

PowerShareX PSX1204D PSX2404D PSX4804D

adaptable power amplifiers



Product Overview

PowerShareX adaptable amplifiers are an ideal match for Bose Professional sound systems. Onboard DSP gives you instant access to optimized loudspeaker presets. ControlSpace Designer software allows for quick configuration. And proven Powersoft technology ensures you put every watt to work.

Choose from three models: PSX1204D, PSX2404D, and PSX4804D. Each networkable, four-channel amplifier offers innovative power-sharing flexibility, peak power capability, Dante® connectivity, and much more — all in a space-saving 1RU design.

And easy integration with Bose Professional DSPs, loudspeakers, and the entire ControlSpace ecosystem makes design, configuration, installation, and operation much simpler — so you can get the job done and move on to the next.

Applications

- Commercial installations
- Houses of worship
- Performing arts
- Corporate
- Hotels
- Retail / restaurants
- Education

Key Features

Power-sharing technology dynamically allocates power evenly or asymmetrically across outputs without having to bridge channels or lose channel count when powering Bose Professional loudspeakers

Bose Professional certified presets and ControlSpace Designer integration delivers the best performance, loudspeaker protection, and visibility of the entire Bose Professional system from a single UI for easy design, configuration, control, and monitoring

Proven Powersoft reliability ensures continuous daily operation

Flexible outputs capable of handling either low-impedance (2, 4, 8 Ω) or high-impedance (70/100 V) loudspeaker loads

Built-in Dante audio supports up to 4 digital input channels from a Dante network eliminating the requirement of ordering and installing an accessory network card

4 analog inputs provide line-level source connections

PowerShareX Design Tool is a downloadable design tool that simulates the power-sharing capability of a PowerShareX amplifier that, in some cases, could lead to a lower-power model requirement and cost savings

GPIO connections provide a remote level, on/off, and alarm triggers

Rack-friendly 1RU design that is only 358 mm (14.1 in) deep, eliminating the need for oversized racks

Universal switch mode power supply with power factor correction

For additional specifications and application information, visit BoseProfessional.com. Specifications are subject to change. 01/2025

TECHNICAL DATA

PowerShareX PSX1204D PSX2404D PSX4804D

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Technical Specifications

		PSX1204D	PSX2404D	PSX4804D
SYMMETRICAL RATINGS ¹ (with all channels equally loaded)				
Rated power total	@ 4–8 Ω, 70 V, 100 V	1200 W	2400 W	4800 W
Rated power	@ 4–8 Ω, 70 V, 100 V	300 W × 4	600 W × 4	1200 W × 4
	@ 2 Ω	400 W × 4	800 W × 4	1500 W × 4
Peak power ³	@ 8 Ω, 70 V, 100 V	600 W × 4	1200 W × 4	2400 W × 4
	@ 4 Ω	600 W × 4	1200 W × 4	3000 W × 4
	@ 2 Ω	800 W × 4	1600 W × 4	3000 W × 4
ASYMMETRICAL RATINGS ² (total power available per a single channel using power-sharing from other channels) We recommend using the PowerShare Design Tool for system verification (downloadable at BoseProfessional.com).				
Rated power	@ 8 Ω	1100 W in 100 V mode	1300 W in 100 V mode	1300 W
	@ 4 Ω	1100 W in 70 V mode	1700 W	2600 W
	@ 2 Ω	1100 W	1600 W	1800 W
	@ 70 V	1100 W	1700 W	2100 W
	@ 100 V	1100 W	1500 W	2200 W
Peak power ³	@ 8 Ω	2200 W	2600 W	2600 W
	@ 4 Ω	2200 W	3400 W	5200 W
	@ 2 Ω	2200 W	3200 W	3600 W
	@ 70 V	2200 W	3400 W	4200 W
	@ 100 V	2200 W	3000 W	4400 W
SYMMETRICAL BRIDGED RATINGS ¹ (with two channels bridged and equally loaded)				
Rated power	@ 8 Ω bridged	600 W	1200 W	2400 W
	@ 4 Ω bridged	800 W	1600 W	3000 W
Peak power	@ 8 Ω bridged	1200 W	2400 W	6000 W
	@ 4 Ω bridged	1600 W	3200 W	6000 W
Maximum unclipped output voltage ⁴	@ 8 Ω	70 V _{peak}	100 V _{peak}	139 V _{peak}
Maximum output current		33 A _{peak}	45 A _{peak}	45 A _{peak}

Footnotes:

1. All channel driven with same burst power.
2. Maximum power-sharing capacity per channel.
3. Peak power calculated from rated power for comparison to peak power values on loudspeaker data sheets.
4. Peak voltage is indicated for low-impedance mode. Peak voltage can be higher in 70 V and 100 V operation.

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		PSX1204D	PSX2404D	PSX4804D
AUDIO PERFORMANCE				
Frequency response	20 Hz – 20,000 Hz (± 1.0 dB, 1 W @ 8 Ω)			
Signal-to-noise ratio	> 104 dBA	> 108 dBA	> 110 dBA	
THD+N	< 0.1% (< 0.05% typical, from 0.1 W to half-power)			
Intermodulation distortion (SMPTE)	< 0.1% (< 0.05% typical, from 0.1 W to half-power)			
Crosstalk (1 kHz)	-70 dB typical			
Slew rate	> 50 V/ μ s @ 8 Ω , input filter bypassed			
Output impedance	26 m Ω @ 100 Hz			
INTEGRATED DSP				
Programming software	Bose Professional ControlSpace Designer 5.12 and later			
A/D and D/A converters	24-bit, 48 kHz			
Sample rate converter	24-bit, 44.1 kHz – 192 kHz			
Internal precision	32-bit floating-point			
Latency	2.5 ms fixed-latency architecture			
Input-to-output signal routing	4 \times 4 matrix			
Presets	Bose Professional loudspeakers			
Available signal processing	Matrix mixer, 5-band PEQ, array EQ, band pass, loudspeaker EQ, limiter, delay (see Software Details)			
Crossovers	Butterworth 6 dB/octave to 48 dB/octave, Linkwitz-Riley & Bessel: 126 dB/octave to 48 dB/octave (IIR)			
Delay	2 s (input) + 100 ms (output) for time alignment			
AUDIO INPUTS				
Analog				
Channels	4 balanced			
Connector	6-pin Euroblock			
Input impedance	20 k Ω			
Maximum Input Level	20 dBu			
Input sensitivity	@ 8 Ω with 26 dB gain	3.54 V _{RMS}	2.48 V _{RMS}	4.91 V _{RMS}
	@ 8 Ω with 29 dB gain	2.51 V _{RMS}	1.76 V _{RMS}	3.48 V _{RMS}
	@ 8 Ω with 32 dB gain	1.78 V _{RMS}	1.24 V _{RMS}	2.46 V _{RMS}
	@ 8 Ω with 35 dB gain	1.26 V _{RMS}	0.88 V _{RMS}	1.74 V _{RMS}
Digital				
Channels (Dante)	4			
Connector	RJ-45			

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TECHNICAL DATA

**PowerShareX PSX1204D
PSX2404D
PSX4804D**

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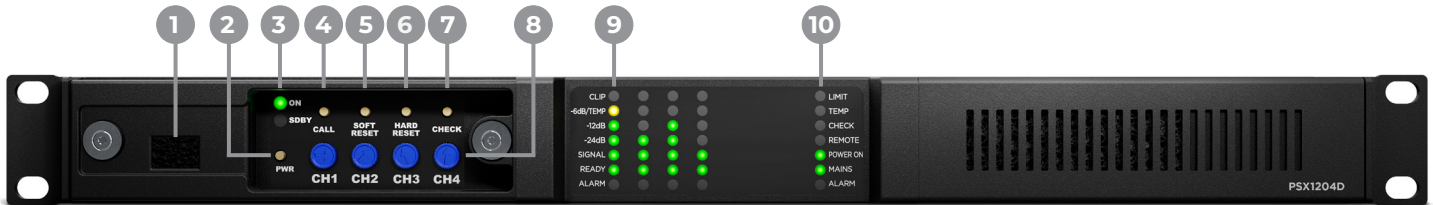
	PSX1204D	PSX2404D	PSX4804D
AUDIO OUTPUTS			
Channels	4 (high-/low-impedance; bridgeable per channel pair)		
Connectors	Euroblock, 8-pin, 7.62 mm pitch		
INDICATORS AND CONTROLS			
Status indicators	21 channel metering LEDs, 7 system status LEDs, 2 power status LEDs		
User controls, front panel	Power button, soft & hard reset buttons, 4 channel attenuation controls		
User controls, rear panel	16 output DIP switches (4 per channel), 8 system configuration DIP switches		
ELECTRICAL			
Nominal voltage	100 VAC – 240 VAC (±10%, 50/60 Hz)		
Operating voltage	90 VAC–264 VAC (50/60 Hz)		
Mains connector	IEC C20 inlet (20 A maximum; typical power consumption is 20%–50% lower; regional power cord included)		
Power supply	Universal, regulated switch mode with power factor correction (PFC)		
Output stage topology	Class D		
Protections	Thermal, excessively high/low AC mains voltage, DC, high-frequency, output short-circuit, inrush current, clip, peak, long-term/RMS		
PHYSICAL			
Operational temperature range	0 °C to 35 °C (32 °F to 95 °F)		
Cooling system	Continuous temperature-controlled variable-speed fan, front-to-back airflow		
Mounting	Integrated rack ears		
Product dimensions (width × height × depth)	483 mm × 45 mm × 358 mm (19.0 in × 1.8 in × 14.1 in)		
Net weight	7.0 kg (15.4 lb)		
Shipping weight	10.3 kg (22.8 lb)		
Package contents	(1) PowerShareX PSX1204D/PSX2404D/PSX4804D, (3) 12-pin Euroblock connectors, (1) 8-pin Euroblock connector, (1) 4-pin Euroblock connector, (1) AC power cord, (1) installation guide		
PRODUCT CODES			
Americas & Europe	876599-0100	876599-0200	876599-0300
Asia Pacific	878918-2130	878919-2130	878920-2130
Australia	878918-5110	878919-5110	878920-5110

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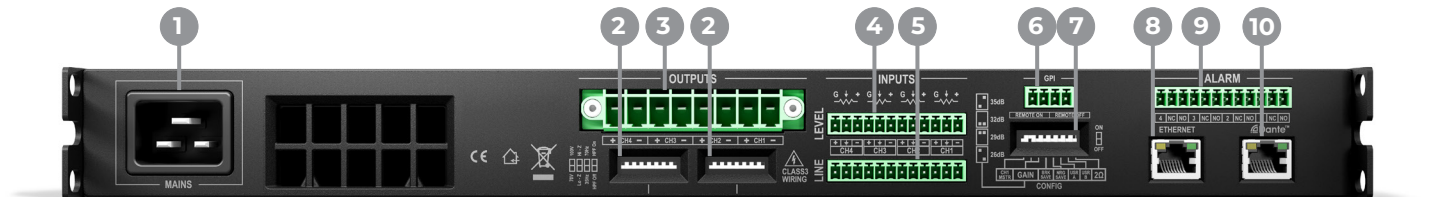
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Hardware Details



(Front panel shown with magnetic faceplate removed.)

1. **Service port:** For service only.
2. **Power button:** To switch amplifier between powered-on and standby mode, press and hold for 3 seconds.
3. **Operating mode LEDs (ON, SDBY):** Indicate whether the amplifier is powered on or in standby mode.
4. **CALL button:** Reserved for future use.
5. **SOFT RESET button:** To reset network parameters to DHCP, press and hold for 3 seconds.
6. **HARD RESET button:** To restart amplifier without affecting settings or loudspeakers EQs/presets, press and hold for 3 seconds.
7. **CHECK button:** To start the self-check procedure, press and hold for 3 seconds. The procedure tests the amplifier status and reports status via channel status and system status LEDs.
8. **Channel attenuation controls (CH1-4):** Attenuation controls for the output level of each channel.
9. **Channel status LEDs:** Indicate level as meters for Channels 1, 2, 3, and 4.
10. **System status LEDs:** Indicate system status.



1. **Power input:** Power cord connection.
2. **Channel output DIP switches:** Set any configuration of low- and high-impedance output loads for each channel.
3. **Outputs:** 8-pin connector for loudspeaker connections, up to 1200 watts of power per channel.
4. **Remote level inputs:** Remotely adjust channel level via a linear 10 kΩ potentiometer per channel, in series with the channel attenuation controls.
5. **Analog line inputs:** 12-pin connector for balanced analog line-level audio signals.
6. **GPI/remote inputs:** 4-pin connector for remote on-off control, depending on the power/standby state of the amplifier.
7. **System configuration DIP switches:** Set the overall system output and performance.
8. **Ethernet port:** RJ-45 connector for control via Ethernet connection to a computer using ControlSpace Designer software and not applicable for Dante redundancy.
9. **GPO/alarm outputs:** 12-pin connector for general-purpose output from each channel to indicate a fault, unsafe operating condition, or any fault preventing normal output channel operation.
10. **Dante port:** RJ-45 connector for 4 Dante audio input streams from a computer using Dante Controller software.

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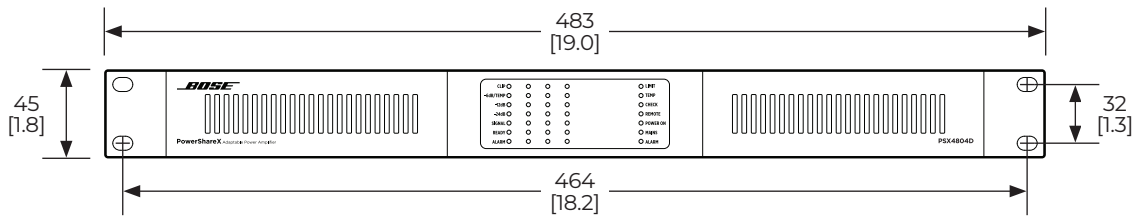
TECHNICAL DATA

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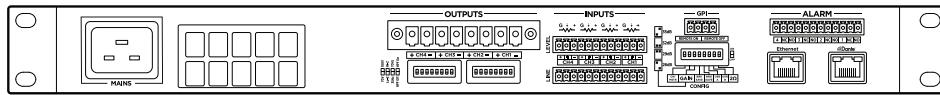
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Dimensions ⁵

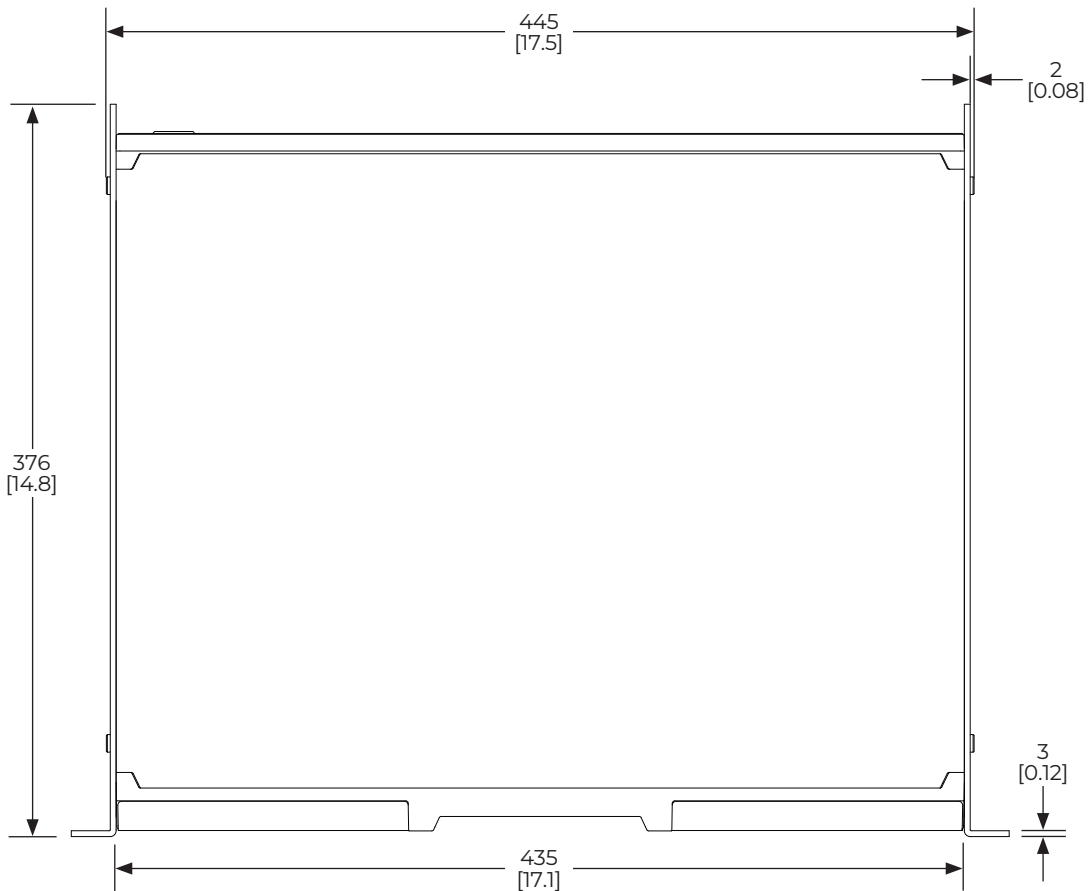
Front View



Rear View



Top View



5. Dimensions are shown in millimeters over inches.

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AC Current Draw & Thermal Dissipation Information

115 V operation	PSX1204D		PSX2404D		PSX4804D	
	Idle	1/8 maximum output power @ 4 Ω	Idle	1/8 maximum output power @ 4 Ω	Idle	1/8 maximum output power @ 4 Ω
Power consumption ⁶	31.1 W	227 W	31.1 W	405 W	31.3 W	823 W
Current draw	0.45 A _{RMS}	2.1 A _{RMS}	0.45 A _{RMS}	3.7 A _{RMS}	0.47 A _{RMS}	7.7 A _{RMS}
Thermal dissipation	106 BTU/h (27 kcal/h)	261 BTU/h (66 kcal/h)	106 BTU/h (27 kcal/h)	360 BTU/h (91 kcal/h)	107 BTU/h (27 kcal/h)	760 BTU/h (192 kcal/h)
230 V operation	Idle	1/8 maximum output power @ 4 Ω	Idle	1/8 maximum output power @ 4 Ω	Idle	1/8 maximum output power @ 4 Ω
Power consumption ⁶	31.5 W	251 W	31.5 W	405 W	31.6 W	840 W
Current draw	0.25 A _{RMS}	1.4 A _{RMS}	0.25 A _{RMS}	2.1 A _{RMS}	0.27 A _{RMS}	4.3 A _{RMS}
Thermal dissipation	107 BTU/h (27 kcal/h)	344 BTU/h (87 kcal/h)	107 BTU/h (27 kcal/h)	360 BTU/h (91 kcal/h)	108 BTU/h (27 kcal/h)	818 BTU/h (206 kcal/h)

Software Details

PowerShareX amplifiers incorporate digital signal processing that can be configured with Bose Professional ControlSpace Designer software, Version 5.12 or later. It provides loudspeaker signal processing with presets for Bose Professional loudspeakers. It includes additional processing for array EQ, time delay, and environmental tuning.

Here are the available processing device blocks and signal flow.



6. Typical power consumption is 20%–50% lower.