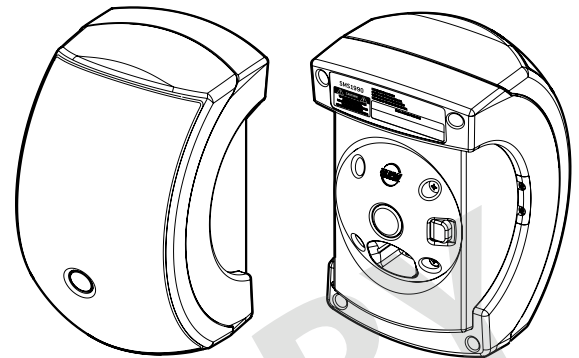


DESCRIPTION

The SMS1990 advances the state-of-the-art for small loudspeaker technology in providing high quality sound and controlled directivity. The design incorporates several innovative technologies developed by EAW for much larger professional loudspeakers. These provide the SMS1990 with the directional performance, wavefront coherency, output levels, and sound quality normally associated with much larger and more expensive loudspeakers.

The 2 LF drivers are configured in a precise arrangement to provide excellent pattern control and coherency below the LF/HF crossover. In addition, the LF drivers couple at lower frequencies providing the LF output of a much larger driver without sacrificing sound quality through the crossover region. The custom, high power HF driver complements the LF subsystem throughout the critical speech range. The result of these driver configurations is an extended range of pattern control and coherency that is not generally associated with loudspeakers of this size.

The SMS1990 is designed for surface mounting using the Clip-Fit™ wall bracket. The Clip-Fit bracket provides both the mechanical and electrical connections to the loudspeaker. This allows the loudspeaker mounting and wiring to be pre-installed on the job site. The loudspeaker is then simply mounted to the Clip-Fit bracket in one operation that provides both the mechanical and electrical connections.



SPECIFICATIONS CONFIGURATION

Subsystem:	<i>Transducer</i> LF 2x 3 in cone HF 1x 1 in dome	<i>Loading</i> Vented Waveguide
Operating Mode:	<i>Amplifier Channels</i> Single-amp LF/HF	<i>External Signal Processing</i> HPF

PERFORMANCE

Operating Range:	99 Hz to 20 kHz	
Nominal Beamwidth:	Horz 90°	Vert 90°
Axial Sensitivity (whole space SPL):	LF/HF 86 dB 99 Hz to 20 kHz	
Input Impedance (ohms):	<i>Nominal</i> LF/HF 8	<i>Minimum</i> 6.7 @ 390 Hz
Input Taps (w/CF-1TX version):	70 V: 32 W / 16 W / 8 W / 4 W 100 V: 32 W / 16 W / 8 W	
High Pass Filter:	High Pass=>90 Hz, 24 dB/octave Butterworth	
Accelerated Life Test: LF/HF 25 V	75 W @ 8 ohm	
Calculated Axial Output Limit (whole space SPL):	<i>Average</i> LF/HF 105 dB	<i>Peak</i> 111 dB

Features

- 2 x 3 inch Kevlar low frequency transducers
- 1 x 1 inch high frequency dome tweeter
- 90° x 90° coverage pattern
- UV/weather resistant HIPS (High Impact Polystyrene) enclosure
- Crossover optimized for speech intelligibility
- U-bracket included

Applications

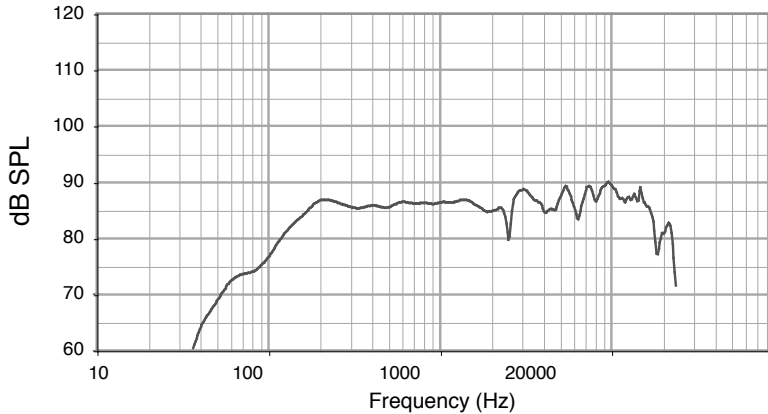
- Meeting Rooms
- Houses of Worship
- Courtrooms
- Multizone Paging/Music Systems
- Hotels
- Boardrooms
- Multi-Purpose Facilities



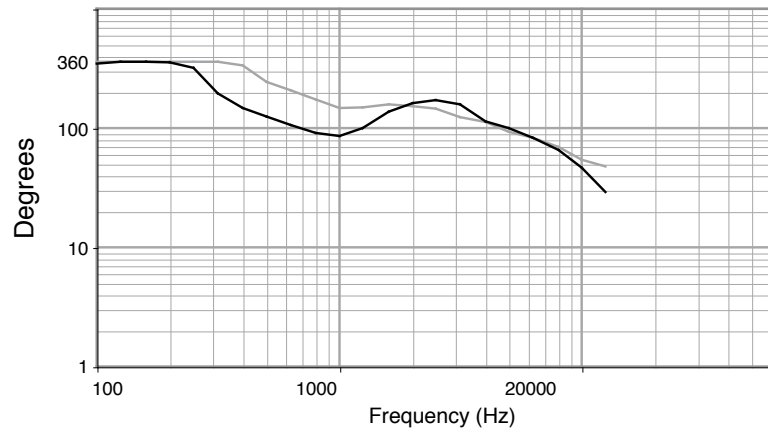
SMS1990

2-Way Surface Mounted Loudspeaker

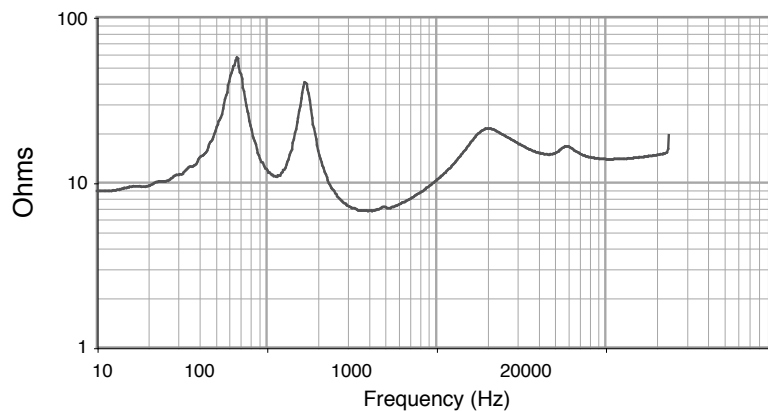
SMS1990 UNPROCESSED RESPONSE VS. FREQUENCY



SMS1990 BEAMWIDTH VS. FREQUENCY



SMS1990 IMPEDANCE VS. FREQUENCY



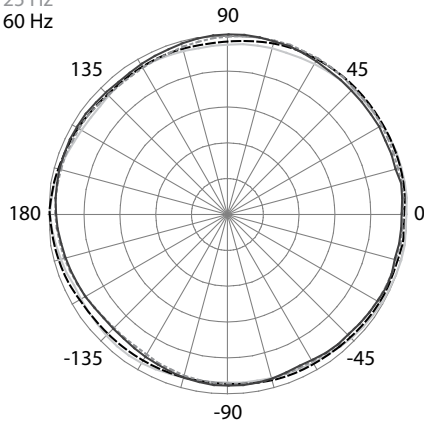


SMS1990

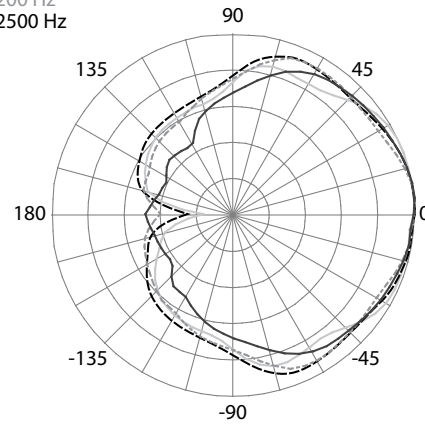
2-Way Surface Mounted Loudspeaker

SMS1990 VERTICAL POLARS

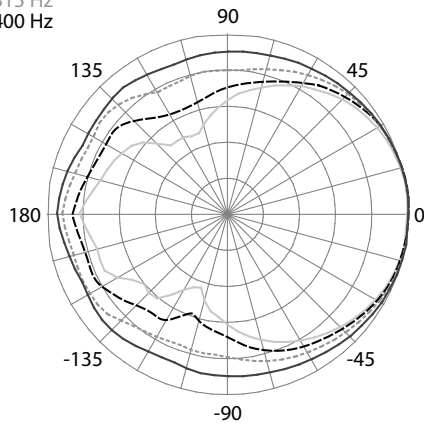
— 100 Hz
- - - 125 Hz
- - - 160 Hz



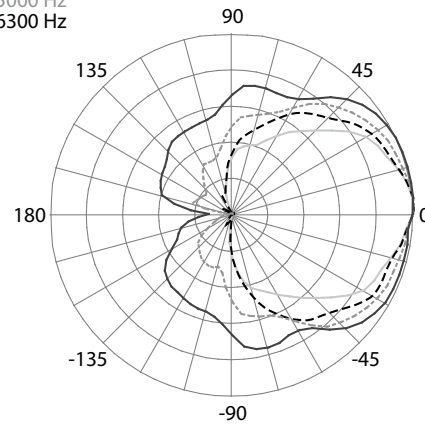
— 1600 Hz
- - - 200 Hz
- - - 2500 Hz



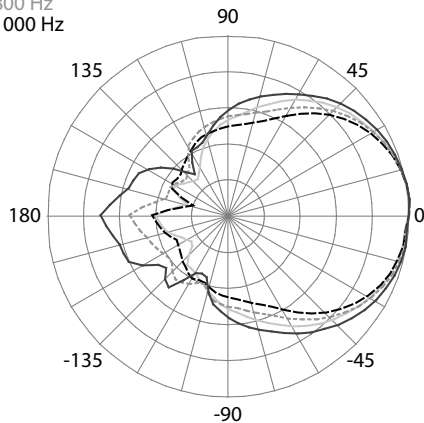
— 250 Hz
- - - 315 Hz
- - - 400 Hz



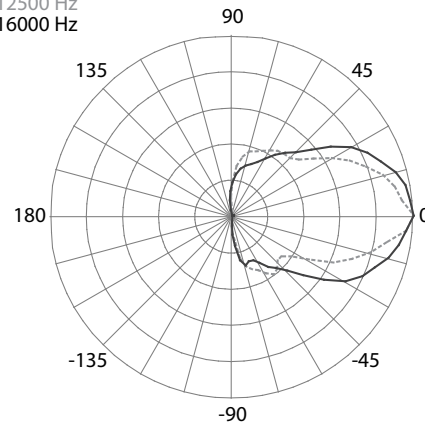
— 4000 Hz
- - - 5000 Hz
- - - 6300 Hz



— 630 Hz
- - - 800 Hz
- - - 1000 Hz



— 10000 Hz
- - - 12500 Hz
- - - 16000 Hz



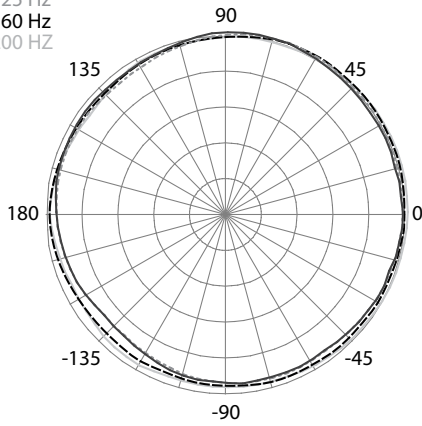


SMS1990

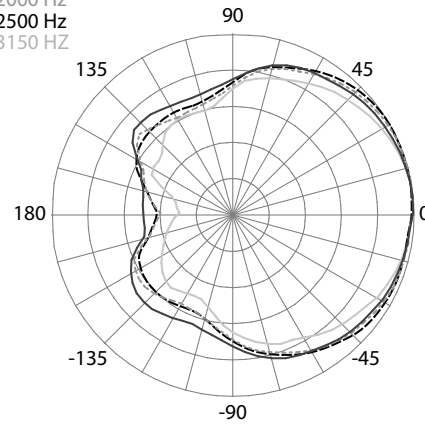
2-Way Surface Mounted Loudspeaker

SMS1990 HORIZONTAL POLARS

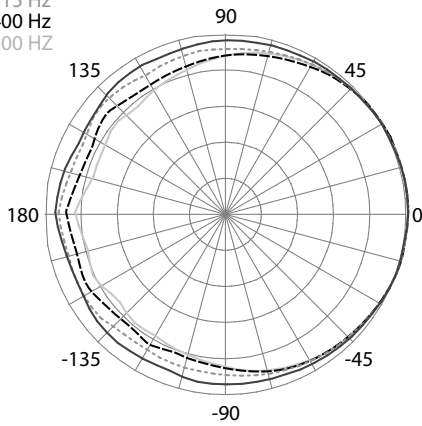
- 100 Hz
- - - 125 Hz
- - - 160 Hz
- 200 Hz



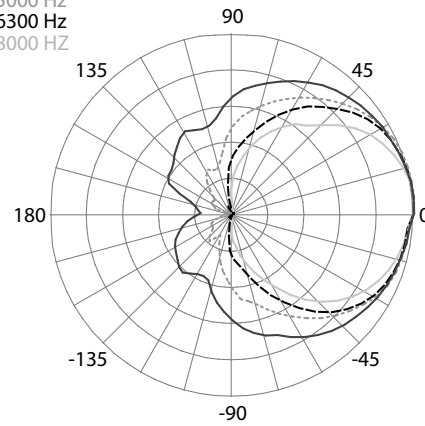
- 1600 Hz
- - - 2000 Hz
- - - 2500 Hz
- 3150 Hz



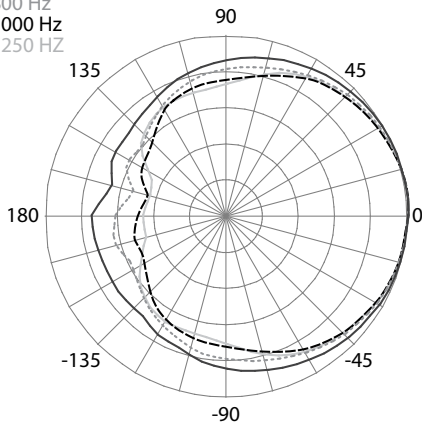
- 250 Hz
- - - 315 Hz
- - - 400 Hz
- 500 Hz



- 4000 Hz
- - - 5000 Hz
- - - 6300 Hz
- 8000 Hz



- 630 Hz
- - - 800 Hz
- - - 1000 Hz
- 1250 Hz



- 10000 Hz
- - - 12500 Hz
- - - 16000 Hz

