TECHNICAL DATA

PowerSpace P4300+
versatile power amplifier



Product Description

The Bose 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, Bose 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, Bose-proprietary algorithms offer predictable performance while optional interfaces — such as ControlCenter analog zone controllers — make operation easy for end users. For premium commercial applications, Bose 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 loudspeakers and controls to create complete commercial sound systems

Built-in DSP, including SmartBass processing, routing, level control, delays, limiters, Bose 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-ohm telephone or mic paging, independent 600-ohm 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 Ω) or high-impedance (70/100V) loads without bridging

I-Share outputs delivers 2x power level into low-impedance (2-4 Ω) 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

POWER RATING		
Amplifier Power	4x 300 W (THD+N < 0.04%, 1 kHz, 4-8 Ω, 70/100V)	
I-Share Mode Power	2x 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	
AUDIO PERFORMANCE		
Frequency Response	4-8 Ω: 20 Hz – 20 kHz (+/- 1 dB @ 1 W); 70/100V: Same as 4-8 Ω with 50 Hz high-pass filter	
Channel Separation (Crosstalk)	> 80 dB @ 1 kHz, > 65 dB @ 20 kHz	
Dynamic Range	≥ 100 dBA (at rated power)	
INTEGRATED DSP		
A/D and D/A Converters	24-bit / 48 kHz	
Processing Functions	Matrix mixer, loudspeaker EQ, V^{peak}/V^{rms} limiters, real-time PEQ, ControlCenter configuration, mute/output polarity inversion	
Audio Latency	< 1 ms (any analog input to loudspeaker output)	
AUDIO INPUTS		
Input Channels	4 balanced, 2 unbalanced	
Connectors	3x 3-pin Euroblock, 1x 4-pin Euroblock (supports PTT/VOX dynamic mic or 600 Ω telephone paging), 2 stereo RCA (internally mono-summed)	
Input Impedance	10 kΩ	
Maximum Input Level	22 dBu (at 14 dBu sensitivity setting)	
Sensitivity	-10 dBV / 4 dBu / 14 dBu	
AUDIO OUTPUTS	**SPEAKER**	**AUXILIARY**
Outputs	4	2
Connectors	8-terminal block	3-pin Euroblock (600 Ω music-on-hold, line level)
INDICATORS AND CONTROLS		
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 CC-1, CC-2 and CC-3 ControlCenter zone controllers, mute, output attenuators.	
ELECTRICAL		
Mains Voltage	100 VAC – 240 VAC (±10%, 50/60 Hz)	
AC Power Consumption	120 VAC: 25 W (Auto standby), 570 W (Max)	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	
PHYSICAL		
Operational Temperature Range	0 °C to 40 °C	
Storage Temperature Range	-40 °C to 70 °C	
Dimensions (H × W × D)	44 × 483 × 420 mm (1.7 × 19.0 × 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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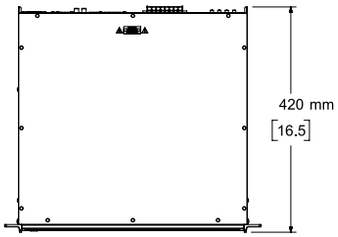
1. **POWER SWITCH** – In/Out standby mode
2. **POWER LED**
   Solid white LED indicates power is ON
   Blinking white LED indicates the unit is in auto standby mode
   Solid red LED indicates a power supply fault
   Blinking red LED indicates a thermal fault
3. **INPUT 1, 2, 3, 4 SIGNAL LED** – Each 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' Vpeak or Vrms limits
   LEDs will display solid red if an amplifier fault is detected
   LEDs will blink red when all outputs are muted



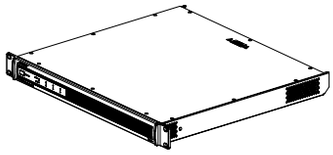
1. **OUTPUT ATTENUATION 1, 2, 3, 4** – Output attenuators for each output. Turn the controls clockwise to decrease attenuation and counter-clockwise to increase attenuation
2. **CONTROLCENTER** – RJ-45 input connector for Bose CC-1, CC-2, CC-3 ControlCenter analog zone controllers or CV41 4-to-1 converter only
3. **MUTE** – Contact closure connection where a short across the mute connector will mute all outputs. Mute polarity can be inverted in the configuration utility
4. **OUTPUT** – 8-terminal block connector for loudspeaker connections. Each channel can deliver up to 150 watts regardless of load into 4 Ω, 8 Ω, 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-ohm 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-ohm 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

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Mechanical Diagrams

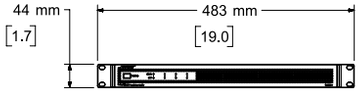


Top View

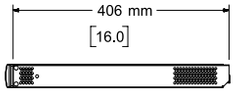




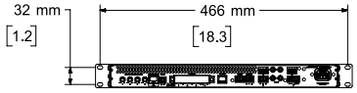
Left View



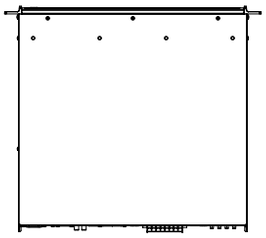
Front View



Right View



Rear View



Bottom View

NOTES:
1. DIMENSIONS ARE IN MILLIMETERS OVER INCHES

For additional specifications and application information, please visit PRO.BOSE.COM. Specifications subject to change without notice. 03/2020