



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' 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

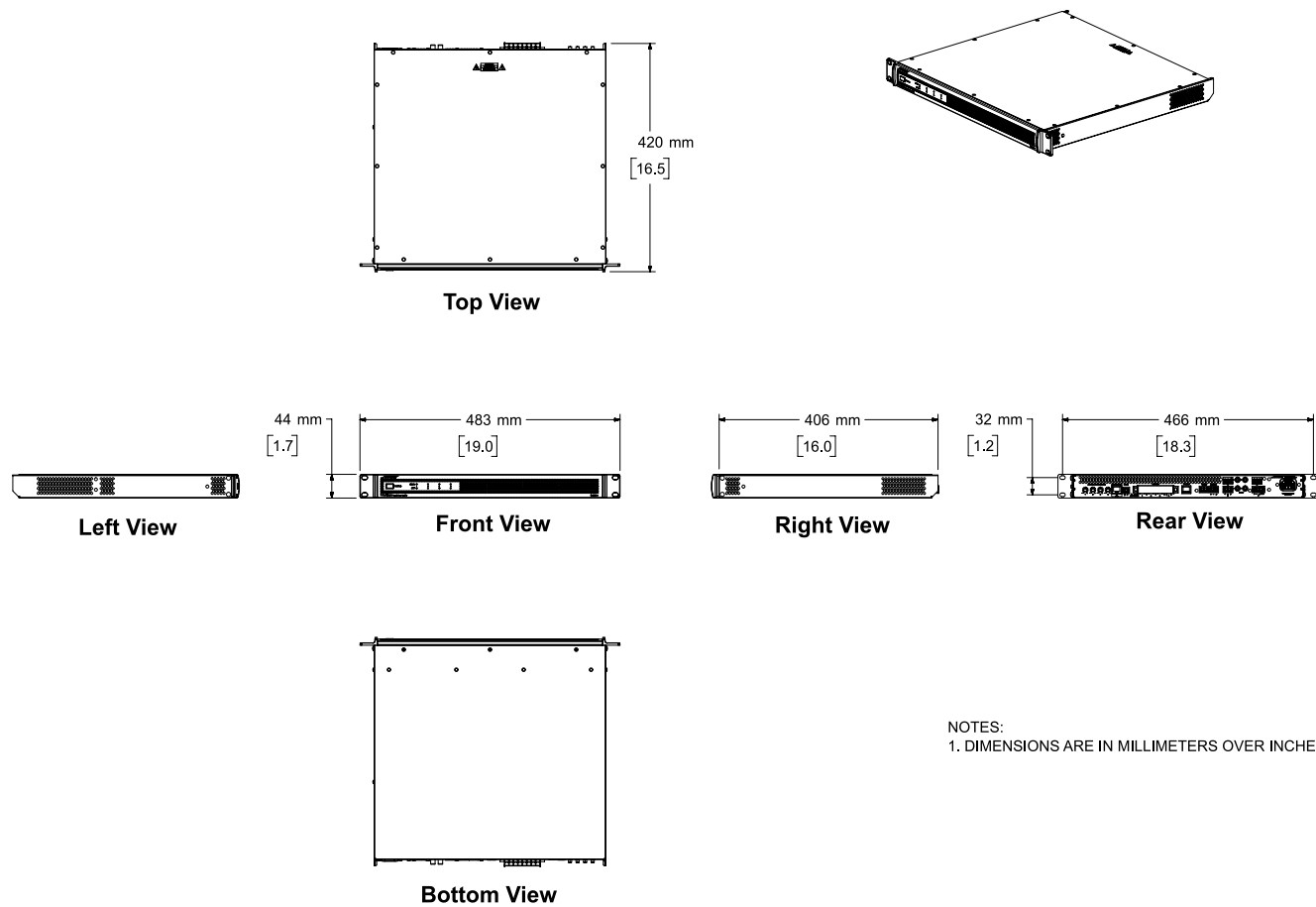


- 1 OUTPUT ATTENUATION 1, 2, 3, 4** – Output attenuators for each output. Turn the controls clockwise to decrease attenuation and counter-clockwise to increase attenuation
- 2 CONTROLCENTER** – RJ-45 input connector for Bose CC-1, CC-2, CC-3 ControlCenter analog zone controllers or CV41 4-to-1 converter 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



NOTES:
1. DIMENSIONS ARE IN MILLIMETERS OVER INCHES