

SN2108

Energy-Efficient 80-Watt Mixer Amplifier with 70 V Output for Distributed Music, Paging and AV Applications



Features

- Multi-function 80-Watt mixer amplifier, designed for continuous operation in distributed music, paging and AV applications
- State-of-the-art, energy-saving Switch-Mode Power technology with up to 80% power efficiency drastically reduces energy cost
- Transformerless, cool-running Class-D amplifier drives 70 V loads directly
- 3 balanced or unbalanced microphone inputs on TRS connectors
- 2 Aux inputs for music or program signals on RCA connectors
- Variable voice-activated music muting
- Lo and Hi frequency EQ for ultimate sound adjustment
- Intuitive front panel with dual-function indicator ring
- Secure 2-position terminal strip speaker output connector
- Independent DC and thermal overload protection plus automatic limiters for each amplifier prevent overload, clipping and distortion without shutting down audio
- Ultra-light, ultra-low noise and ultra-efficient switch-mode power supply for noise-free audio, superior transient response and low power consumption
- High-quality components and exceptionally rugged construction ensure long life

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Product Overview

Combining superior performance and ease-of-use with unprecedented value, the EUROCOM SN2108 mixer-amplifier is an innovative yet practical solution for distributed sound in low-complexity environments. Designed exclusively for use with high-impedance distributed loudspeaker systems, the SN2108 unites a five-input mixer with an 80 W (RMS) mono amplifier engineered for continuous 70 V output. The result is an ideal match for commercial sound requirements in retail, hospitality, office, medical, educational, and industrial spaces.

With a sleek, compact exterior that's at home in the chic-est of settings, the SN2108 can be shelf-mounted within convenient reach rather than hidden away in a back room. The focused feature set provides versatility without clutter, allowing easy operation by non-technical personnel. An included paging function automatically senses microphone activity and ducks background audio, ensuring that pages can be heard.

Installation is fast and flexible, with three quarter-inch jacks for either balanced (TRS) or unbalanced (TS) mic-level input, plus two sets of auxiliary RCA jacks (each pair summed internally to mono) for playback from external sources such as CD players, MP3 players, cable boxes, and radio or television tuners. Loudspeakers connect via a secure 2-position terminal strip.

Front panel level controls are included for all inputs, as are high and low EQ settings to optimize the sound for any environment, including restaurants, conference rooms, bars, patios, and retail stores. The front-panel master volume knob is surrounded by an indicator ring that glows yellow for power on and flashes red at the onset of clipping.

SN2108 operation is both cool and extraordinarily energy-efficient thanks to a transformerless Class-D amplifier design utilizing a switch-mode power supply that runs on AC from 100~240 VAC at either 50 or 60 Hz. The amplifier is protected with DC and thermal overload protection, as well as by automatic limiting that prevents overload, clipping, and distortion.

Offering exceptional usability and style in a simple integrated package, the SN2108 is the perfect professional-quality mixer-amplifier for a wide variety of commercial applications.

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Technical Specifications

| | | | |
|---------------------------|--|-----------------------------|--------------------------------------|
| Audio Inputs | | Power Supply (Fuses) | |
| • Microphone inputs | 3 x ¼" TRS (-50 dBv, 600 Ω balanced) | • Mains voltage | 100-240 VAC~, 50/60 Hz |
| • Auxiliary inputs | 2 x RCA, stereo summed (0 dB, 10 kΩ unbalanced) | • Fuse | T 3.15 A H 250 V |
| Audio Outputs | | • Power efficiency | 70% |
| • Speaker outputs | 2-position terminal block | • Power consumption | 38 W @ 1/8 of max rate output |
| Amplifier | | • Mains connector | Standard IEC receptacle |
| • Amplifier channels | HI-Z: 1 x 70 V | • Dimensions / Weight | |
| • Power output LO-Z | 80 W RMS @ 70 V 1% THD, 1 kHz sine wave | • Dimensions (H x W x D) | 3.3 x 12 x 14.2" / 83 x 305 x 360 mm |
| • Min. impedance | 62.5 Ω | • Weight | 8.2 lbs / 3.7 kg |
| System Information | | | |
| • Controls | 3 x Mic / Line gain (Inputs 1 – 5) Lo tone: ±15 dB @ 100 Hz Hi tone: ±15 dB @ 10 kHz Master volume Mute depth Power on / off Voltage, 100-240 VAC~, 50/60 Hz | | |
| • Indicators | Dual-function indicator ring (Volume control): Yellow (Power on) Red (Clip) | | |
| • Output circuit type | Class D, transformerless | | |
| • Amplifier protection | Thermal and DC protection Automatic limiters | | |
| • Frequency response | 50 Hz – 18 kHz, ±1 dB @ 1 W (70 V) | | |
| • Dynamic range | Mic: 65 dB Aux: 80 dB | | |
| • THD+N | 0.05% @ 1 W, 1 kHz dBr into 62.5 Ω load | | |
| • Signal-to-noise ratio | 90 dB @ 1% THD+N | | |



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Architect's and Engineer's Specifications

Summary description: The mixer-amplifier shall be of compact, shelf-mountable multi-input design with built-in paging functions and a mono transformerless 80-watt RMS Class D power amplifier with a switch-mode power supply and a 70 V output for distributed high-impedance speaker systems.

Controls and indicators shall include the following:

- Master Volume knob for setting overall volume
- Indicator ring for power (yellow) and clipping (flashing red)
- EQ controls (HI and LO) to adjust the overall treble and bass
- Input level controls (1-5) to set the relative level of each input
- Mute depth control to set ducking of aux inputs during pages
- Power switch to turn the unit on and off

Connections to the mixer-amplifier shall include:

- Mic inputs (3), 1/4-inch balanced (TRS) or unbalanced (TR)
- Aux inputs (2 pair), unbalanced RCA, summed to mono
- Output (70 V only) on a 2-position terminal strip AC power on IEC jack

Protections incorporated into the amplifier shall include automatic limiting and independent DC and thermal overload protection.

Performance criteria met by the mixer-amplifier shall include:

- RMS power output (1 kHz @ 1% THD) of 80 W
- Frequency Response (1 W) of 20 Hz – 20 kHz, ± 1 dB
- Dynamic range of 65 dB for Mic ins and 80 dB for Aux ins
- Distortion (THD+N; 1 W, 1 kHz) of 0.05% into 8 Ω
- Signal to Noise Ratio (1% THD+N) of 90 dB

AC Power requirements of the mixer-amplifier shall be:

- Mains voltage of between 100-240 VAC at 50~60 Hz
- Power consumption of 120 W
- Power efficiency of 70%

Physical characteristics of the mixer-amplifier shall be:

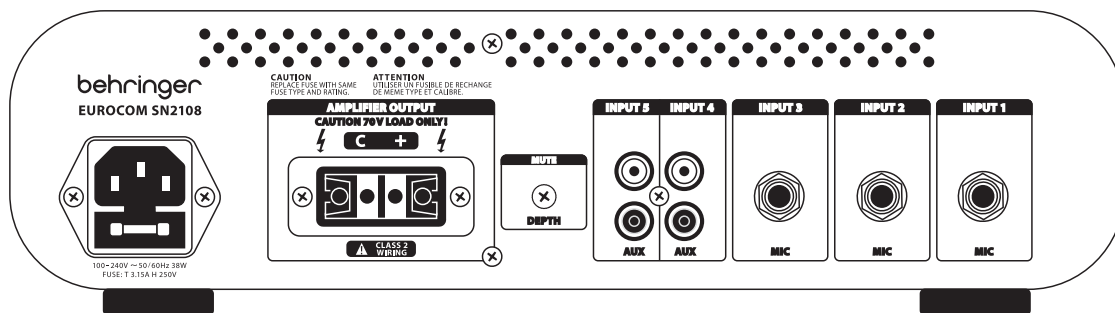
- Height x Width x Depth of 3.3 x 12 x 14.2" / 83 x 305 x 360 mm
- Net Weight of 8.2 lbs / 3.7 kg

Model: The mixer-amplifier shall be the BEHRINGER EUROCOM SN2108.

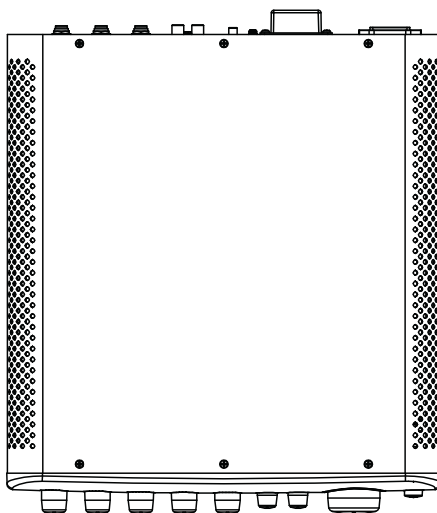
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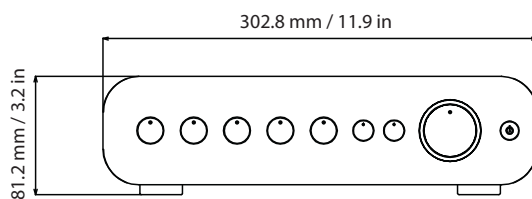
Dimensional Drawings:



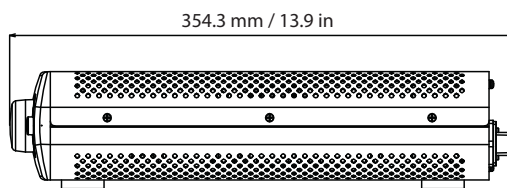
REAR



TOP



FRONT



SIDE

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