

# PowerSpace P4300+

## versatile power amplifier



### Product Overview

The Bose Professional PowerSpace P4300+ amplifier combines power and DSP into a 1RU, four-channel design for quick-turn installations. Part of a comprehensive platform of loudspeakers, controls, and software that help installers deliver premium commercial sound systems efficiently, PowerSpace+ amplifiers feature a quick-setup workflow. An onboard configuration utility and intuitive browser-based UI present common tasks in a logical manner, so you can configure the system faster, reducing installation time while increasing setup accuracy. Once installed, proprietary algorithms offer predictable performance while optional interfaces — such as ControlCenter analog zone controllers — make operation easy for end users. For premium commercial applications, PowerSpace+ models provide amplification and DSP in one integrated, easy-to-configure package.

### Applications

- Retail stores
- Restaurants and bars
- Hospitality venues
- Conference centers
- Schools
- Auxiliary zones

### Key Features

**300 watts per channel** and works seamlessly with Bose Professional loudspeakers, DSPs, and controls to create complete commercial sound systems

**Built-in DSP**, including SmartBass processing, routing, level control, delays, limiters, Bose Professional loudspeaker EQs, plus input and area EQs

**PowerSpace configuration utility** facilitates setup with an integrated webserver and intuitive browser-based UI, including real-time control with signal and thermal monitoring

**Opti-Voice paging** provides a smooth transition between music and announcements

**Integrated features to simplify commercial installations:** Dedicated input for 600  $\Omega$  telephone or mic paging, independent 600  $\Omega$  music-on-hold and line-level aux outputs, and a NO/NC mute connection

**Load-independent outputs** deliver full channel power to either low-impedance loads (4–8  $\Omega$ ) or high-impedance (70/100V) loads without bridging

**I-Share outputs** deliver 2X power level into low-impedance (2–4  $\Omega$ ) or high-impedance (70/100V) loads by combining the current of both channels

**Auto-standby mode** saves power when audio signal falls below a set threshold after 20 minutes, then wakes when audio returns

**Intuitive end-user operation** — optional ControlCenter CC-1, CC-2, and CC-3 analog zone controllers provide easy volume control and source selection

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## Technical Specifications

<b>POWER RATING</b>		
Amplifier Power	4 × 300 W (THD+N < 0.04%, 1 kHz, 4–8 Ω, 70/100V)	
I-Share Mode Power	2 × 600 W (2–4 Ω, 70/100V) (each channel pair can be I-Shared)	
Gain (Low-Z mode)	32 dB	
Gain (70V mode)	35 dB	
Gain (100V mode)	38 dB	
<b>AUDIO PERFORMANCE</b>		
Frequency Response	4–8 Ω: 20 Hz – 20 kHz (±1 dB @ 1 W) 70/100V: 20 Hz – 20 kHz (±1 dB @ 1 W) with 50 Hz high-pass filter	
Channel Separation (Crosstalk)	> 80 dB @ 1 kHz, > 65 dB @ 20 kHz	
Dynamic Range	≥ 100 dBA (at rated power)	
<b>INTEGRATED DSP</b>		
A/D and D/A Converters	24-bit / 48 kHz	
Processing Functions	Matrix mixer, loudspeaker EQ, $V_{\text{Peak}}/V_{\text{RMS}}$ limiters, real-time PEQ, ControlCenter configuration, mute/output polarity inversion	
Audio Latency	< 1 ms (any analog or AmpLink input to loudspeaker output)	
<b>AUDIO INPUTS</b>		
Input Channels	4 balanced, 2 unbalanced	
Connectors	3 × 3-pin Euroblock, 1 × 4-pin Euroblock (supports PTT/VOX dynamic microphone or 600 Ω telephone paging), 2 stereo RCA (internally mono-summed)	
Input Impedance	10 kΩ	
Maximum Input Level	22 dBu (@ 14 dBu sensitivity setting)	
Sensitivity	-10 dBV / 4dBu / 14 dBu	
<b>AUDIO OUTPUTS</b>	<b>LOUDSPEAKER</b>	<b>AUXILIARY</b>
Outputs	4	2
Connectors	8-terminal block	3-pin Euroblock (600 Ω music-on-hold, line level)

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<b>INDICATORS AND CONTROLS</b>	
Power LED	Solid white: power is on. Blinking white: unit is in auto standby mode. Solid red: power supply fault. Blinking Red: thermal fault.
Input Signal LED	Green: signal present. Amber: input is near clipping. Red: input is clipping.
Output Limit LED	Amber: amplifier limiting an output. Blinking red: amplifier muted. Solid red: amplifier or thermal fault.
Controls, Front Panel	Power on/off
Controls, Rear Panel	RJ-45 remote input for ControlCenter CC-1, CC-2 and CC-3 zone controllers, mute, output attenuators
<b>ELECTRICAL</b>	
Mains Voltage	100 VAC – 240 VAC ( $\pm 10\%$ , 50/60 Hz)
AC Power Consumption	120 VAC – 230 VAC, 25 W (auto standby), 570 W (max)
Mains Connector	Standard IEC (C14)
Protections	$V_{Peak}/V_{RMS}$ limiters, high temperature, output short, extra high frequency (EHF), excessively low or high AC line voltage
<b>PHYSICAL</b>	
Operational Temperature Range	0 °C to 40 °C (32 °F to 104 °F)
Storage Temperature Range	-40 °C to 70 °C (-40 °F to 158 °F)
Dimensions (H × W × D)	44 mm × 483 mm × 420 mm (1.7 in × 19.0 in × 16.5 in)
Net Weight	6.6 kg (14.6 lb)
Shipping Weight	8.6 kg (19.0 lb)
Cooling System	Microprocessor-controlled variable-speed fans, front-to-back air flow

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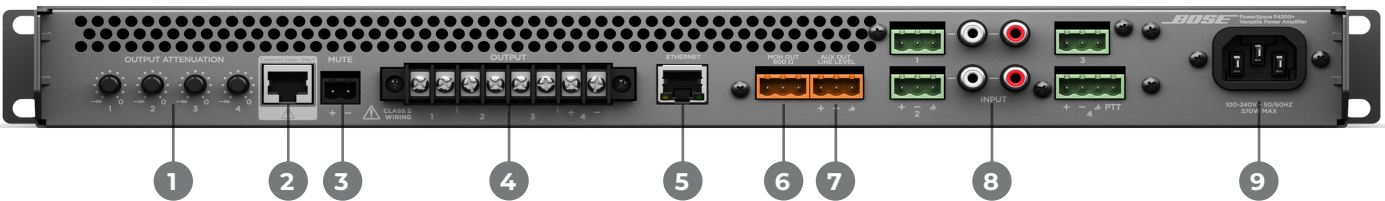
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## Front Panel



- 1. Power switch** – In/Out standby mode
- 2. Power LED**  
Solid white LED indicates power is on.  
Blinking white LED indicates the unit is in auto standby mode.  
Solid red LED indicates a power supply fault.  
Blinking red LED indicates a thermal fault.
- 3. Input 1, 2, 3, 4 signal LED** – Each LED operates independently:  
Green LED indicates signal is present.  
Amber LED indicates signal is near clipping.  
Red LED indicates clipping.
- 4. Output 1, 2, 3, 4 limit LED** – Each LED operates independently:  
LED is amber when the amplifier is limiting the corresponding output due to exceeding the outputs'  $V_{Peak}$  or  $V_{RMS}$  limits.  
LEDs will display solid red if an amplifier fault is detected.  
LEDs will blink red when all outputs are muted.

## Rear Panel



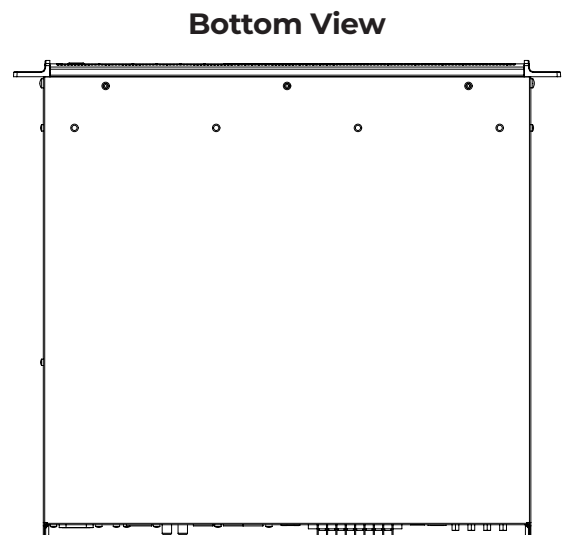
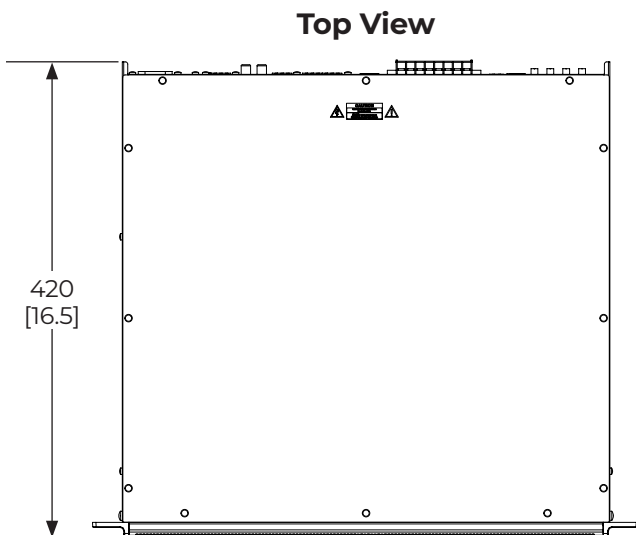
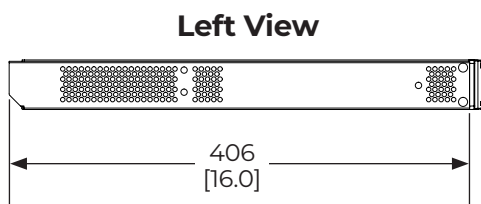
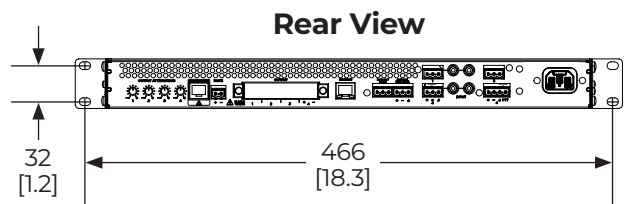
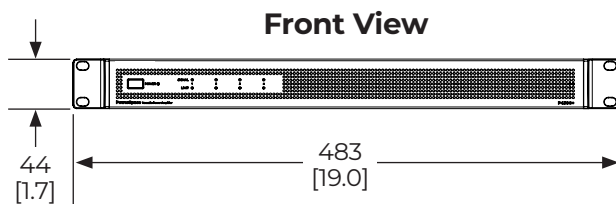
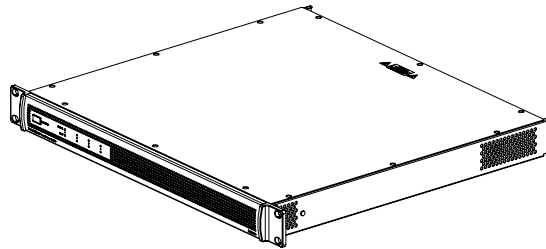
- 1. Output attenuation 1, 2, 3, 4** – Output attenuators for each output. Turn the controls clockwise to decrease attenuation and counter-clockwise to increase attenuation.
- 2. ControlCenter** – RJ-45 input connector for Bose Professional ControlCenter CC-1, CC-2, CC-3 analog zone controllers or CV41 4-to-1 converter only.
- 3. Mute** – Contact closure connection where a short across the mute connector will mute all outputs. Mute polarity can be inverted by a DIP switch.
- 4. Output** – 8-terminal block connector for loudspeaker connections. Each channel can deliver up to 300 watts regardless of load into 4  $\Omega$ , 8  $\Omega$ , 70V, or 100V. Each output pair can be I-Shared.
- 5. Ethernet** – Connect amplifier to a switch or laptop Ethernet port to configure via the web-based configuration utility.
- 6. Music-on-hold** – Dedicated 600  $\Omega$  music-on-hold interface.
- 7. Auxiliary output** – Line-level auxiliary output.
- 8. Input** – Inputs 1 and 2 support balanced line-level inputs (Euroblock) or unbalanced inputs (stereo RCA). Inputs 3 and 4 are balanced inputs, and Input 4 also supports either a 600  $\Omega$  telephone paging input or a PTT/VOX dynamic microphone input.
- 9. AC inlet** – Removing the AC cord when the amplifier is on is equivalent to powering down using the front panel power switch and is an acceptable power-down method.

TECHNICAL DATA

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## Mechanical Diagrams<sup>1</sup>



1. Dimensions are shown in millimeters over inches.

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