High-performance commercial audio solutions
Portfolio and application overview
Retail and hospitality businesses are finding new ways to connect with consumers, with the most successful businesses positioning themselves as more than simple shopping locations. They are transforming into distinctive environments of spiritual and emotional consumption, becoming gathering sites where friends share space while adding new clothes, products and experiences to their lives.

Research shows that music systems help provide an enjoyable atmosphere and can be used to encourage more sales.
For over a century, Bosch has been known worldwide for the quality and reliability of its products and services. It is also the only supplier that ranks among the top three firms in both the professional music and public address (PA) system industries. Bosch commercial audio solutions provide different control methods and speaker types geared to the needs of different business environments. Bosch commercial audio solutions create an encouraging and comfortable business environment. They also enhance the retail and hospitality customer experience, creating more opportunities for business owners, while increasing brand value.

**Outstanding business environment**
- Enhances the customer experience
- Creates new revenue opportunities
- Meets the growing expectations of customers

**Music helps create a unique customer experience**
- Sound is a highly influential stimulus
- Music can recall wonderful memories and emotions
- At a suitable volume it can mask or distract from unpleasant background noise

**Commercial Audio system features**
- Reliable, easy to install and use
- Balanced frequency response at low volumes
- Low profile, easily integrated into the decor

**The value of Commercial Audio**
- Prolongs customer stay
- Subtle influence and marketing
- Creates recognizable music associated with a particular company or brand
Bar/Cafe

Creating a cool trendy environment is essential for small bars and cafes. They generally require compact sound solutions to cater to their background music needs, as they have smaller distances and fewer zones to cover. Loudspeaker systems such as the LB20 premium commercial loudspeakers provide superior acoustics for these kind of venues. The perfect addition to these loudspeakers is the PLENA matrix – ensuring excellent sound thanks to a smart equalizing approach and built-in limiters. Low operating costs and expandability additionally ensure that the system can be used for years to come.

**Highlights/requirements**
- Café/bar area: approx. 100 - 200 m² (328 - 656 ft²) 1 zone
- For background music and occasional live performance/speech
- Loudspeakers for indoor and outdoor installation
LEGEND

Premium commercial loudspeaker
LB20-PC90-8

Premium subwoofer
LB20-SW400

PLENA matrix power amplifier
PLM-4P220

The layouts are for general and visual purposes only and should not be directly applied to any installation.

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

Breakfast, lunch and dinner for the fast food restaurant means peak noise levels from hungry customers and seated eaters alike. Maintaining a welcoming and safe environment means being able to accurately adapt to noise levels at these peak times as well during quieter periods. Background music is a vital support for restaurant staff in maintaining comfort levels, and a PLENA sound system plays a central role in keeping customers happy at any time of day or night. With 4 mic/line inputs for connection to the Plena Call Station, 3 music inputs and an emergency/telephone input, this mixing amplifier can deliver 120 Watts while maintaining full music and audio clarity. Add the LC2 premium ceiling loudspeakers to tailor the set-up to suit every taste.

Highlights/requirements
- Restaurant area: approx. 150 - 250 m² (492 - 820 ft²) 2+ zones
- Separate tone control for voice and music
- 2 Priority inputs for (emergency) broadcast announcement
The layouts are for general and visual purposes only and should not be directly applied to any installation.
Cozy dining - it’s all about intimacy and the background music helps to create this. Suitable for small/medium-sized restaurants, the PLENA matrix Digital Sound System is a quality step-up solution with more functionality than ordinary consumer audio products. It is possible to cover several areas including the restaurant itself as well as the adjoining kitchen or service area. With the integrated wall panels, restaurant managers can choose the music source and control the volume of the zones remotely.

Small / Midsized Restaurant

**Highlights/requirements**
- Restaurant area: approx. 400 - 500 m² (1312 - 1640 ft²) 2+ zones
- High quality audio with acoustically balanced crossover point
- Suitable for occasional live performance/speech
- Zone volume can be independently adjusted
- Priority for emergency broadcast announcement
The layouts are for general and visual purposes only and should not be directly applied to any installation.

**LEGEND**

- **100V**
  - Premium commercial loudspeaker
  - LB20-PC30-5

- **LO-Z**
  - Premium commercial loudspeaker
  - LB20-PC90-8

- **Premium ceiling loudspeaker**
  - LC2-PC30G6-8

- **PLENA matrix mixer**
  - PLM-8M

- **PLENA matrix power amplifier**
  - PLM-4P220

- **PLENA matrix wall control panel**
  - PLM-WCP

Channels 1 & 2 limited to match loudspeaker power
Large Restaurant

Dining out with family or friends should be a memorable and pleasant occasion. With the PLENA matrix Digital Sound System, your guests will always enjoy the perfect accompaniment to their dining experience. Simply link it to a media set, MP3 player or smart phone, and experience exceptional sound via our compact and stylish loudspeakers. If you need to make an announcement to guests or employees, use the system’s call station for clear and audible messaging. Multiple zones are supported, so atmospheric music can be played in the dining area, while employees can be addressed separately in the kitchen. Additional call stations can be integrated as required.

**Highlights/requirements**
- Restaurant area: approx. 1500 - 2000 m² (4921 - 6561 ft²)
- Up to 8 independent zones
- 3 different music channels in different zones
- Flexible control via wall panel, PC or mobile devices
- Option for PA announcements
The layouts are for general and visual purposes only and should not be directly applied to any installation.

Channels 1 & 2 limited to match loudspeaker power.
Whether it is an afternoon of casual browsing or looking for a specific item, the shopping experience should be rewarding, comfortable and fun. Attracting customers into a shop and keeping them there both rely on providing a sense of welcome and well-being. That’s where a high-quality music and voice announcement system really helps, both in setting the mood for shopping and for keeping shoppers informed. Busy retail stores with multiple sections and floors can often find this challenging, but not any longer. The PLENA matrix Digital Sound System, combined with the LB20 premium commercial loudspeakers, delivers beautiful audio for music and messaging. This stylish system hits exactly the right note for the perfect shopping experience.

**Midsized Shop**

**Highlights/requirements**
- Shop area: approx. 500 - 800 m² (1640 - 2624 ft²)
- Up to 8 independent zones
- Room acoustics and loudspeaker equalizing adjustments possible
- 4 microphone/line, 3 music source, call station and emergency input
- Flexible control via wall panel, PC or mobile device
LEGEND

- **Premium commercial loudspeaker**
  - LB20-PC30-5

- **Premium ceiling loudspeaker**
  - LC2-PC30G6-8

- **Premium subwoofer**
  - LB20-SW400

- **PLENA mixer**
  - PLE10M2

- **PLENA matrix amplifier**
  - PLM-4P220

- **PLENA Two-zone call station**
  - PLE-2CS

- **SD Player/Tuner BGM source**
  - PLE-SDT

The layouts are for general and visual purposes only and should not be directly applied to any installation.
Supermarket

Supermarkets have different periods of heavy foot traffic, with daily customers looking for last-minute goods or families doing the weekly shopping. High noise levels at till areas and entrances/ exits, combined with the need for constant paging/messaging alerts and special offers, all make the supermarket a challenging environment for owners. We now have a perfect solution that ensures the entire supermarket floor space is adequately covered for audible messaging, background music and announcements. The Compact Sound System combined with the PLENA All-In-One Unit including paging system is an easy-to-use out-of-the-box solution, delivering high quality sound and intelligible voice announcements and special announcements in targeted areas.

Highlights/requirements
- Supermarket area: 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
- Up to 6 independent zones
The layouts are for general and visual purposes only and should not be directly applied to any installation.
Fitness Centre

Fitness goals need focus, and a great gym environment requires the right music to keep the practice rhythm and pace. Whether that’s a soothing mantra in the yoga section, or a techno vibe in the cardio area, it’s clear that a capable system should be able to handle different music and volumes at the same time. Enter the PLENA matrix Digital Sound System, with intuitive configuration interfaces for ease-of-use for different zones or sections. Combine it with LB20 Premium commercial loudspeakers, and visitors will enjoy exceptional sound throughout their fitness journey.

Highlights/requirements
- Fitness area: approx 800 - 1000 m² (2624 - 3280 ft²)
- Up to 8 zones
- Flexible control via PC or iOS app
- Supports enhancing fitness experience with foreground music, background music, live speech and announcements
The layouts are for general and visual purposes only and should not be directly applied to any installation.
# Loudspeakers

<table>
<thead>
<tr>
<th></th>
<th>LC6-S-L</th>
<th>LC6-SW100-L</th>
<th>LC2-PC30G6-4</th>
<th>LC2-PC30G6-8</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>2” Full-Range Ceiling Loudspeaker</td>
<td>8” Ceiling Subwoofer</td>
<td>4” Two-Way Coaxial Ceiling Loudspeaker</td>
<td>8” Two-Way Coaxial Ceiling Loudspeaker</td>
</tr>
<tr>
<td><strong>Frequency Range</strong></td>
<td>180 Hz - 20 kHz</td>
<td>45 Hz - 300 kHz</td>
<td>65 Hz - 20 kHz</td>
<td>50 Hz - 20 kHz</td>
</tr>
<tr>
<td><strong>Sensitivity (1 W/1 m)</strong></td>
<td>84 dB</td>
<td>88 dB</td>
<td>86 dB</td>
<td>91 dB</td>
</tr>
<tr>
<td><strong>Max. SPL (@1m)</strong></td>
<td>102 dB</td>
<td>114 dB</td>
<td>109 dB</td>
<td>116 dB</td>
</tr>
<tr>
<td><strong>Power Handling</strong></td>
<td>15/30/60 W</td>
<td>100/200/400 W</td>
<td>50/100/200 W</td>
<td>75/150/300 W</td>
</tr>
<tr>
<td><strong>Nominal Impedance</strong></td>
<td>16 Ω</td>
<td>4 Ω</td>
<td>8 Ω</td>
<td>8 Ω</td>
</tr>
<tr>
<td><strong>Transformer Taps</strong></td>
<td>N/A</td>
<td>70 V: 100, 50, 25, 12.5 W and 4/8 Ω</td>
<td>70 V: 30, 15, 7.5, 3.75, 1.8 W and 8 Ω</td>
<td>70 V: 30, 15, 7.5, 3.75, 1.8 W and 8 Ω</td>
</tr>
<tr>
<td><strong>Coverage (Conical)</strong></td>
<td>100°</td>
<td>Omnidirectional</td>
<td>130°</td>
<td>110°</td>
</tr>
<tr>
<td><strong>Coverage (H x V)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>HF Transducer</strong></td>
<td>N/A</td>
<td>N/A</td>
<td>0.75” (19 mm)</td>
<td>1” (25 mm)</td>
</tr>
<tr>
<td><strong>LF Transducer</strong></td>
<td>2” (50 mm)</td>
<td>12” (305 mm)</td>
<td>4” (100 mm)</td>
<td>8” (200 mm)</td>
</tr>
<tr>
<td><strong>Environmental</strong></td>
<td>Indoor</td>
<td>Indoor</td>
<td>Indoor</td>
<td>Indoor</td>
</tr>
<tr>
<td><strong>Certification</strong></td>
<td>UL 1480A, UL 2043, CE</td>
<td>UL 1480A, UL 2043, CE</td>
<td>UL 1480A, UL 2043, CE</td>
<td>UL 1480A, UL 2043, CE</td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>White (RAL 9003)</td>
<td>White (RAL 9003)</td>
<td>White (RAL 9010)</td>
<td>White (RAL 9010)</td>
</tr>
<tr>
<td><strong>Cutout Dimensions</strong></td>
<td>114 mm (4.49”)</td>
<td>346 mm (13.6”)</td>
<td>183 mm (7.19”)</td>
<td>269 mm (10.6”)</td>
</tr>
<tr>
<td><strong>Diameter</strong></td>
<td>135 mm (5.3”)</td>
<td>373 mm (14.69”)</td>
<td>181 mm (7.1”)</td>
<td>300 mm (11.8”)</td>
</tr>
<tr>
<td><strong>Depth</strong></td>
<td>119 mm (4.7”)</td>
<td>316 mm (12.44”)</td>
<td>176 mm (6.9”)</td>
<td>255 mm (10.0”)</td>
</tr>
<tr>
<td><strong>Height</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Width</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>0.82 kg (1.8 lb)</td>
<td>9.52 kg (21 lb)</td>
<td>2.7 kg (6.0 lb)</td>
<td>5 kg (11.0 lb)</td>
</tr>
</tbody>
</table>

*Also available in white LB6-S-L LB6-SW100-L
<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>LC2-PC60G6-10</th>
<th>LC20-PC60G6-6</th>
<th>LC20-PC60G6-8</th>
<th>LB6-S</th>
<th>LB6-SW100</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC6-S-L</td>
<td>2&quot; Full-Range Ceiling Loudspeaker</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC6-SW100-L</td>
<td>8&quot; Ceiling Subwoofer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC2-PC30G6-4</td>
<td>4&quot; Two-Way Coaxial Ceiling Loudspeaker</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC2-PC30G6-8</td>
<td>8&quot; Two-Way Coaxial Ceiling Loudspeaker</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LB2-PC60G6-10</td>
<td>10&quot; High-Power Ceiling Subwoofer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LB6-S</td>
<td>6.5&quot; Premium Two-Way Coaxial Ceiling Loudspeaker</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LB6-SW100</td>
<td>8&quot; Surface-Mount Subwoofer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC20-PC60G6-6</td>
<td>8&quot; Ceiling Subwoofer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC20-PC60G6-8</td>
<td>10&quot; High-Power Ceiling Subwoofer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC2-PC30G6-4</td>
<td>4&quot; Two-Way Coaxial Ceiling Loudspeaker</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC2-PC30G6-8</td>
<td>8&quot; Two-Way Coaxial Ceiling Loudspeaker</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC6-S-L</td>
<td>2&quot; Full-Range Surface-Mount Loudspeaker</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC6-SW100-L</td>
<td>8&quot; Surface-Mount Subwoofer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Frequency Range (-10 dB)**
- LC6-S-L: 180 Hz - 20 kHz
- LC6-SW100-L: 45 Hz - 20 kHz
- LC2-PC30G6-4: 180 Hz - 20 kHz
- LC2-PC30G6-8: 45 Hz - 150 kHz

**Sensitivity (1 W/1 m)**
- LC6-S-L: 84 dB
- LC6-SW100-L: 88 dB
- LC2-PC30G6-4: 86 dB
- LC2-PC30G6-8: 91 dB

**Max. SPL (@1m)**
- LC6-S-L: 102 dB
- LC6-SW100-L: 114 dB
- LC2-PC30G6-4: 109 dB
- LC2-PC30G6-8: 116 dB

**Power Handling (Continuous/Program/Peak)**
- LC6-S-L: 15/30/60 W
- LC6-SW100-L: 100/200/400 W
- LC2-PC30G6-4: 50/100/200 W
- LC2-PC30G6-8: 75/150/300 W

**Nominal Impedance**
- LC6-S-L: 16 Ω
- LC6-SW100-L: 4 Ω
- LC2-PC30G6-4: 8 Ω
- LC2-PC30G6-8: 8 Ω

**Transformer Taps**
- LC6-S-L: N/A
- LC6-SW100-L: 70 V: 100, 50, 25, 12.5 W and 4/8 Ω
- LC2-PC30G6-4: 70 V: 30, 15, 7.5 W and 8 Ω
- LC2-PC30G6-8: 70 V: 60, 30, 15 W and 8 Ω

**Coverage (Conical)**
- LC6-S-L: 100° Omnidirectional
- LC6-SW100-L: 130°
- LC2-PC30G6-4: 110°
- LC2-PC30G6-8: 180°

**Coverage (H x V)**
- LC6-S-L: 100° x 100° Omnidirectional
- LC6-SW100-L: 100° x 120°
- LC2-PC30G6-4: 120°
- LC2-PC30G6-8: 100° x 120°

**HF Transducer**
- LC6-S-L: N/A
- LC6-SW100-L: N/A
- LC2-PC30G6-4: 0.75" (19 mm)
- LC2-PC30G6-8: 1" (25 mm)

**LF Transducer**
- LC6-S-L: 2" (50 mm)
- LC6-SW100-L: 12" (305 mm)
- LC2-PC30G6-4: 4" (100 mm)
- LC2-PC30G6-8: 8" (200 mm)

**Environmental**
- LC6-S-L: Indoor
- LC6-SW100-L: Indoor
- LC2-PC30G6-4: Indoor
- LC2-PC30G6-8: Indoor

**Certification**
- LC6-S-L: UL 1480A, UL 2043, CE
- LC6-SW100-L: UL 1480A, UL 2043, CE
- LC2-PC30G6-4: UL 1480A, UL 2043, CE
- LC2-PC30G6-8: UL 1480A, UL 2043, CE

**Color**
- LC6-S-L: White (RAL 9003)
- LC6-SW100-L: White (RAL 9003)
- LC2-PC30G6-4: Black (RAL 9003)
- LC2-PC30G6-8: Black (RAL 9003)

**Cutout Dimensions**
- LC6-S-L: 114 mm (4.49")
- LC6-SW100-L: 346 mm (13.6")
- LC2-PC30G6-4: 183 mm (7.19")
- LC2-PC30G6-8: 269 mm (10.6")

**Diameter**
- LC6-S-L: 119 mm (4.7")
- LC6-SW100-L: 316 mm (12.44")
- LC2-PC30G6-4: 176 mm (6.9")
- LC2-PC30G6-8: 255 mm (10.0")

**Depth**
- LC6-S-L: 119 mm (4.7")
- LC6-SW100-L: 316 mm (12.44")
- LC2-PC30G6-4: 176 mm (6.9")
- LC2-PC30G6-8: 255 mm (10.0")

**Width**
- LC6-S-L: 135 mm (5.3")
- LC6-SW100-L: 373 mm (14.69")
- LC2-PC30G6-4: 181 mm (7.1")
- LC2-PC30G6-8: 300 mm (11.8")

**Height**
- LC6-S-L: 115 mm (4.53")
- LC6-SW100-L: 400 mm (15.75")
- LC2-PC30G6-4: 181 mm (7.1")
- LC2-PC30G6-8: 300 mm (11.8")

**Weight**
- LC6-S-L: 0.82 kg (1.8 lb)
- LC6-SW100-L: 9.52 kg (21 lb)
- LC2-PC30G6-4: 2.7 kg (6.0 lb)
- LC2-PC30G6-8: 5 kg (11.0 lb)

- LC6-S-L: 7 kg (15.43 lb)
- LC6-SW100-L: 8 kg (17.6 lb)
- LC2-PC30G6-4: 0.5 kg (1.1 lb)
- LC2-PC30G6-8: 18.26 kg (40.25 lb)
## Loudspeakers (continued)

<table>
<thead>
<tr>
<th>Description</th>
<th>LB1-UM20</th>
<th>LB1-UM50</th>
<th>LB2-UC15</th>
<th>LB2-UC30</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>5&quot; Full-Range 20 W EN54 Surface Mount Loudspeaker</td>
<td>5&quot; Full-Range 50 W EN54 Surface Mount Loudspeaker</td>
<td>4&quot; Full-Range Surface Mount Loudspeaker</td>
<td>5&quot; Full-Range Surface Mount Loudspeaker</td>
</tr>
<tr>
<td><strong>Frequency Range</strong></td>
<td>90 Hz - 20 kHz</td>
<td>90 Hz - 20 kHz</td>
<td>95 Hz - 20 kHz</td>
<td>100 Hz - 19 kHz</td>
</tr>
<tr>
<td><strong>Sensitivity (1 W/1 m)</strong></td>
<td>88 dB</td>
<td>91 dB</td>
<td>87 dB</td>
<td>90 dB</td>
</tr>
<tr>
<td><strong>Max. SPL (@1m)</strong></td>
<td>101 dB</td>
<td>108 dB</td>
<td>99 dB</td>
<td>105 dB</td>
</tr>
<tr>
<td><strong>Nominal Impedance</strong></td>
<td>8 Ω</td>
<td>8 Ω</td>
<td>8 Ω</td>
<td>8 Ω</td>
</tr>
<tr>
<td><strong>Transformer Taps</strong></td>
<td>70 V: 20, 10, 5, 2.5 W 100 V: 20, 10, 5, 2.5 W</td>
<td>70 V: 50, 25, 12.5, 6.2, 5 W 100 V: 50, 25, 12.5, 6.2, 5 W</td>
<td>70 V: 15, 7.5, 3.75, 1.9 W 100 V: 15, 7.5, 3.75, 1.9 W</td>
<td>70 V: 30, 15, 7.5, 3.75 W 100 V: 30, 15, 7.5, 3.75 W</td>
</tr>
<tr>
<td><strong>Coverage (Conical)</strong></td>
<td>174 x 127° (@1K)</td>
<td>186 x 84° (@1K)</td>
<td>184 x 170° (@1K)</td>
<td>110 x 110°</td>
</tr>
<tr>
<td><strong>HF Transducer</strong></td>
<td>1 inch (25.4 mm)</td>
<td>1 inch (25.4 mm)</td>
<td>0.75 inch (20 mm)</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>LF Transducer</strong></td>
<td>5.25 inch (134.5 mm)</td>
<td>5.25 inch (134.5 mm)</td>
<td>0.75 inch (20 mm)</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Environmental</strong></td>
<td>Indoor, Outdoor (IP 65)</td>
<td>Indoor, Outdoor (IP 65)</td>
<td>Indoor, Outdoor (IP 65)</td>
<td>Indoor, Outdoor (IP 65)</td>
</tr>
<tr>
<td><strong>Certification</strong></td>
<td>CPD, EN54-24</td>
<td>CPD, EN54-24</td>
<td>CE</td>
<td>CE</td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>White (RAL 9010), Charcoal Black (RAL 7021)</td>
<td>White (RAL 9010), Charcoal Black (RAL 7021)</td>
<td>White (RAL 9010), Charcoal Black (RAL 7021)</td>
<td>White (RAL 9010), Charcoal Black (RAL 7021)</td>
</tr>
<tr>
<td><strong>Cutout Dimensions</strong></td>
<td>Diameter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Depth</strong></td>
<td>180 mm (7.08&quot;)</td>
<td>180 mm (7.08&quot;)</td>
<td>117 mm (4.60&quot;)</td>
<td>140 mm (5.51&quot;)</td>
</tr>
<tr>
<td><strong>Width</strong></td>
<td>160 mm (6.29&quot;)</td>
<td>160 mm (6.29&quot;)</td>
<td>136 mm (5.35&quot;)</td>
<td>160 mm (6.30&quot;)</td>
</tr>
<tr>
<td><strong>Height</strong></td>
<td>274 mm (10.78&quot;)</td>
<td>405 mm (15.94&quot;)</td>
<td>205 mm (8.07&quot;)</td>
<td>250 mm (9.84&quot;)</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>3.88 kg (8.55 lb)</td>
<td>5.58 kg (12.30 lb)</td>
<td>1.9 kg (4.18 lb)</td>
<td>2.4 kg (5.29 lb)</td>
</tr>
<tr>
<td>Model</td>
<td>Description</td>
<td>Frequency Range (Hz)</td>
<td>Sensitivity (1 W/1 m)</td>
<td>Max. SPL (@1m)</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------------------------</td>
<td>----------------------</td>
<td>-----------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>LB20-PC40-4 /LB20-PC15-4</td>
<td>4&quot; Two-Way Surface-Mount Loudspeaker</td>
<td>75 Hz - 20 kHz</td>
<td>90 dB</td>
<td>101 dB</td>
</tr>
<tr>
<td>LB20-PC75-5 /LB20-PC30-5</td>
<td>5&quot; Two-Way Surface-Mount Loudspeaker</td>
<td>75 Hz - 20 kHz</td>
<td>90 dB</td>
<td>109 dB</td>
</tr>
<tr>
<td>LB20-PC60EW-5</td>
<td>5&quot; Two-Way IP65 Surface-Mount Loudspeaker</td>
<td>55 Hz - 20 kHz</td>
<td>90 dB</td>
<td>109 dB</td>
</tr>
<tr>
<td>LB20-PC90-8 /LB20-PC60-8</td>
<td>8&quot; Two-Way Surface-Mount Loudspeaker</td>
<td>50 Hz - 20 kHz</td>
<td>90 dB</td>
<td>109 dB</td>
</tr>
<tr>
<td>LB20-SW400</td>
<td>Dual 10&quot; Surface-Mount Subwoofer</td>
<td>33 Hz - 500 Hz</td>
<td>90 dB</td>
<td>150 dB</td>
</tr>
<tr>
<td>LP6-S</td>
<td>2&quot; Full-Range Pendant Loudspeaker</td>
<td>33 Hz - 500 Hz</td>
<td>90 dB</td>
<td>150 dB</td>
</tr>
</tbody>
</table>

**Legend:**
- **Frequency Range (-10 dB):**
  - (-10 dB) indicates the frequency range where the speaker operates effectively.
- **Sensitivity (1 W/1 m):**
  - Represents the sensitivity level at which the speaker operates optimally.
- **Max. SPL (@1m):**
  - Maximum Sound Pressure Level at a distance of 1 meter.
- **Power Handling:**
  - Continuous/Program/Peak power handling levels for the speaker.
- **Nominal Impedance:**
  - The standard impedance level for the speaker.
- **Transformer Taps:**
  - Transformer taps for the speaker.
- **Certification:**
  - Certifications that the speaker meets.
- **Color:**
  - Color options available for the speaker.
<table>
<thead>
<tr>
<th>Amplifiers</th>
<th>PLE-1ME 060-EU, 120-EU, 240-EU</th>
<th>PLE-1MA 030-EU, 060-EU, 120-EU</th>
<th>PLE-2MA 120-EU, 240-EU</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Zones</strong></td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Output Channel and Power</strong></td>
<td>Single channel, 60 W, 120 W, 240 W (100 V/4 Ω)</td>
<td>Single channel 30 W, 60 W, 120 W (100 V/4 Ω)</td>
<td>Single channel 120 W, 240 W (100 V / 8 Ω)</td>
</tr>
<tr>
<td><strong>Frequency Response</strong></td>
<td>Line 60 Hz - 20 kHz (+1/-3dB @-10 dB) Microphone 70 Hz - 20 kHz (+1/-3dB @-10 dB)</td>
<td>50 Hz - 20 kHz (+1/-3dB @-10 dB)</td>
<td>50 Hz - 20 kHz (+1/-3dB @-10 dB)</td>
</tr>
<tr>
<td><strong>THD</strong></td>
<td>&lt;1 %</td>
<td>&lt;1 %</td>
<td>&lt;1 %</td>
</tr>
<tr>
<td><strong>Dynamic Range</strong></td>
<td>&gt;93 dB</td>
<td>&gt;93 dB</td>
<td>&gt;93 dB</td>
</tr>
<tr>
<td><strong>Audio Input/Output</strong></td>
<td>4 × Microphone/Line 1 × Music</td>
<td>4 × Microphone/Line 3 × Music 1 × Emergency/Telephone</td>
<td>6 x Microphone/Line 3 × Music Call Station 1 × Emergency/Telephone</td>
</tr>
<tr>
<td><strong>Control input/ Interface</strong></td>
<td>1 x Wall Panel</td>
<td>1 x Wall Panel</td>
<td>1 x Wall Panel</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td>100 × 430 × 270 mm (19 wide, 2RU high)</td>
<td>100 × 430 × 270 mm (19 wide, 2RU high)</td>
<td>100 × 430 × 270 mm (19 wide, 2RU high)</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>PLE-1ME060-EU 6.5 kg (14.33 lb) PLE-1ME120-EU 8.9 kg (19.62 lb) PLE-1ME240-EU 10.5 kg (23.15 lb)</td>
<td>PLE-1MA060-EU 5 kg (11.02 lb) PLE-1MA120-EU 8.5 kg (18.74 lb) PLE-1MA240-EU 10.5 kg (23.15 lb)</td>
<td>PLE-2MA120-EU 10.5 kg (23.15 lb) PLE-2MA240-EU 12.5 kg (27.56 lb)</td>
</tr>
<tr>
<td><strong>Accessory Call Station</strong></td>
<td>PLE-1CS Call Station</td>
<td>PLE-1CS Call Station</td>
<td>PLE-2CS Call Station</td>
</tr>
<tr>
<td><strong>Accessory Control Panel</strong></td>
<td>PLE-WP3S2Z-EU Wall Control Panel</td>
<td>PLE-WP3S2Z-EU Wall Control Panel</td>
<td>PLE-WP3S2Z-EU Wall Control Panel</td>
</tr>
<tr>
<td>PLN-6AIO240 PLENA All-in-One</td>
<td>PLM-8M8 Audio Matrix Controller</td>
<td>Power Amplifier PLM-4P125 / PLM-4P220</td>
<td>PLE-SDT SD Player/Tuner BGM source</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------------------------</td>
<td>-------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td><img src="image1" alt="PLN-6AIO240 PLENA All-in-One" /></td>
<td><img src="image2" alt="PLM-8M8 Audio Matrix Controller" /></td>
<td><img src="image3" alt="Power Amplifier PLM-4P125 / PLM-4P220" /></td>
<td><img src="image4" alt="PLE-SDT SD Player/Tuner BGM source" /></td>
</tr>
<tr>
<td>6</td>
<td>8</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Single channel 240 W (100 V/70 V/8 Ω)</td>
<td>8-channel line output</td>
<td>PLM-4P125: 4 channel 4 x 130 W PLM-4P220: 4 channels 4 x 220 W (100 V/70 V/8 Ω/4 Ω)</td>
<td>2</td>
</tr>
<tr>
<td>60 Hz - 18 kHz (+1/-3 dB @ -10 dB)</td>
<td>20 Hz - 20 kHz (+0/-3 dB)</td>
<td>65 Hz - 20 kHz (+0/-3 dB)</td>
<td>FM tuner: 50 Hz - 12 kHz SD/USB player: 50 Hz - 20 kHz</td>
</tr>
<tr>
<td>&lt;1 %</td>
<td>&lt;0.01 %</td>
<td>PLM-4P125 &lt;0.1 % PLM-4P220 &lt;0.03 %</td>
<td>FM Tuner: &lt;1% SD/USB player : &lt;0.1%</td>
</tr>
<tr>
<td>&gt;103 dB</td>
<td>PLM-4P125&gt;101 db PLM-4P220&gt;102 db</td>
<td>1 x SD card/USB input 1 x FM tuner</td>
<td></td>
</tr>
<tr>
<td>6 x Microphone/Line 3 x Music 1 x Emergency/Telephone Built-in AM/FM Tuner MP3 player for USB device and SD card</td>
<td>4 x Microphone/Line 3 x Music Call station</td>
<td>4 x Microphone/Line</td>
<td></td>
</tr>
<tr>
<td>1 x Wall Panel</td>
<td>1 x Logic input 1 x Ethernet 1 x Wall Panel iOS device control</td>
<td>1 x Ethernet 1 x Logic input</td>
<td></td>
</tr>
<tr>
<td>133 x 430 x 365 mm (19 wide, 3 U high)</td>
<td>45 x 440 x 358 mm (19 wide, 1RU high)</td>
<td>90 x 440 x 417 mm (19 wide, 2RU high)</td>
<td>44 x 444 x 250 mm (19 wide, 2RU high)</td>
</tr>
<tr>
<td>18 kg (39.69 lb)</td>
<td>6 kg (13.23 lb)</td>
<td>PLM-4P125 15 kg (33.07 lb) PLM-4P220 18 kg (39.69 lb)</td>
<td>3.6 kg (7.94 lb)</td>
</tr>
<tr>
<td>PLN-6CS Call Station</td>
<td>PLM-8CS Call Station, 8 zones</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLN-456Z Wall panel with local input</td>
<td>PLM-WCP Wall Control Panel, 8 zones</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>