

PowerShare PS602P adaptable power amplifier



Architects' and Engineers' Specifications

The amplifier shall employ Class-D amplification together with a digital signal processing architecture running at 48 kHz / 24 bit. The amplifier shall incorporate a switch-mode power supply allowing normal operation from AC outlets ranging from 100 – 240 V ($\pm 10\%$) at 50/60 Hz. The amplifier shall have an IEC 320-C14 electrical power inlet and shall be equipped with a removable power supply cord. A power switch shall be located on the front panel. The product shall include protection from shorted loads and general overheating. The amplifier's physical size shall be 1 RU in height by 1 RU in width and be capable of rack mounting. The product shall have venting with two fans, variable left-to-right airflow. Each output channel shall have front panel output attenuation controls.

The amplifier shall have two output channels with a frequency response of 20 Hz to 20 kHz (± 0.5 dB) when driving low-impedance ($4 - 8 \Omega$) systems, and a frequency response of 50 Hz to 20 kHz when driving 70/100V distributed audio systems. The amplifier shall have THD+N at rated power less than 0.04%. Output connections shall be made via either the NL4 or binding post connectors.

The amplifier shall meet or exceed the following performance specifications: channel separation (crosstalk) greater than 85 dB below rated power at 1 kHz and greater than 65 dB below rated power at 20 kHz. The amplifier shall incorporate 2 line-level inputs. The nominal input sensitivity shall be 4 dBu for balanced line-level inputs (XLR/TRS combo) or -10 dBv for commercial unbalanced line-level inputs (RCA). Five LEDs shall be visible on the front panel: one Power (green) for power indication, (blinking green) for standby indication, and (red) for fault indication. Per-channel Signal (green) for input level from -40 dBu to 9 dBu, (amber) from 9 dBu to 12 dBu, and (red) over 12 dBu indicating clipping. Per-channel Limit (amber) when an output is limiting. The digital signal processor shall enable a user-selectable loudspeaker preset per channel supporting Bose® FreeSpace® DS 16, DS 40, DS 100, FS3B, Panaray® 402, 802, MA12EX, and RoomMatch® Utility RMU105 and RMU108. The amplifier shall offer a master mute connection for use with external dry contacts to mute all outputs of the amplifier.

The amplifier chassis shall be constructed of painted steel. The dimensions of the amplifier shall allow for 19-inch (483 mm) EIA standard rack mounting. The amplifier shall be 44 mm (1.7 inches) in height, 483 mm (19 inches) in width and 414 mm (16.3 inches) in depth. The amplifier shall weigh 5.5 kg (12.2 pounds). The amplifier shall be the Bose PowerShare PS602P adaptable power amplifier.