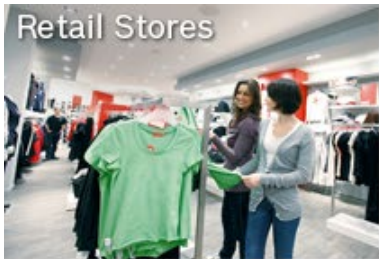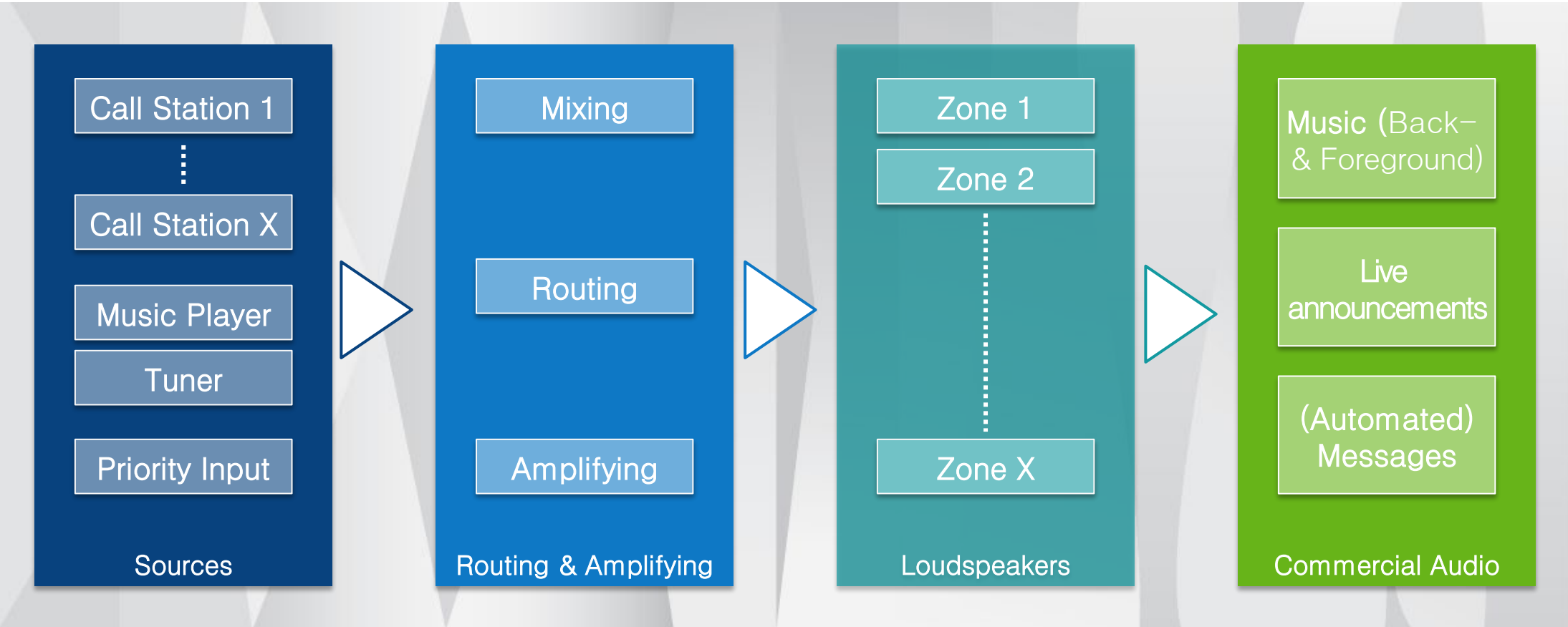
EMEA REGION

BOSCH

Commercial Audio
What is it?

▶ Bosch Commercial Audio products provide different **control methods and speaker types** to help you **create elegant and comfortable** environments, and **enhance** your customer's **experience.**

▶ While the prime focus is on providing a matching atmosphere with **foreground, background and business supporting music**, the systems may also be able to broadcast **advertisements and voice announcements**.

▶ Commercial Audio Systems are used as **stand-alone** and as **extended parts of a PAVA solution** in areas where acoustically pleasant ambience is essential in addition to safety.

Retail Stores | Shopping Malls | Restaurants | Cafes | Offices
Hotels | Fitness Centers | Schools | Houses of Worship | Conference Rooms

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What is it?

Sources
- Call Station 1
- ⋮
- Call Station X
- Music Player
- Tuner
- Priority Input

Routing & Amplifying
- Mixing
- Routing
- Amplifying

Loudspeakers
- Zone 1
- Zone 2
- Zone X

Commercial Audio
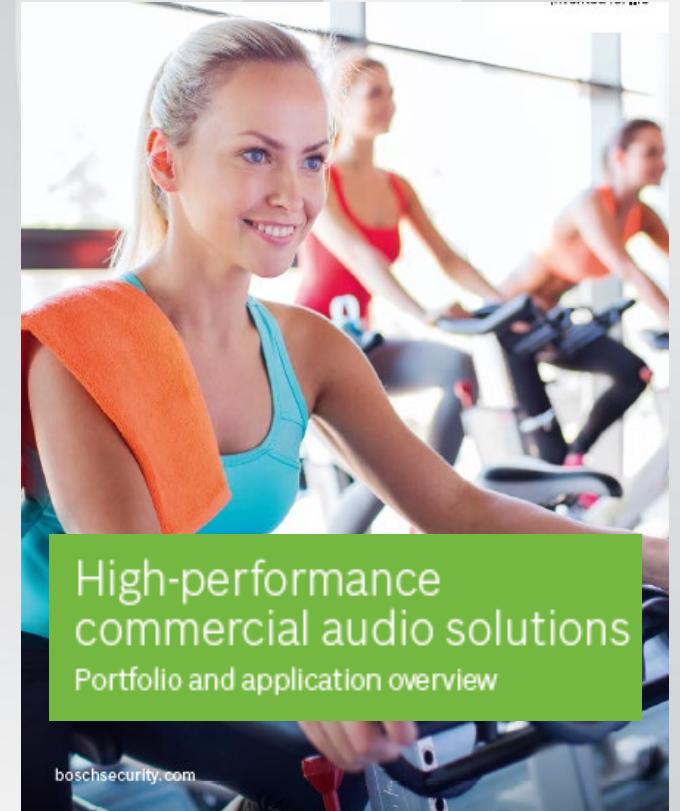- Music (Back- & Foreground)
- Live announcements
- (Automated) Messages

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Commercial Audio
What makes us different?

We have been renowned worldwide for **over 90 years** for the quality and reliability that our audio products bring

Enhancing customer experience in all types of business and leisure environments.

3,5 Million Watts of Bosch Commercial Audio installed in EMEA annually

High-performance commercial audio solutions
Portfolio and application overview

boschsecurity.com

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Commercial Audio
We offer more

We are present in more than **150 Countries** and focus on putting our customers first. **Experts** with the required **Knowledge** will help answer your questions and face challenges together with you.

As a customer it is important to be able to rely on the **Quality** of the audio systems, as well as the Bosch **Warranty**, and that you can **Trust** Bosch as a partner.

We address customer needs with **Easy-to-install Low Profile**, yet **High Performance** sound solutions for **Applications of Every Size**.

Local support

Customer service

Product reliability

Partnership

Broad portfolio of electronics and loudspeakers

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Commercial Audio
Cater for all types of applications

Project sizes and level

Entry-level	Extended	Professional
e.g. Office, Restaurant, Bar or Retail Shop	e.g. Supermarket, Department Store or Mall	e.g. Clothing Store, Conference Hotel, Boardroom or Fitness Center

Entry-level applications, 1 to 2 zones when plug-and-play concept is required

PLENA Easy line

Small-to-mid applications, up to 6 zones when parallel zoning features and control is required

PLENA All-in-one

Small-to-mid applications, up to 8 zones when foreground professional audio is required

PLENA Matrix

BARS / CAFÉS

RESTAURANTS

RETAIL SHOPS

DEPAREMENT STORES

FASHION STORES

SUPERMARKETS

MALLS

SCHOOLS

FITNESS CENTERS

CASINOS

HOTELS

CONFERENCE ROOMS

OFFICES

HOUSES OF WORSHIP

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Commercial Audio
Professional application areas

▶ Digital Sound System "Surprisingly Flexible, Powerful Control"

▶ Adjustable to the acoustic needs of the environment

Call station
Capacitive touch buttons
for zone selection

Wired and wireless control
through wall panel, PC and iOS App

Multi channel DSP amplifiers
4x125 W & 4x220 W power
version with built-in DSP

**Channel DSP
matrix mixer**
Processor with
8x8 in/out matrix

Separate PC / iOS controls
for amplifiers and controller

PLENA Matrix

• System for 8 zones or
  8 mixed channels of music
  and speech
• Powerful digital signal
  processing capabilities
• Amplifiers can be used for
  standalone applications
• Smart power management in
  amplifiers to reduce energy cost

BARS / CAFÉS	
RESTAURANTS	
RETAIL SHOPS	
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FASHION STORES	
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MALLS	
SCHOOLS	
FITNESS CENTERS	
CASINOS	
HOTELS	
CONFERENCE ROOMS	
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HOUSES OF WORSHIP	

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Extended application areas

▶ Compact, standalone and plug-and-play concept for mid-sized application areas with public address functionality

▶ Smart configuration via DIP-switches

PLENA All-in-one

- 6-zone BGM and paging system, with built-in tuner and USB/SD player
- Option to create 2 channel system with speech in one zone and music in another
- Call station with built-in limiter to prevent message distortion

Call station
6 zones,
configurable gain,
speech filter and limiter

Remote control
remote music source
selection and remote input

Controller
6 zone paging system
with built-in 240W amplifier

Optional external amp
Extending with PLN-1Pxxx creates
2 channel audio system

Integrated music unit
Built in tuner and MP3 player
(USB + SD)

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Entry-level application areas

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▶ Compact, standalone and intelligent plug-and-play concept for quality music and outstanding speech intelligibility

▶ Versatility and reliability with choice of mixer, 1- or 2-zone mixer amplifiers and power amplifiers

▶ Easy-to-use with zone labeling and setting indicators

PLENA Easy line

- Compact system for 1 or 2 zones
- Built-in limiter to control the output from distortion
- Up to 10 inputs, including emergency input for PA/VA integration
- Smart equalization for superb sound and speech reproduction

Mixer amplifier PLE-1ME
4 Mic/Line inputs + 1 BGM input;
1 channel, 1 zone
Built-in 60W, 120W or 240W amp

Mixer amplifier PLE-1MA
4 Mic/Line inputs + 3BGM inputs
+ priority (100V) input
1 channel, 1 zone
Built-in 30W, 60W or 120W amp

Call station PLE-1CS
1 zone

Call station PLE-2CS
2 zones

Mixer amplifier PLE-2MA
4 Mic/Line + 3 BGM inputs +
priority (100V) input
1 channel, 2 zones
Built in 120/240W amp

Wall panel PLE-WP3S2Z
Source and zone selection

Power amplifiers PLE-1Px
120W and 240W amps

Mixer PLE-10M2
6 Mic/Line + 3 BGM inputs +
priority (100 V) input
2 channel, 2 zones
Combine with any type of power amp

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Amplifiers

▶ 4-channel amplifier, with a total powerTANK capacity of 600 W

▶ dualCOOL convection cooling with additional intelligent fan in case of extreme thermal conditions

▶ ecoRAIL and APD deliver significant reduction in power consumption

▶ Variable Load Drive (VLD) providing the same power into 4 Ω, 8 Ω, 70 V or 100 V

PRM-4P600

- 4-channel amplifier
- Ideally suited to background music and clear voice announcement
- 1" rack unit size design
- Maximum 600 W on a single channel possible

Reliable
Great, leading value, trouble free operation

ECO-friendly
Energy-cost-saving

Flexible
Convenient, easy handling and specifying

BARS / CAFÉS

RESTAURANTS

RETAIL SHOPS

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HOUSES OF WORSHIP

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Commercial Audio
Loudspeakers that cater for all types of applications

Ceiling	Surface	Pump up the bass
e.g. Office, Restaurant or Bar	e.g. Supermarket or Retail Store	The role subs play in music systems is crucial

Ceiling
e.g. Office, Restaurant or Bar

LC20
Background, Foreground + PA

LC2
Background, Foreground + PA

LC9-UC06B
Background + PA

LC9-UC06B
Background + PA

Performance

Surface
e.g. Supermarket or Retail Store

LB20
Background, Foreground + PA

LB9-UC06
Background + PA

LB2
Background, Foreground + PA

LB10
Background, Foreground + PA

Performance

Pump up the bass
The role subs play in music systems is crucial

LB20 subwoofer
great fit for LB20, LC20 and LC2 families

LC2 subwoofer
great fit for LC20 and LC2 families

Performance

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Commercial Audio
Premium sound LB20 series − Installation as easy as 1-2-3!

Complete range
- Range of 4,5,8 inch models, 8Ω/100V, 2x10" Sub
- Installed vertically, horizontally and ceiling
- Available in black/white and all models paintable

full-range

Quick, easy installation
- Pre-wired easy mounting system
- Water bubble
- Paint shield protecting bracket

user-experience

Performance at competitive price
- Fitting a good, better, best approach for Bosch premium commercial audio speakers
- Positioned at competitive levels

cost-effective

Flexible & reliable
- Indoor & outdoor applications (IP54/IP65)
- 5x model to be EN54 certified

certification

1 PRE-WIRE: Attach the wall-mount and terminate the cables inside. A built-in bubble level saves time.

2 PROTECT: Apply the paint cover to protect the wall-mount until construction is completed.

3 PLACE: Simply slide the pre-wired speaker with adjustable arm onto the wall-mount and lock into place.

LB20 SERIES
Commercial loudspeakers with easy wall-mount system

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Commercial Audio
Premium sound LB10 series

Danny, is this overview still correct?

Should we remove or add products?

Complete range	• Range of 6W, 100V wall mount speakers • Angled and volume control versions • Available in black/white	full-range

Volume control versions

Quick, easy installation	• Keyholes provide easy and quick wall mounting • Four-pole screw terminal block is on the rear panel for on-site wiring.	user-experience

Angled versions

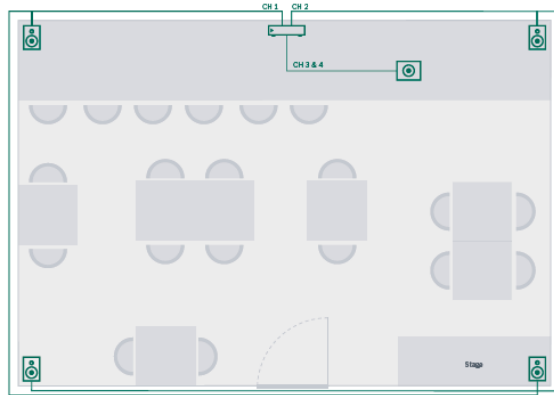|		
Performance at competitive price	• Fitting a good-better-best approach for Bosch premium commercial audio speakers • Good speech intelligibility and background music reproduction	cost-effective

Prepared for wall mounting

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Overview example applications

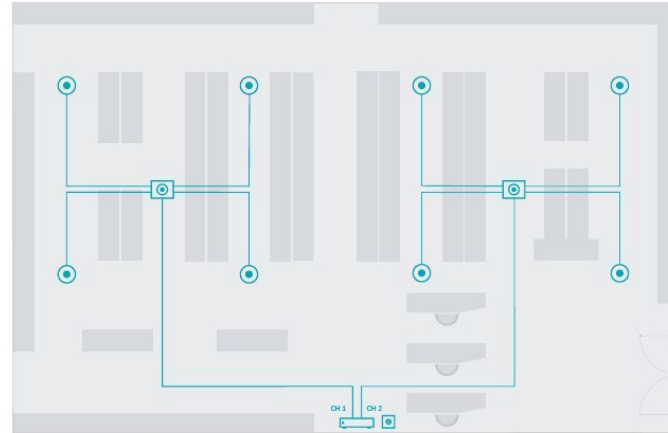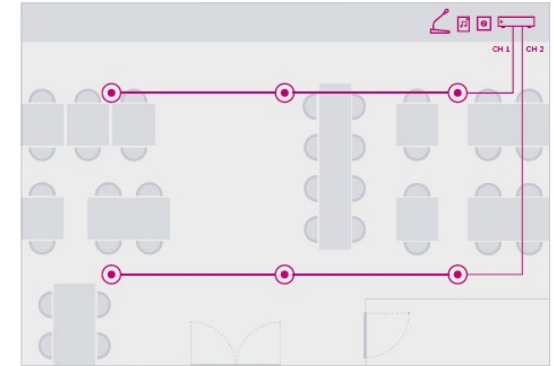| PLENA Matrix	PLENA All-in-One	PLENA Easy Line
Cafe/Bar: approx. 100 - 200 m² (328-656 ft²) 1 zone - For background music & occasional live performance/speech - Loudspeakers for indoor and outdoor installation	**Supermarket:** approx. 500 - 800 m² (1640-2624 ft²) - Built-in AM/FM tuner with presets, MP3 player for USB device and SD card - Flexible control via wall panel	**Fast Food Restaurant:** approx. 150 - 250 m² (492-820 ft²) 2 zones - Separate tone control for voice and music - Priority input for (emergency) broadcast announcements

LEGEND

LG-Z	Premium commercial loudspeaker LB20-PC90-8	
LG-Z	Premium subwoofer LB20-SW400	
	PLENA matrix power amplifier PLM-4P220	

Channels limited to match loudspeaker power
Channel 1 & 2: 4 Ω
Channel 3 & 4: 8 Ω

LEGEND

	Compact Sound satellite speaker LC6-5 Satellite speaker	
	Compact Sound subwoofer LC6-SW100	
	PLENA All-in-one PLN-6AIO240	
	PLENA wall control panel controller PLN-4S6Z	

LEGEND

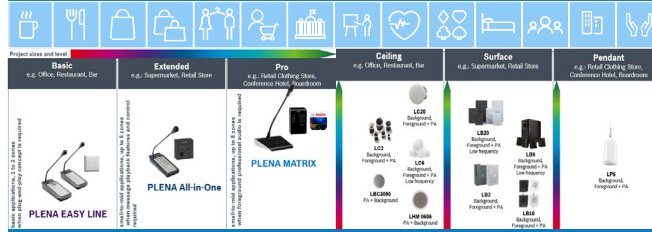|		
	Premium ceiling loudspeaker LC2-PC30G6-4	
	PLENA mixer amplifier PLE-2MA240	
	PLENA All-Call call station PLE-ICS	
♫	Music Source	
	Volume control LBC 1411/00	

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Commercial Audio
Why Bosch Commercial Audio?

Expertise and outstanding quality in commercial audio

- ▶ Vast experience and expertise wins over customers
- ▶ Solid and reliable product performance delivering high quality audio for every price range

Wide and resilient commercial audio and speaker portfolio

- ▶ Contribute to a better world
- ▶ Cater for all sizes and types of applications, even large, integrated project solutions
- ▶ Fulfilling budget background music as well as high quality foreground music and announcement requirements

Global partnerships and closeness to customers

- ▶ Support our customers to shape their future

Building solutions for a better life

Anticipating · Sustainable · Inspiring

Integrating Solutions

We offer end-to-end solutions that are anticipating, sustainable and inspire new opportunities for our commercial audio customers

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CORIANDER LEAF, SINGAPORE – RESTAURANTS
PLENA MATRIX

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