SM1001p High-Powered Surface-Mount Subwoofer Preliminary Technical Information for System Engineers





Preliminary Data: SM1001p

System Type	10-inch active woofer with a 10 inch passive radiator	
Impedance (nominal)	N/A (powered)	
Sensitivity dB @ 2.83 V/1 m	92 dB	
Sensitivity dB @ 1 W/1 m ¹	92 dB	
Frequency Response (- 3 dB) ²	55 Hz – 118 Hz	
Frequency Response (-10 dB) ²	41 Hz – 224 Hz	
Max. Program Power ³	300 W	
Max. Continuous Power RMS ⁴	200 W	
Max. Power SPL @ 1 m ⁵	111.0 dB	
Low-Frequency Transducers	One active 254 mm (10 in.) polypropylene cone with butyl rubber surround, one passive 254 mm (10 in.) polypropylene	
	cone with butyl rubber surround	
Low-Frequency Voice Coil	35.0 mm (1.38 in.)	
Crossover Frequency		
High Pass Output Filter	Variable, user-selectable 50 Hz thru 200 Hz	
	Variable, user-selectable 50 Hz thru 200 Hz	
Enclosure Material	MDF with plywood top and back	
Input	Balanced XLR	
Output	Balanced XLR	
Color Options	Black or white, custom colors available.	
Height (excluding feet)	355.6 mm (14.0 in.)	
Width	624.6 mm (24.6 in.)	
Depth (excluding SM bracket)	364.7 mm (14.4 in.)	
Weight	12.3 kg (27 lbs.)	
Shipping Weight	14.5 kg (32 lbs.)	
Packaging	One per box	
Included Accessories	Safety cable, forged eyebolt	
Optional Accessories	Surface mount bracket, corner mount bracket	
Regulatory - CE	Approved	
RoHS	Approved	

- 1 1 W 1 m sensitivity determined using nominal impedance
- Frequency response measured in half or full space as dictated by speaker mounting configuration
- 3 Max program power is 3 dB above max continuous power
- 4 Continuous power rating, EIA-426-B test
- 5 Max output based on max continuous power

Key Features

- Powered subwoofer with one 10-inch active woofer and one 10-inch passive radiator, incorporating a 200-watt Class D amplifier.
- Polypropylene woofers with butyl rubber surrounds mated to steel baskets.
- Solid cabinet with textured paint finish.
- High output (111 dB) and maximum efficiency with an accentuated 70 Hz peak to maximize the listener's low frequency experience.
- Powder-coated steel grilles provide lasting durability.
- Inputs include a balanced XLR and 70.7volt high-level binding post input.
- More versatile with 70.7v high level input for adding powered bass in distributed systems.
- Full-range balanced XLR output with selectable 50 Hz to 200 Hz high-pass filters with full range LFE position.
- 0°/180° phase switch.
- High quality painted black or white textured finish. Custom colors available.
- Included accessory: Safety cable and forged eyebolt.
- Optional accessories: Surface mount bracket (AC-SM1001p-S), corner mount bracket (AC-SM1001p-C).

Description

The SM1001p is a powered surfacemount or freestanding subwoofer with a 10-inch active polypropylene woofer and a 10-inch polypropylene passive radiator to deliver maximum low-frequency response down to 41 Hz (- 10 dB). Mated to a steel basket and an MDF and plywood enclosure, the SM1001p delivers serious lowfrequency punch (111 dB max. SPL) with minimal distortion.

Engineered with a 200-watt Class D amplifier, a 70.7-volt high level input and full-range balanced XLR outputs, the SM1001p offers a user selectable 50 Hz to 200 Hz high-pass filter and a 0°/180° phase

Safety hardware is included and optional surface and corner mounting brackets can mount to walls, ceilings or other rigid structures.

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Applications

The SM1001p is a background to foreground subwoofer for installations where high-quality, true bass response and rapid installation are critical. Aerobic rooms, retail restaurants, nightclubs, hotels, bars, theme parks, arenas, ballrooms and churches are all ideal fits for the SM1001p.

Patented SoundTube **Technologies**

SoundTube Entertainment and MSE Audio Group constantly develop new technologies that enhance audio product performance. SoundTube Entertainment innovations are protected by multiple U.S. and international patents, which explicitly cover SoundTube dispersion, enclosure and dome technologies. MSE Audio Group actively defends its patents in order to protect SoundTube resellers and end users.

Technical Data and Specification Tools

Technical Data

SoundTube Entertainment strives to provide complete and effective technical information and data to dealers, engineers and designers. All data are available from SoundTube Entertainment or at www.soundtube.com.

Technical data and downloads include:

EASETM data – 3-D polar plots.

EASETM Address - 2-D modeling for distributed systems

Autodesk® Revit® software

Tech Sheets - Technical information and architectural specs for system engineers

SoundTubeSPECTM – Proprietary speaker placement software

Independent Data Acquisition and Verification

All data for SoundTube speakers are independently collected and verified by NWAA Labs (www.nwaalabs.com) using their proprietary MACH testing system. All data are collected and analyzed according to ASTM, ISO and AES standards using EASERA, TEF and MLSSA. Full balloon data including

both phase and magnitude are compiled into a variety of formats including EASE 4.x, GLL and CLF.

Architectural Specifications

The surface-mount subwoofer shall consist of one 254.0 mm (10.00 in.) active lowfrequency transducer with one 254.0 mm (10.00 in.) passive radiator.

Performance specifications of a typical unit shall be as follows: Useable frequency range shall extend from 41 Hz – 224 Hz (-10 dB). Maximum continuous output at 1 meter shall be at least 111 dB. Rated power capacity shall be 200 watts continuous RMS and confirm to EIA-426-B testing.

The low frequncy transducers shall be constructed of polypropylene cones with butyl rubber surrounds and be mated to a steel basket.

Installation for the unit shall be with optional surface or corner mount bracket. The unit comes with floor feet for placement on ground or flat surface as an alternative installation option. Safety cable and forged eyebolt are included. Inputs include balanced XLR and 70.7-volt high level binding post input. More versatile with 70.7v high level input for adding powered bass in distributed systems. Outputs include full-range balanced XLR output with selectable 50 Hz to 200 Hz high pass filters. The subwoofer also offers a 0°/180° phase switch.

The enclosure shall be constructed of MDF and plywood. The grilles shall be constructed of powder-coated steel. Overall dimensions for the unit without the surface mount bracket shall be 355.6 mm (14.0 in.) tall excluding feet by 624.6 mm (24.6 in.) wide by 364.7 mm (14.4 in.) deep.

The system shall be the SoundTube SM1001p for low- and high-impedance applications.

SoundTube Entertainment

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All SoundTube products come with a 5-year limited warranty.

Graphs and Plots		
Frequency Response	Impedance/Phase	
N/A	N/A	
Vertical Beamwidth	Directivity Index (DI)	
N/A	N/	A

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Polar Plots — Horizontal ---- Vertical

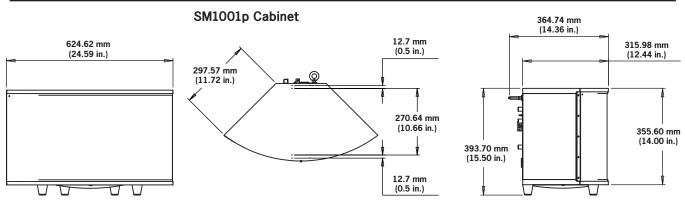
125 Hz 250 Hz 500 Hz 1,000 Hz

N/A N/A N/A

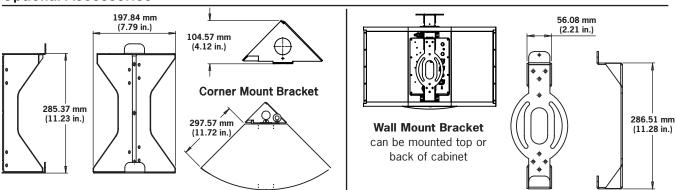
2,000 Hz 4,000 Hz 8,000 Hz 10,000 Hz

N/A N/A N/A

Mechanical Drawings



Optional Accessories



SoundTube Entertainment manufactures a complete line of speakers for: