



SMS5

Compact Two-Way Loudspeaker

SMS5 — COMPACT TWO-WAY LOUDSPEAKER

Careful acoustic design and the use of advanced materials contribute to the exceptional music fidelity and speech intelligibility exhibited by the EAW Commercial SMS5 (black) and SMS5W (white) two-way speaker systems.

The shielded low-frequency driver's carbon fiber diaphragm remains extremely rigid at high power levels, producing a linear response and low distortion. The cone is fitted with a durable foam surround and treated to resist moisture. The high-frequency section features a 110° x 110° constant directivity horn with a built-in mechanical phase equalizer. The horn is driven by a Ferrofluid® cooled, 0.75" soft dome tweeter.

The system is nominally crossed over at 3.0 kHz by a 12 dB/octave network, which uses markedly lower (than conventional) inductance values in series with the woofer. This design reduces sound delays associated with high inductance values and provides excellent low frequency transient response. The high-pass section is corrected for optimum performance of the CD horn and is protected with a circuit based on a low-value/low-mass filament resistor that smoothly limits the power sent to the tweeter driver.

All components are housed in a vented enclosure formed from semi-expanded polystyrene foam that is extremely strong, lightweight and weather resistant. Threaded metal sockets are molded into the cabinet to facilitate quick, safe deployment of the SMS5, as a single unit or in arrays, using specially designed accessory mounting hardware.

The SMS5 is a part of EAW Commercial's SMS Series Surface Mount Speakers, which includes two-way constant directivity, compact speakers in easily installed enclosures.

FEATURES

- .. 5" high-efficiency carbon fiber woofer
- .. 110° x 110° constant directivity horn with Ferrofluid® cooled, 0.75" soft dome tweeter
- .. Built-in low inductance passive crossover
- .. Lightweight, UV/weather resistant, high density polystyrene, trapezoidal shaped enclosure for multiple applications and minimum visual intrusion
- .. Integrated mounting points for use with optional mounting hardware
- .. Articulated wall-mount support bracket included



APPLICATIONS

- .. Meeting Rooms
- .. Hotels
- .. Houses of Worship
- .. Board Rooms
- .. Courtrooms
- .. Multizone Paging/Music Systems
- .. Multi-Purpose Facilities



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SPECIFICATIONS

SYSTEM

Freq. Range (-10 dB):	55 Hz–25 kHz
Freq. Response (-3 dB):	65 Hz–23 kHz
Horz. Coverage Angle (-6 dB):	110° averaged 800 Hz to 16 kHz
Vert. Coverage Angle (-6 dB):	110° averaged 800 Hz to 16 kHz
Directivity Factor; Q (DI):	6.3 (8.0) averaged 800 Hz to 16 kHz
System Sensitivity ¹ :	87 dB, 1W @ 1m
Rated Maximum SPL:	109.5 dB, @ 1m
System Nominal Impedance:	4Ω
Long-term Power Handling ² :	175 W (IEC268-1)
HF Protection:	Dynamic
Crossover:	3.0 kHz, 12 dB/octave

TRANSDUCERS

Low-Frequency:	5 in/130 mm carbon fiber woofer with 1 in/25 mm coil
High-Frequency:	Horn loaded 0.75 in/19 mm dome tweeter, Ferrofluid cooled

PHYSICAL

Enclosure:	45° back angles, high density polystyrene
Attachment Inserts:	2 points M6 threaded on back 2 points M6 threaded on top and bottom
Mounting Hardware:	Adjustable wall-mount support bracket
Color:	Matte black (SMS5), White (SMS5W), scratch resistant paint
Grille:	Matching perforated steel grille
Input Connectors:	Gold-plated banana jacks
Dimensions (HxWxD):	10.62 in/270 mm x 7.36 in/187 mm x 6.77 in/172 mm
Net Weight:	8.6 lb/3.9 kg

¹ Measured on axis in the far field with 1 watt (2.00 V rms @ 4 ohms) input and referenced to 1 meter distance using the inverse square law. Listed sound pressure represents an average from 300 Hz to 3 kHz.

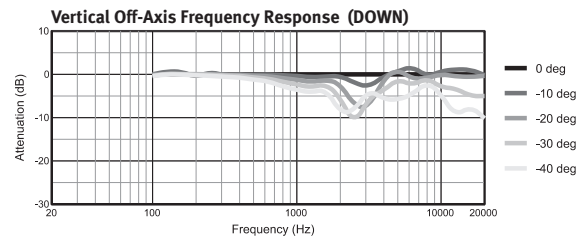
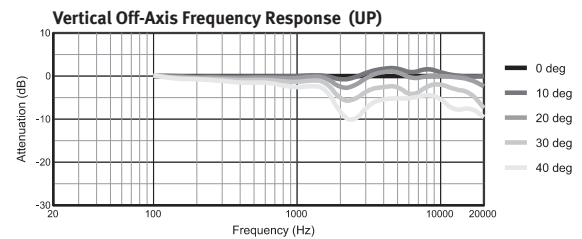
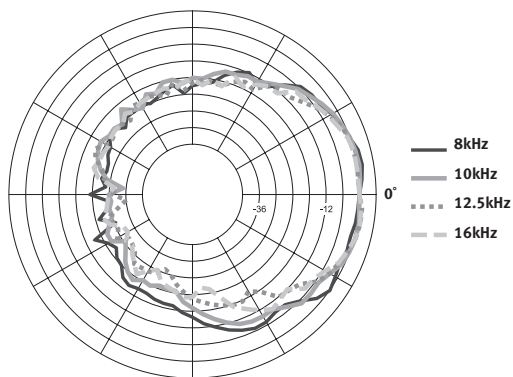
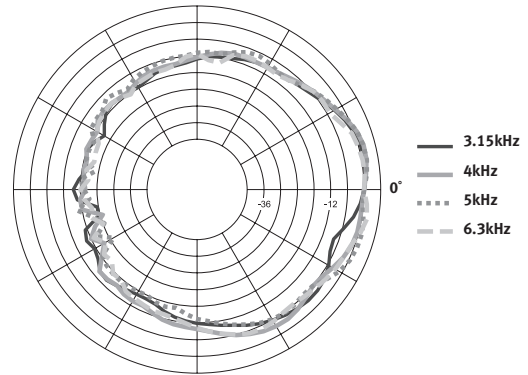
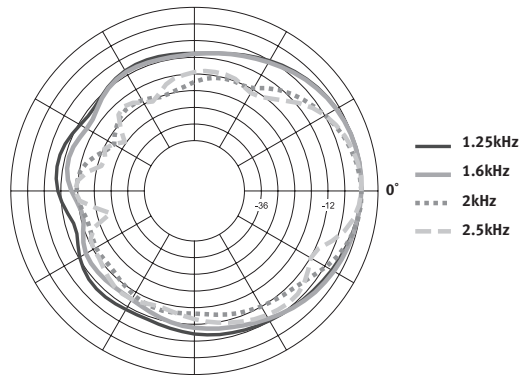
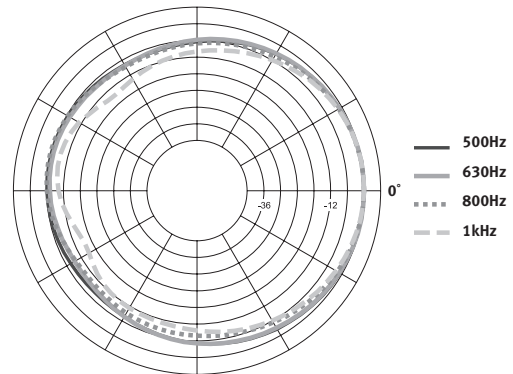
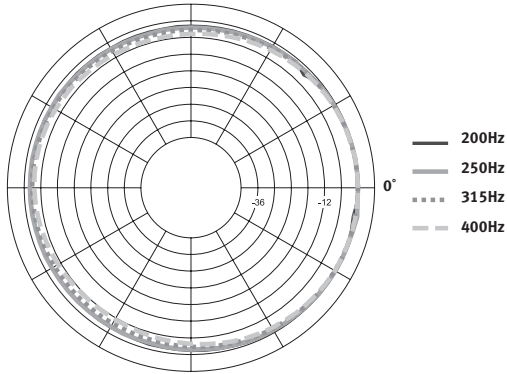
² Long-term maximum input power is determined by submitting the speakers to a power test lasting one hour, in which a special signal (IEC268-1) is applied 20 times for one minute each, with an interval of two minutes between one application and the next. The special signal is generated by filtering pink noise with a weighting device that bandpasses the signal with a 12 dB/octave slope below 55 Hz and above 5 kHz, and maintains the 6 dB peak/average ratio. The maximum power the speaker is able to withstand without any permanent damage is taken as the value of long-term maximum input power.



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SMS5 Vertical Polars

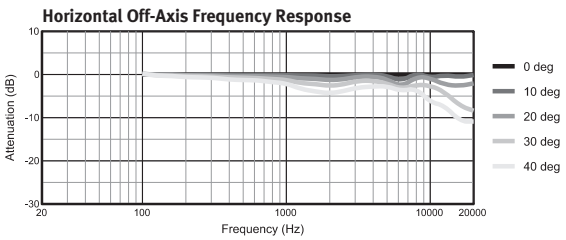
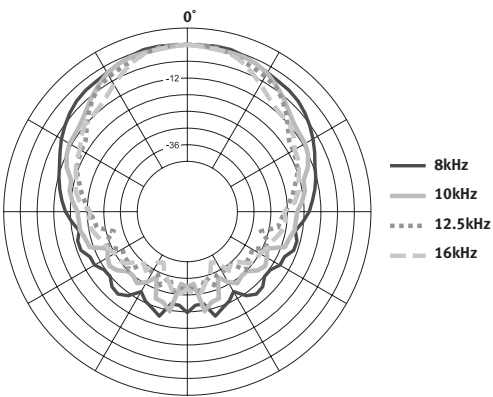
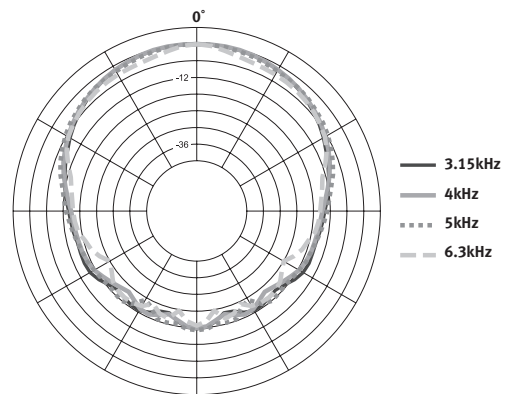
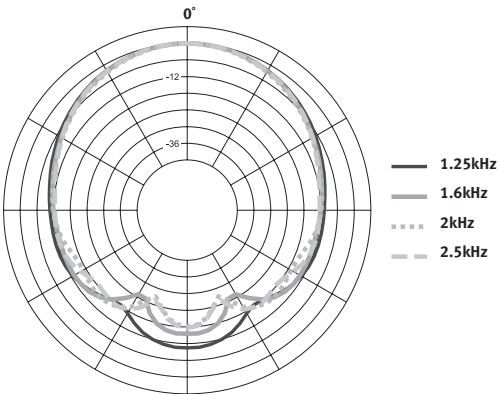
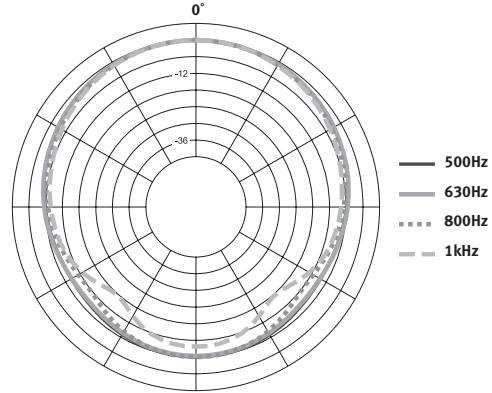
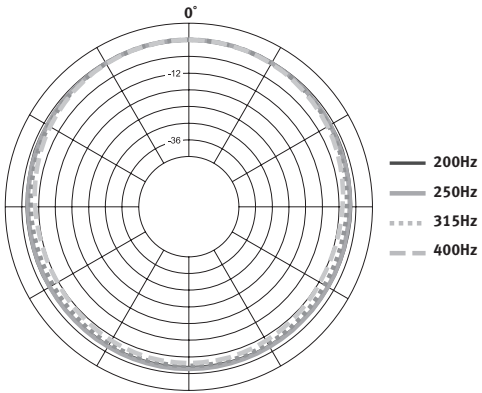




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SMS5 Horizontal Polars

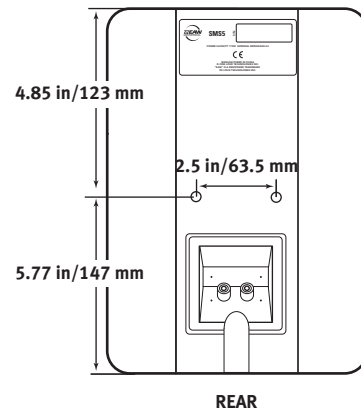
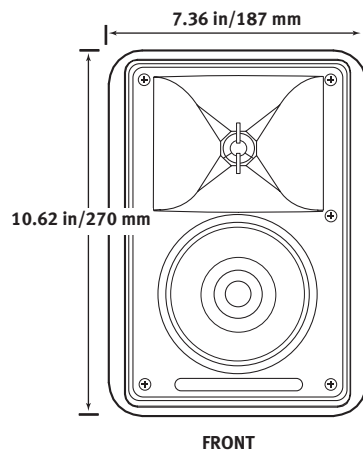
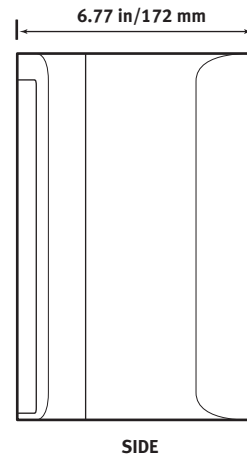
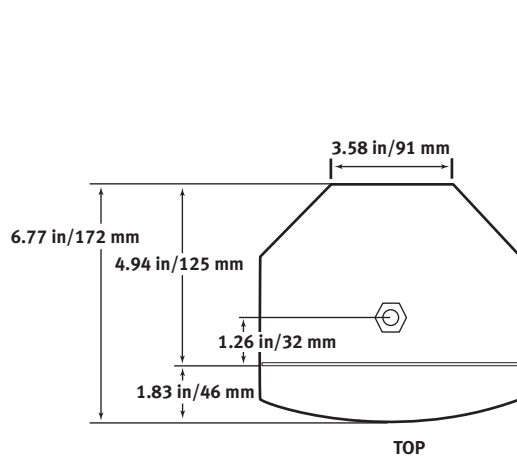
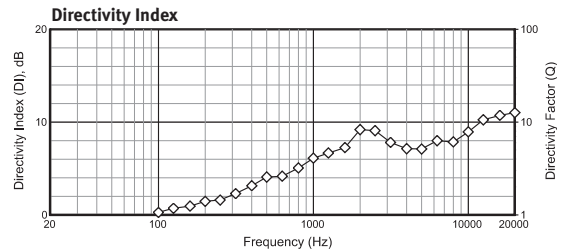
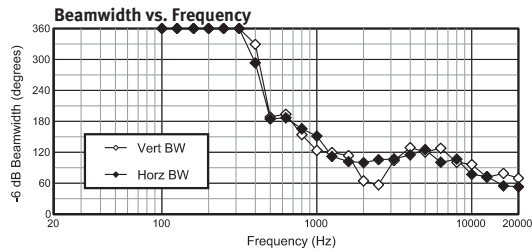
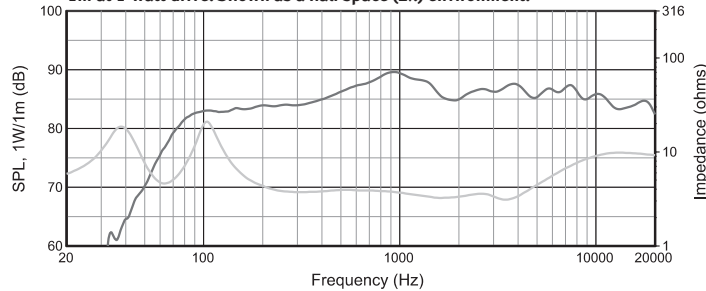




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Frequency response is measured on-axis at a distance referenced back to 1m at 1-watt drive. Shown as a half space (2π) environment.





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CSI PRODUCT SPECIFICATIONS FOR DESIGNERS, SPECIFIERS, AND CONSULTANTS

(ALSO KNOWN AS "A&E SPECIFICATIONS")

The following are "Part 2 Products" CSI-type specifications. It is assumed that "Part 1 General – Administrative and Procedures" and "Part 3 Execution – Installation and Maintenance" are part of an overall audio system or project specification.

PART 2 PRODUCTS

- 2.01 Approved Manufacturer/Product
 - A. EAW Commercial, One Main Street, Whitinsville, MA 01588 USA
 - B. Model number: SMS5
- 2.02 Design
 - A. Configuration: Compact 2-Way Constant Directivity Speaker
 - B. LF Sub-section: 5 in. carbon fiber cone low-frequency driver
 - C. HF Sub-section: 0.75 in. dome high-frequency driver
- 2.03 Acoustical Properties
 - A. Nominal Dispersion Angle (–6 dB points)
 - 1. Horizontal: 110° averaged 800 Hz to 16 kHz
 - 2. Vertical: 110° averaged 800 Hz to 16 kHz
 - B. Axial Frequency Response (–3 dB points):
65 Hz – 23 kHz
 - C. Axial Frequency Range (–10 dB points):
55 Hz – 25 kHz
 - D. Axial Sensitivity (dB SPL/1 W @ 1 m):
87 dB
 - E. Long-Term Power Handling:
175 W (IEC268-1)
 - F. Nominal Impedance:
4 ohms
- 2.04 Physical Properties
 - A. Enclosure Shape: Trapezoidal
 - B. Enclosure Material: High-density polystyrene
 - C. Enclosure Finish: Matte black (SMS5) or white (SMS5W), scratch-resistant paint
 - D. Connectors: Gold-plated banana jacks
 - E. Mounting/Suspension Hardware:
Four M6 threaded inserts, two on back, one on top, one on bottom
 - F. Grille: Matching perforated steel grille
 - G. Dimensions
 - 1. Height: 10.62 in/270 mm
 - 2. Width: 7.36 in/187 mm
 - 3. Depth: 6.77 in/172 mm
 - H. Weight
 - 1. Net Weight: 8.6 lb/3.9 kg

LOUD Technologies Inc. continually engages in research related to product improvement. New material, production methods, and design refinements are introduced into existing products without notice as a routine expression of that philosophy. For this reason, any current EAW Commercial and LOUD Technologies product may differ in some respect from its published description, but will always equal or exceed the original design specifications unless otherwise stated.
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