UL Listed Sound Masking Speakers

Model Series: SM810, SM820, SM410

Sound Masking:

A sound masking system helps provide greater conversational privacy and productivity in the workplace by adding specially shaped ambient noise to an open-office environment. Sound masking speakers are typically positioned above the finished lay-in tile ceiling in plenum space; however, models with a white finish are sometimes specified for use in open-architecture truss-type ceilings.

Along with a sound masking speaker, you will need a specially designed sound masking generator to feed the system, as well as an amplifier. AVLELEC offers stand-alone sound masking generators (that can feed a mic or line level signal to an external amplifier), as well as generators with built-in power amplifiers. Order the generator and amplifier separately from the speaker.*

SM Sound Masking Speakers:

The UL Listed SM speaker assembly consists of a speaker (4" single cone, 8"dual cone, or 8" coaxial), transformer, steel enclosure and grille, and choice of mounting hardware (hangers or bridge rails). Bridge rails can also be purchased separately, as needed.

- Speaker (select one):
  — No. 810: 8" 15W dual cone (paper woofer cone & paper whizzer cone) with 10 oz. magnet.
  — No. 8A50: 8" 50W coaxial (polypropylene LF cone) with 20 oz. LF & 2 oz. HF magnets.
  — No. JR410: 4" 15W single cone (paper) with 10 oz. magnet. Includes adaptor ring.
- Factory-wired transformer with taps at 4, 2, 1, 1/2, 1/4 @ 70V. Selector switch includes "OFF" position.
- Steel enclosure: 760 cu.in. (11.625"SQ x 5.625"D), acoustically lined with fiberglass. Black or white finish.
- Perforated steel grille. Black or white finish.
- SG handibox cover with dual combination 3/4" / 1/2" knockouts for flex conduit. 1/2" Romex connector is included for installations without conduit.
- Externally accessible input leads.

Mounting Hardware Selection (choose one):

- Hangers, S-hooks, & chain: removable wire hangers are factory-mounted to aim up but can be reconfigured to aim down or sideways. Includes S-hooks and 4' chain for single point suspension from building structure. *Note: rigging hardware to attach speaker to building stucture is to be furnished by installer. If not used for installation, remove hangers from enclosure to prevent rattling.*
- Bridge Rails: for installation directly on lay-in tile ceiling grid. Speakers have pre-drilled pilot holes to attach rails quickly. Rails can be ordered as part of the speaker package or separately (SM-BR). Includes six black sheet metal screws.

SM models with hanger-style mounting hardware ship ready to install with single point suspension.

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The SM speaker can also be purchased with bridge rails.

> UL 1480 General Signaling for use in the USA.
> UL 2043 suitable for use in return air plenum spaces.
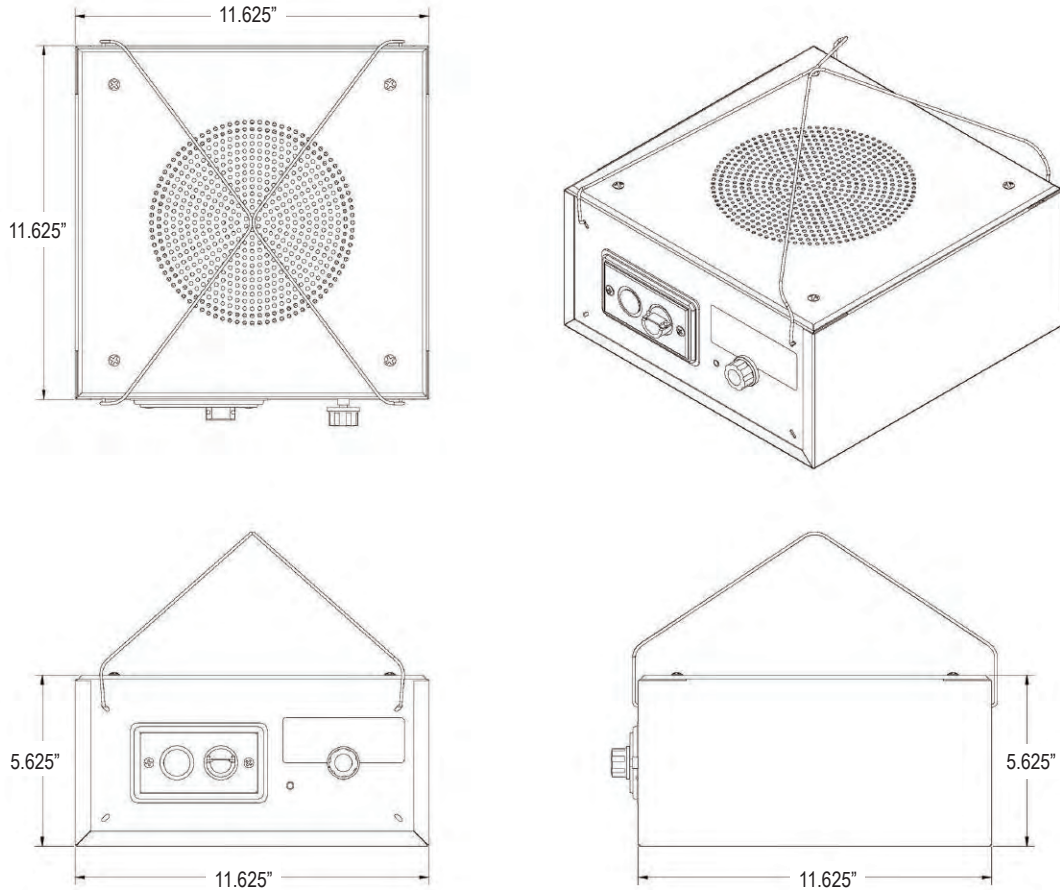> CSA C22.2 No. 205-M1983 for General Signaling use in Canada.

* Order separately:
— Generator/amplifier models: SMGA-5 or SMGA-20
— Generator models: SMG-1 or SMG-1R

Code Note: *The masking speaker system must be mounted in accordance with local, state, and federal codes and regulations and industry standard practices. In some areas of the country, code may require that the masking speaker be physically attached to the ceiling grid. In that case, sheet metal screws (furnished by installer) may be attached through holes provided in end caps of SM-BR rails through the ceiling grid. In other areas, code may require seismic restraint cables be installed between the building structure and masking speaker. Holes are also provided in SM-BR rails to attach seismic restraint cables to the speaker assembly (restraint cables and hardware to be furnished by installer).*

Model No.	Description	Speaker I.D.	Transformer Taps	Enclosure & Grille Color	Enclosure Volume	Mounting Hardware Included	Assembly Weight (lbs)
SM810A	Sound masking speaker	810	4,2,1,.5,.25 @ 70V	black	760 cu.in.	hangers, S-hooks, chain	8.6
SM810AW*	Sound masking speaker	810	4,2,1,.5,.25 @ 70V	white	760 cu.in.	hangers, S-hooks, chain	8.6
SM810A-BR*	Sound masking speaker	810	4,2,1,.5,.25 @ 70V	black	760 cu.in.	bridge rails	8.5
SM820A*	Sound masking speaker	8A50	4,2,1,.5,.25 @ 70V	black	760 cu.in.	hangers, S-hooks, chain	10.2
SM820AW*	Sound masking speaker	8A50	4,2,1,.5,.25 @ 70V	white	760 cu.in.	hangers, S-hooks, chain	10.2
SM820A-BR*	Sound masking speaker	8A50	4,2,1,.5,.25 @ 70V	black	760 cu.in.	bridge rails	10.1
SM410A*	Sound masking speaker	JR410	4,2,1,.5,.25 @ 70V	black	760 cu.in.	hangers, S-hooks, chain	9.0
SM410AW*	Sound masking speaker	JR410	4,2,1,.5,.25 @ 70V	white	760 cu.in.	hangers, S-hooks, chain	9.0
SM410A-BR*	Sound masking speaker	JR410	4,2,1,.5,.25 @ 70V	black	760 cu.in.	hangers, S-hooks, chain	8.9
SM-BR	Bridge rails only (1-pr)						

* NOTE: The SM810A is the basic stock model. Other models are made to order.

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Electrical & Acoustical Specifications

Model No.	Mounting Hardware*	Enclosure & Grille Color	Speaker Type	Frequency Response	Sensitivity	Dispersion	Transformer Taps **
SM810A	Hangers	black	810 (8" dual cone)	117 Hz - 6.9 kHz ± 7 dB	97.1 dB	115˚ conical	4, 2, 1, .5, .25W @70V
SM810AW	Hangers	white	810 (8" dual cone)	117 Hz - 6.9 kHz ± 7 dB	97.1 dB	115˚ conical	4, 2, 1, .5, .25W @70V
SM810A-BR	Bridge Rails	black	810 (8" dual cone)	117 Hz - 6.9 kHz ± 7 dB	97.1 dB	115˚ conical	4, 2, 1, .5, .25W @70V
SM820A	Hangers	black	8A50 (8" coaxial)	60 Hz - 16.5 kHz ± 7 dB	90.6 dB	100˚ conical	4, 2, 1, .5, .25W @70V
SM820AW	Hangers	white	8A50 (8" coaxial)	60 Hz - 16.5 kHz ± 7 dB	90.6 dB	100˚ conical	4, 2, 1, .5, .25W @70V
SM820A-BR	Bridge Rails	black	8A50 (8" coaxial)	60 Hz - 16.5 kHz ± 7 dB	90.6 dB	100˚ conical	4, 2, 1, .5, .25W @70V
SM410A	Hangers	black	JR410 (4" single cone)	85 Hz - 12.6 kHz ± 7 dB	92.1 dB	170˚ conical	4, 2, 1, .5, .25W @70V
SM410AW	Hangers	white	JR410 (4" single cone)	85 Hz - 12.6 kHz ± 7 dB	92.1 dB	170˚ conical	4, 2, 1, .5, .25W @70V
SM410A-BR	Bridge Rails	black	JR410 (4" single cone)	85 Hz - 12.6 kHz ± 7 dB	92.1 dB	170˚ conical	4, 2, 1, .5, .25W @70V

* Hangers include S-hooks and 4-ft. chain. ** Plus "OFF" position

A & E Specifications

The sound masking speaker assembly for suspended ceiling installations shall be AVLELEC Model _____. It shall include an _____ (8" 15W dual cone, 8" 50W coaxial, 4" single cone) speaker with factory-wired transformer mounted in a 760 cu.in. steel backbox with grille and externally accessible speaker leads. The wired transformer shall be 70V with primary taps at 4, 2, 1, .5, and .25 watts. The assembly shall include an externally accessible rotary switch to adjust tap selections. Speaker leads shall exit the backbox through a strain relief clamp on a single gang handibox cover on bottom of enclosure.

[The unit shall include hangers, S-hooks and a 4' chain. OR The unit shall include a pair of bridge rails.]

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