

BOSE

302™A Loudspeaker

General Description

The Bose® 302™A loudspeaker is a 100-Watt loudspeaker designed for surface-mount installations in indoor and outdoor commercial applications.

It offers the following features:

- Wide-range reproduction over a broad dispersion area
- A multi-tap line transformer that provides easy-to-change tap settings for 12W, 25W, 50W, and 100W (in 70V or 100V configurations)
- Transformer encased in a custom molded compartment on the speaker bracket
- Aesthetic design available in black or white to blend with decor
- Mounting hardware that permits fast and easy installation
- Weather resistant design and hardware to ensure reliable performance indoors or outdoors

Installation

All hardware, the transformer, bracket, and installation instructions are included with the loudspeakers.

The loudspeakers are designed to be mounted on a wall, ceiling, or overhang, using the supplied U-brackets, which attach to the internal threaded inserts. The loudspeaker slips easily into the mounting bracket and can be tilted down by 30° when mounted vertically or 90° when mounted on a horizontal surface.

Loudspeaker Configuration

The Bose 302A loudspeaker can be used with all Bose amplifiers. It is also compatible with industry standard professional amplifiers.

The 302A loudspeaker is used as a distributed speaker system with its built-in transformer.

The 302A is packaged two units per carton.



Technical Information

Frequency Range

75Hz to 16kHz \pm 3dB

302A Speaker Configurations

70V/100V (12W, 25W, 50W, 100W taps)

Sensitivity¹

84dB-SPL @ 1W, 1m (pink noise)

Maximum Acoustic Output²

104dB-SPL @ 1m (pink noise)

104dB-SPL @ 1m (IEC³ noise)

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

Horizontal 178°

Vertical 93°

Long-Term Power Handling⁴

100W continuous

Impedance

70V: 25 Ω at 100W tap setting

100V: 50 Ω at 100W tap setting

Mechanical Specifications

Dimensions: 13.4"H x 5.7"W x

9.0"D (34 cmH x 14 cmW x

23 cmD)

Weight: 13 lb (3.85 kg)

including transformer and bracket

Connectors: Screw terminals

Mounting Hardware Included: "Quick install" U-bracket with transformer and hardware

Bracket Angle: Ceiling pitch, 90°;

Wall pitch, 30°

¹Full bandwidth pink noise is applied to the 302A 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.

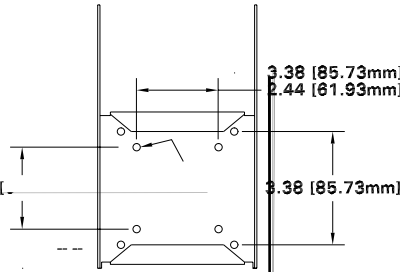
²Full bandwidth pink noise is applied to the 302A and amplified to a level at the loudspeaker terminals corresponding to the long-term rated power handling of the speaker. The average sound pressure level (dB-SPL) is measured at 1 meter from the speaker in an anechoic environment.

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

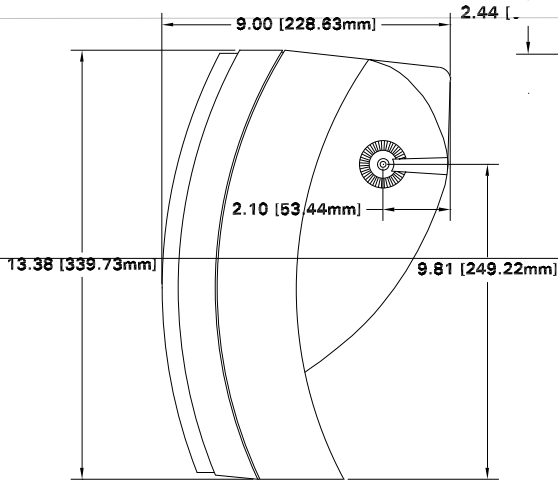
⁴Full bandwidth noise, meeting the IEC Standard #268-5 is applied to the 302A and amplified to a level at the loudspeaker terminals corresponding to the power handling of the loudspeaker. The loudspeaker must show no visible damage or measurable loss of performance after 100 hours of continuous testing.

Bracket and Speaker Views

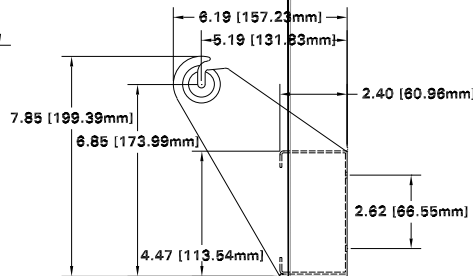
Bracket Footprint



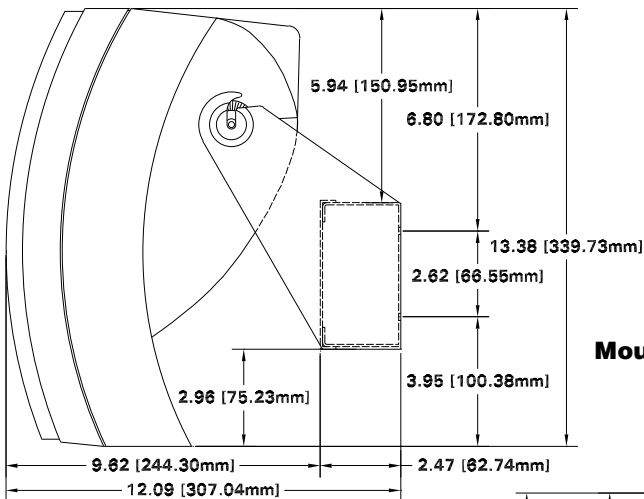
Speaker Side View



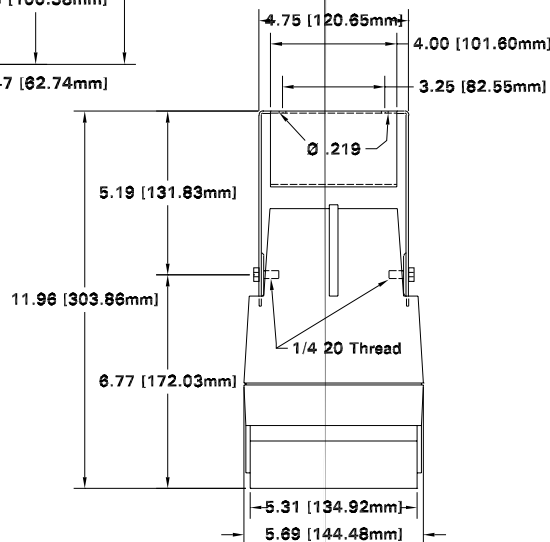
Bracket Side View



Mounted Speaker Side View



Mounted Speaker Top View



Engineers' and Architects' Specifications

The system shall consist of a loudspeaker with bracket that houses one 100-Watt transformer. The loudspeaker shall be an indoor/outdoor 100-Watt, ported loudspeaker utilizing one 5.25" (13.3 cm) environmental woofer and two 2.50" (6.3 cm) environmental Twiddler™ transducers arrayed for wide dispersion. The transformer shall offer multiple taps of 12W, 25W, 50W, and 100W.

The loudspeaker shall have a maximum acoustic output of 105dB-SPL @ 1 m from 75Hz to 16kHz. The input connector to the transformer shall be a terminal strip. The dispersion angle shall be 178° horizontal and 93° vertical. The loudspeaker shall be available in black and Arctic white.

The loudspeaker shall be the Bose® 302™A loudspeaker.

Safety and Regulatory Compliance

All versions of the Bose 302A 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 302A loudspeaker are covered by a 5-year, transferable limited warranty.

BOSE
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