

BOSE

PANARAY® 802® Series III Loudspeaker

General Description

The Bose® 802 Series III loudspeaker is a 240-watt speaker designed for permanent installations and portable use in indoor and outdoor commercial applications. As a new addition to the Bose line of *Installed Anywhere™* loudspeakers, it meets our strictest standards for outdoor use.

The 802 Series III loudspeaker offers the following features:

- Wide-range reproduction over a broad dispersion area
- A rugged, portable enclosure with metal grille and protective cover with carrying handle
- Low profile, aesthetic styling
- Weather-resistant design for reliable performance indoors and outdoors
- A full complement of brackets and stands available for a variety of product uses

Each 802 Series III loudspeaker uses four (8) 11.34 cm full-range drivers mounted in symmetric vertical pairs on a faceted Articulated Array® loudspeaker baffle assembly. The drivers feature low-impedance, edge-wound Ferrite V ceramic magnets, and molded polyester frames. Their advanced cone and motor system gives them high linear excursion capability and power output. Environmental durability is built into soft parts – cone, surround and spider – and coated onto the hard parts of the driver. These materials optimize the weather resistance of the loudspeaker when it is installed outdoors.

802 Series III loudspeakers are used in combination with the PANARAY system digital controller or the Bose 1600 or 1800 amplifiers with the 802 speaker plug-in EQ card for active equalization of the system.

The PANARAY system digital controller assures smooth, accurate spectral



Technical Information

Frequency Range

55Hz to 16kHz ± 3 dB

Sensitivity¹

91dB-SPL @ 1W, 1m (pink noise)

Maximum Acoustic Output²

114dB-SPL @ 1m (pink noise)

116dB-SPL @ 1m (IEC³ noise)

Dispersion (–6dB point, average, 1-4kHz)

Horizontal 120°

Vertical 100°

Long-Term Power Handling⁴

240W continuous

Impedance

8 Ω nominal

Mechanical Specifications

Dimensions: 13.0"H x 20.5"W x 12.5"D (33 cm H x 52 cm W x 32 cm D)

Weight: 31 lb (14 kg)

Available color: black

Connectors: Two (2) parallel-wired NL4 connectors

Enclosure construction: Mica-reinforced polyethylene copolymer structural foam

Installation

Installation and use instructions are included with the loudspeaker.

The 802 Series III loudspeakers are designed to be wall or ceiling mounted, or mounted on stands for portable use. The following versatile accessories are available from Bose:

- WBP8 802 loudspeaker Wall Mount Bracket (0-45° pitch, $\pm 40^\circ$ yaw)
- SB8 802 loudspeaker Single Fly Bracket (0-45° pitch)
- SB82 802 loudspeaker Stacked Pair Fly Bracket (0-45° pitch)
- SS10 Speaker Stand with Mounting Adapter and Carry Bag

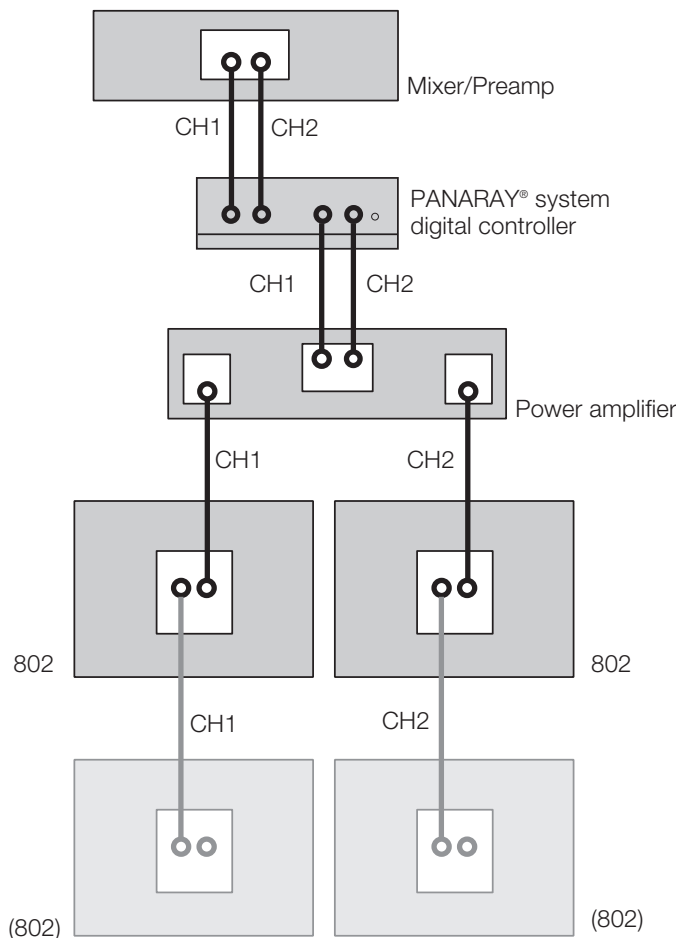
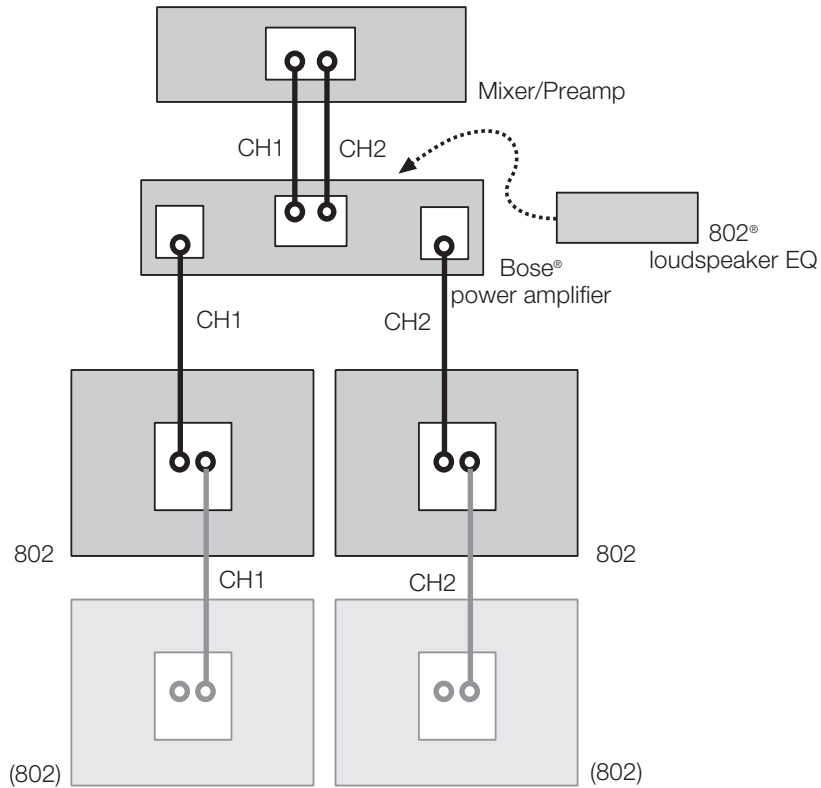
¹Full bandwidth pink noise is applied to the 802-III and amplified to a level at the loudspeaker terminals corresponding to 1 watt as referenced to the nominal impedance. The average sound pressure level (dB-SPL) is measured at 1 meter from the speaker in an anechoic environment.

²Full bandwidth pink noise is applied to the 802-III and amplified to a level at the loudspeaker terminals corresponding to the long-term rated power handling of the speaker. The average sound pressure level (dB-SPL) is measured at 1 meter from the speaker in an anechoic environment.

³Full bandwidth pink noise, meeting International Electrotechnical Commission (IEC) Standard #268-5, with a spectrum corresponding to average program material.

⁴Full bandwidth noise, meeting the IEC Standard #268-5 is applied to the 802-III and amplified to a level at the loudspeaker terminals corresponding to the power handling of the loudspeaker. The loudspeaker must show no visible damage or measurable loss of performance after 100 hours of continuous testing.

System Configurations



response across the entire operating range of the 802 Series III loudspeaker. Using a controller or EQ card also allows for cross-over of the 802 Series III loudspeaker with a Bose bass loudspeaker.

Loudspeaker Configuration

The 802® Series III loudspeaker can be used with the Bose® 1600 and 1800 amplifiers. It is also compatible with industry standard amplifiers rated for 4-8Ω loads.

The 802 speaker is packaged one per carton.

Engineers' and Architects' Specifications

The loudspeaker shall be a multiple driver, full-range system with matched active equalization as follows:

The transducer complement shall consist of eight (8) full-range environmental drivers of 11.4 cm diameter, mounted symmetrically in vertical pairs on a faceted, removable baffle assembly. Each driver shall have a rated impedance of 1Ω and shall be wired in series, resulting in a composite nominal impedance of 8Ω.

The loudspeaker system sensitivity shall be 99dB-SPL in the 300Hz to 3kHz range and 91dB-SPL in the 55Hz to 16kHz range with both measurements referenced to a 1 watt (2.83V) pink noise input at 1 meter. The nominal horizontal beamwidth shall be 120 degrees, and the nominal vertical beamwidth shall be 100 degrees. The power handling capacity of the loudspeaker shall be 240 watts continuous pink noise, band-limited from 55Hz to 16kHz.

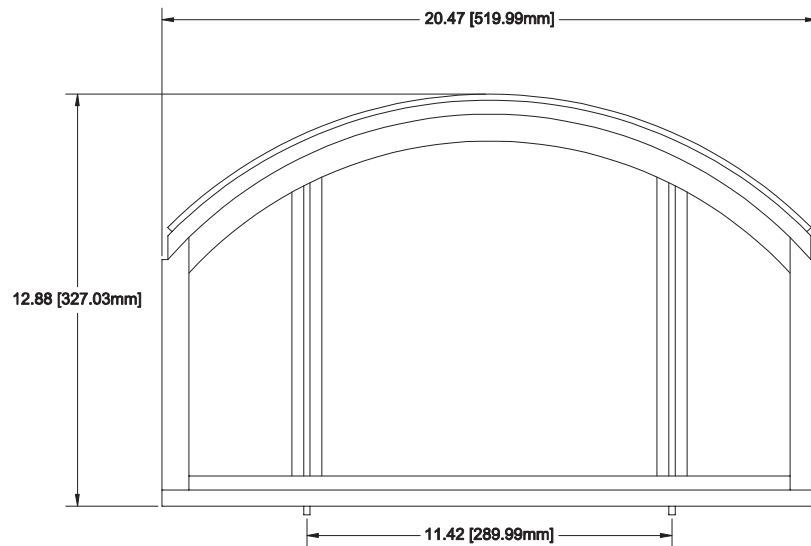
The loudspeaker shall be provided with a ducted vent system, tuned at 55Hz. The input connectors of the 802 Series III loudspeaker shall consist of two parallel Speakon® NL4 receptacles.

The enclosure of the 802 Series III loudspeaker shall be composed of mica-reinforced polyethylene copolymer structural foam. Its outer dimensions shall be 13" H x 20.5" W x 12.5" D (33 cm H x 52 cm W x 32 cm D); its weight shall be 31 lb (14 kg).

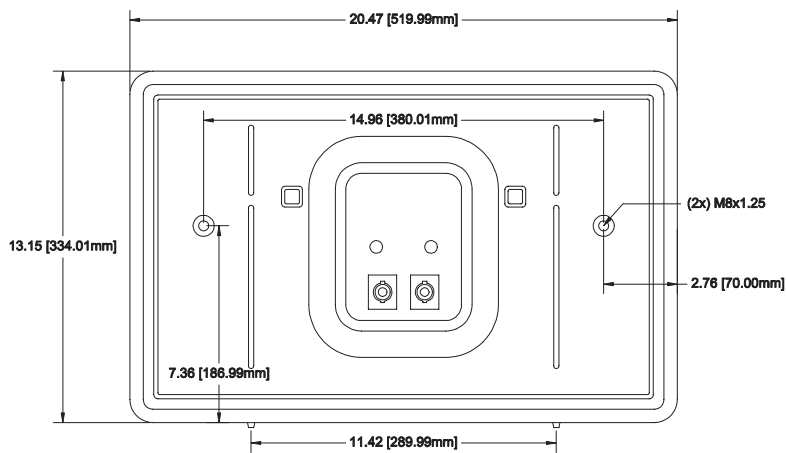
The loudspeaker shall be the Bose 802 Series III loudspeaker system.

802® Series III Speaker Views

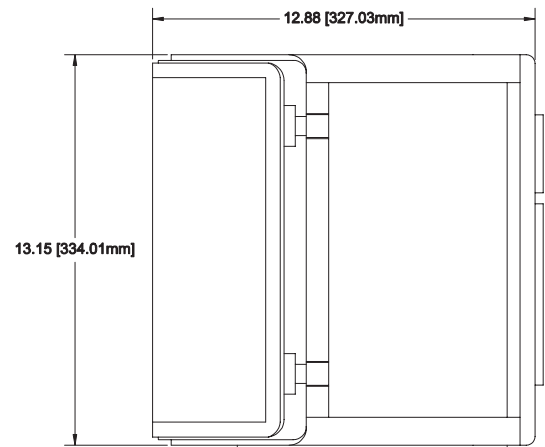
Top View



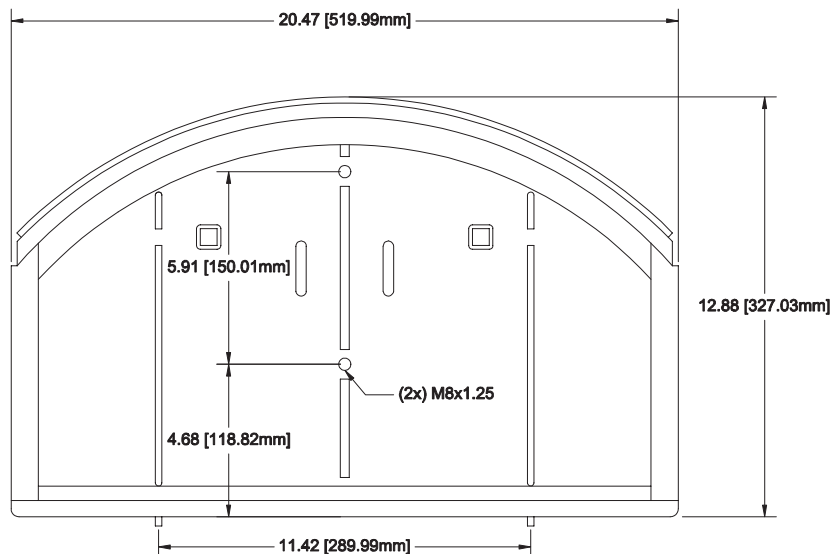
Rear View



Side View



Bottom View



The loudspeaker system shall be used with a PANARAY® system digital controller, to be connected before the input(s) of the system power amplifier(s), or with an 802® EQ card, to be installed in a Bose 1600 or 1800 amplifier.

The electronic controller shall be the Bose® PANARAY system digital controller.

Safety and Regulatory Compliance

All versions of the 802 Series III loudspeakers comply with ANSI/EIA 636, *Recommended Loudspeaker Safety Practices* and EMC Directive 89/336/EEC and Article 10 (1) of the Directive in compliance with EN50081-1, EN50082-1, as signified by the CE mark.

Warranty Information

All versions of the Bose 802 Series III loudspeaker are covered by a 5-year, transferable limited warranty.

