

BOSE PROFESSIONAL PowerSpace P4150+ Versatile Power Amplifier Instruction Manual

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Instruction Manual

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Product Overview

The Bose Professional Power Space P4150+ 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, Power Space+ 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 Control Center analog zone controllers — make operation easy for end users. For premium commercial applications, Power Space+ 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

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

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

Power Space 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 Ω telephone or mic paging, independent 600 Ω 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 deliver 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 Control Center CC-1, CC-2, and CC-3 analog zone controllers provide easy volume control and source selection

TECHNICAL DATA

Power Space P4150+ versatile power amplifier Technical Specifications

POWER RATING	
Amplifier Power	4 × 150 W (THD+N < 0.04%, 1 kHz, 4–8 Ω, 70/100V)
I-Share Mode Power	$2 \times 300 \text{ W}$ (2–4 Ω , 70/100V) (each channel pair can be I-Shared)
Gain (Low-Z mode)	29 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: 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)

INTEGRATED DSP

A/D and D/A Converters	24-bit / 48 kHz
Processing Functions	Matrix mixer, loudspeaker EQ, V Peak/VRMS limiters, real-time PEQ, Control Center configuration, mute/output polarity inversion
Audio Latency	< 1 ms (any analog or Am plink input to loudspeaker output)

AUDIO INPUTS

Input Channels	4 balanced, 2 unbalanced
Connectors	3×3 -pin Autoblock, 1×4 -pin Autoblock (supports PTT/VOX dynamic micro phone 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

AUDIO OUTPUTS	LOUDSPEAKER	AUXILIARY
Outputs	4	2
Connectors	8-terminal block	3-pin Autoblock (600 Ω music-on-hol d, line level)

Power Space P4150+ versatile power amplifier

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 Pa	Power on/off
Controls, Rear Pa	RJ-45 remote input for Control Center CC-1, CC-2 and CC-3 zone controllers, mute, output attenuators

ELECTRICAL

Mains Voltage	100 VAC - 240 VAC (±10%, 50/60 Hz)
AC Power Consumption	120 VAC - 230 VAC, 25 W (auto standby), 325 W (max)
Mains Connector	Standard IEC (C14)
Protections	V Peak /VRMS 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 (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

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.

- 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.

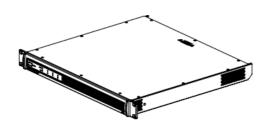
LEDs will blink red when all outputs are muted.

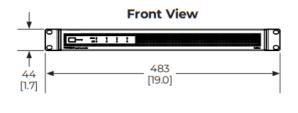
Rear Panel

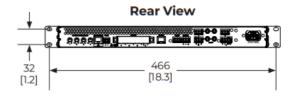


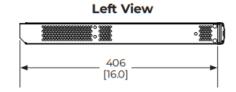
- 1. Output attenuation 1, 2, 3, 4 Output attenuators for each output. Turn the controls clockwise to decrease attenuation and counter-clockwise to increase attenuation.
- 2. Control Center RJ-45 input connector for Bose Professional Control Center CC-1, CC-2, CC-3 analog zone controllers or CV41 4-to-1 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 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 Ω 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 Ω 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.

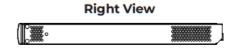
Mechanical Diagrams

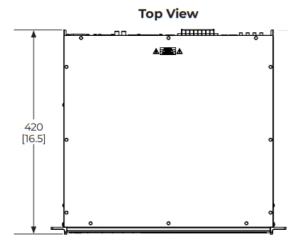


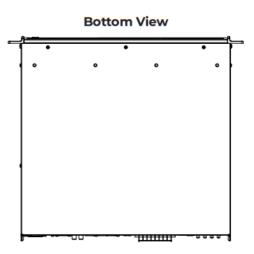












1. Dimensions are shown in millimeters over inches.

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Documents / Resources



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P4150, PowerSpace P4150, PowerSpace P4150 Versatile Power Amplifier, Versatile Power Amplifier, Power Amplifier, Amplifier

References

• Bose Professional

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