

SCS 12

Two-Way Spatially Cued Cinema Ceiling Surround Loudspeaker with Coaxial 12" LF



Key Features:

- Easy mounting system and ideal coverage allows for the SCS 12 to be the perfect loudspeaker for ceiling surround applications in immersive systems
- 400-watt power handling (2-hour AES, average continuous pink noise) and high sensitivity provide high SPL capability
- Consistent 100° x 100° broadband pattern coverage
- Extraordinarily clear cinema surround with extended frequency response for special effects
- Components:
 - 300 mm (12 in) woofer with Kevlar-reinforced cone and 75 mm (3 in) voice coil
 - 25 mm (1 in) exit compression driver with unique patented design and high-temperature polymer diaphragm
- 70 Hz – 20 kHz frequency response
- Coaxial 2-way design with high-power passive crossover network
- Overload protection



Description:

The SCS 12 Spatially Cued Cinema Surround is a full-range loudspeaker optimized for multi-channel surround formats and is designed for overhead or standard wall installations.

The SCS 12 is comprised of a high-power coaxial 300 mm (12 in) low frequency driver and 25 mm (1 in) high frequency compression driver. The coaxial design utilizes a unique tapered pole-piece design and transitions to the cone of the low frequency driver as a large diameter pattern control horn for the high frequencies, both eliminating high-frequency beaming and extending pattern control to the lowest possible frequencies. The result is a coaxial speaker with wide, extremely consistent 100° broadband coverage.

Component features include a Kevlar-reinforced low-frequency cone for reliability, well-damped surround edge for smooth frequency response, high-temperature 75 mm (3 in) voice coil and reduced distortion through saturated-gap magnet geometry. The high-frequency compression driver features a unique patented design, high-temperature polymer diaphragm and fluid cooling for high output levels with low distortion.

The enclosure is constructed of thick ABS and fiberglass and is heavily braced to maximize low-frequency performance. A heavy-duty U-type mounting bracket is included.

Specifications:

System:	
Frequency Range (-10 dB) ¹	55 Hz – 20 kHz
Frequency Response (±3 dB) ¹	70 Hz – 20 kHz
Coverage Pattern ²	100° x 100°
Input Power Handling ³ (AES 100-Hour Rating)	250 W (37.8 Vrms), pink/IEC
Input Power Handling ³ (AES 2-Hour Rating)	400 W (56.6 Vrms), pink/IEC
Half-Space Sensitivity	96 dB, 1 W @ 1m, ref 2.83 V
Calculated Maximum SPL ⁴	122 dB (peaks of 128 dB) @ 1m
Crossover Network	1.8 kHz HF Filter: 3rd order (18 dB/oct) high-pass LF Filter: 2nd order (12 dB/oct) low-pass
Nominal Impedance	8 ohms
Minimum Impedance	5.7 ohms @ 160 Hz
Transducers:	
Low Frequency Driver	1 x C322, 75 mm (3 in) voice coil
High Frequency Driver	1 x 2408H-1, 25 mm (1 in) diaphragm and voice coil diameter, patented design, fluid-cooled
HF Driver Protection	Minimum audibility SonicGuard™ HF overload protection

Physical:	
Enclosure Construction	ABS and fiberglass, heavily braced
Attachment Options	2 x M10 points for included U-bracket M6 secondary safety attachment point on back panel
Grille Construction	Corrosion-resistant, zinc-rich steel
Input Connection	CE-compliant covered barrier strip terminals. Barrier terminals accept up to 9 mm outside 4 mm inside openlug (#6, #8 or #10) plus bare wire up to 2.5 mm ² (12 AWG) wire or spade lugs.
Dimensions (H x W x D)	402 x 402 x 445 mm (15.8 x 15.8 x 17.5 in) Depth with included U-bracket: 542 mm (21.4 in)
Colors	Black
Net Weight	14 kg (31 lb) With U-Bracket: 16.8 kg (37 lb)
Shipping Weight	19.5 kg (43 lb)
Included Accessories	Steel U-bracket

¹Measured in half-space.

²Average 500 Hz to 10 kHz.

³IEC standard, measured using full-bandwidth pink noise with 6 dB crest factor.

⁴Calculated based on power rating and measured half-space sensitivity.

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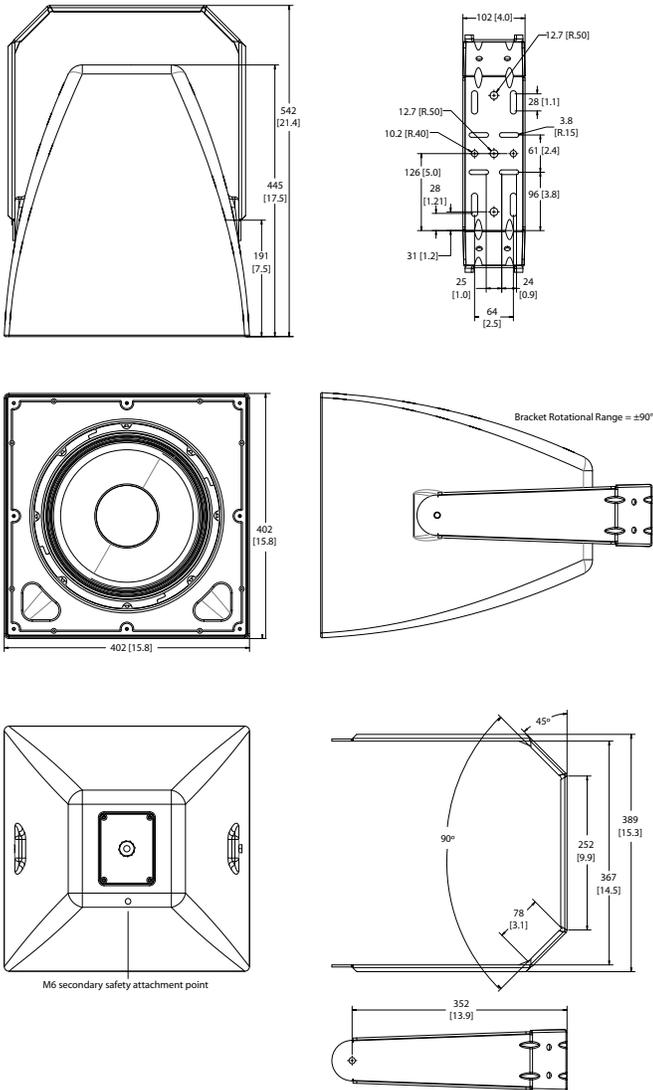
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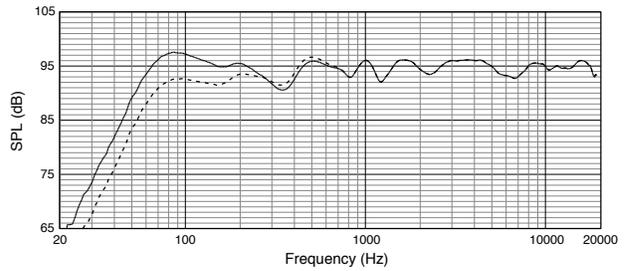
Dimensions:

Dimensions in mm (inches)

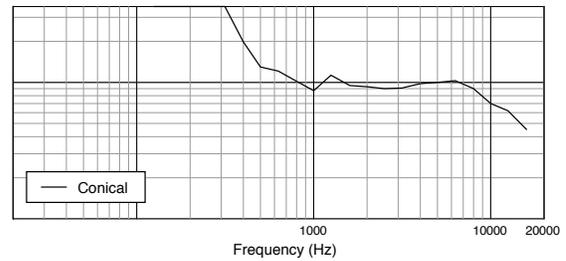


Graphs:

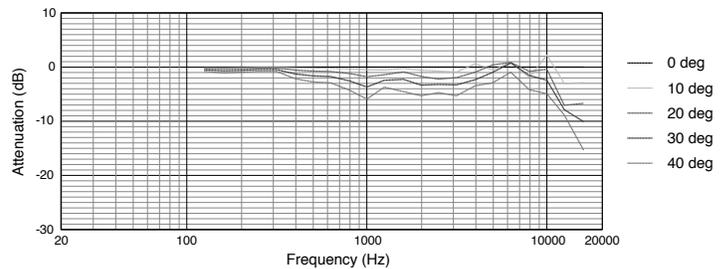
Frequency response in half-space (2π , solid line) and full-space (4π , dotted line)



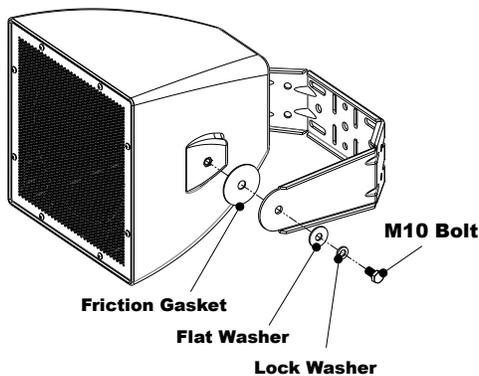
Beamwidth vs. Frequency



Off-Axis Frequency Response



Attaching the U-Bracket to the Cabinet:



Impedance

