

Model Series

SM820A Sound Masking Speakers

• Ready to install

The SM820A Series of UL Listed sound masking speakers ship completely assembled and ready for installation. Each assembly includes an 8" coaxial driver, wired transformer, steel enclosure and grille (black or white) along with choice of hanger/chain or bridge rail mounting hardware. See Model No. Summary on page 2.

In general, the purpose of a sound-masking system is to provide for greater conversational privacy and productivity in open office environments by adding ambient noise and shaping the signal to mask speech. The signal is fed from a generator with an amplifier to sound masking speakers that are typically positioned above finished lay-in tile ceilings in plenum space; however, speaker assemblies with a white finish are sometimes specified for use in open architecture truss type ceilings.

NOTE: Along with sound masking speakers you'll need a specially designed sound masking generator to feed the system, as well as an amplifier. Lowell offers generators that can feed a mic or line level signal to an external amplifier, as well as generators with a built-in power amplifier. Order the generator/amplifier separately from speakers.

Construction & Features

- **DRIVER / TRANSFORMER:** 8" 50W coaxial driver (polypropylene LF cone, 20oz.LF and 2oz.HF magnets) and factory-wired 70V transformer with primary taps at 4, 2, 1, .5, and .25 watts (selector switch includes "OFF" position).
- **BACKBOX / GRILLE:** The 760 cu.in. (11.625"H x 11.625"W x 5.625"D) steel backbox is acoustically lined with fiberglass and features externally accessible input leads, SG handibox cover with dual combination (3/4", 1/2") knockouts for flex conduit, and 1/2" Romex connector for installations without conduit. Perforated steel grille. Black or white finish.
- **MOUNTING HARDWARE SELECTION:**
 - **Wire Hangers, S-hooks, and Chain:** Removable wire hangers are factory-mounted to aim up but can be reconfigured to aim down or sideways. S-hooks and 4 ft. chain are provided for single point suspension from building structure. *Note: rigging hardware to attach speaker to building structure is to be furnished by the installer. If not used for installation, remove the wire hangers from the backbox to prevent rattling.*
 - **Bridge Rails:** Factory-mounted bridge rails for installation directly on lay-in tile ceiling grid.



UL1480 — General Signaling, USA

UL2043 — Return air plenum space

CSA C22.2 No.205-M1983 — General Signaling, Canada



Model No. SM820A includes 8" 50W coaxial driver with transformer, black grille, black backbox with externally accessible leads and single gang input plate, and mounting hardware (4 ft. chain with S-hooks and pre-mounted wire hangers).



Model No. SM820AW includes 8" 50W coaxial driver with transformer, white grille, white backbox with externally accessible leads and single gang input plate, and mounting hardware (4 ft. chain with S-hooks and pre-mounted wire hangers).

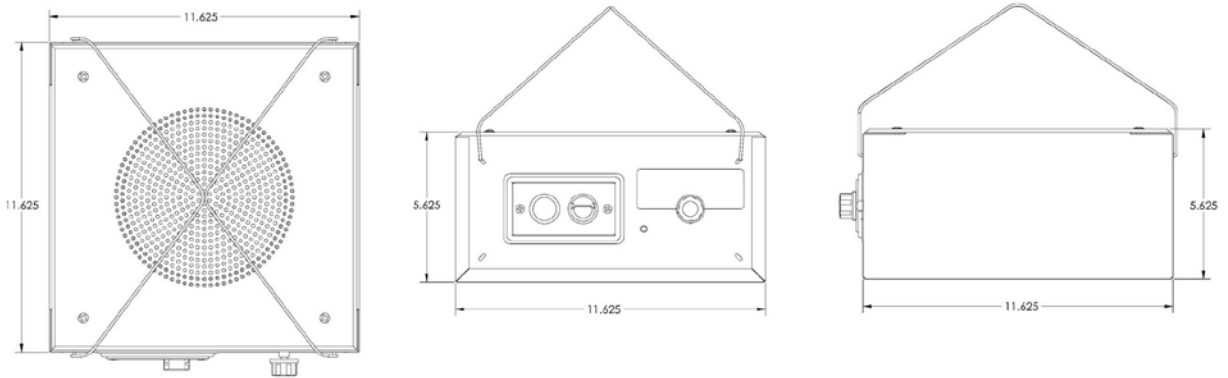


Model No. SM820A-BR includes 8" 50W coaxial driver with transformer, black grille, black backbox with externally accessible leads and single gang input plate, and mounting hardware (pre-mounted bridge rails).

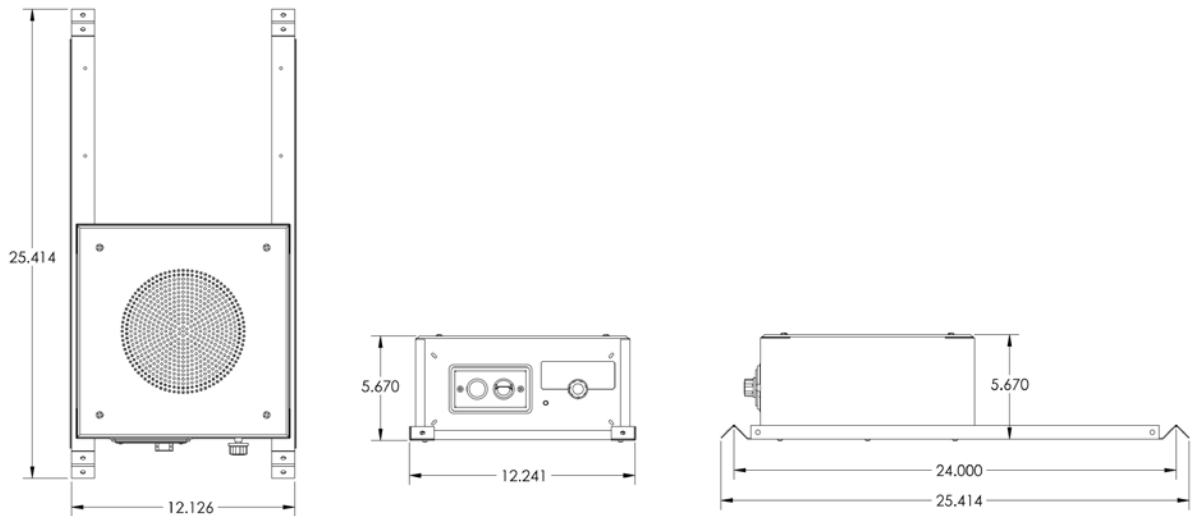
Code Note: The masking speaker system must be mounted in accordance with local, state, and federal codes and regulations and industry standard practices. In some areas of the country, code may require that the masking speaker be physically attached to the ceiling grid. In that case, sheet metal screws (furnished by the 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 the installer).

Technical Drawings

Models
SM820A
SM820AW



Model
SM820A-BR



A&E Specifications

The sound masking speaker assembly for suspended ceiling installations shall be Lowell Model No. _____ (SM820A, SM820A-BR, SM820AW), which shall include an 8" 50W coaxial driver 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 and include an "OFF" position. Speaker leads shall exit the backbox through a strain relief clamp on a single gang handibox cover. Backbox and grille shall have a _____ (black, white) finish and include _____ (pre-mounted wire hangers with separate 4 ft. chain and S-hooks OR pre-mounted bridge rails).

Model No. Summary

Model No. (lbs)	Description	Driver (No. 8A50)	Transformer Taps	Backbox/Grille Color	Backbox Volume	Mounting Hardware	Assembly Weight
SM820A	Sound masking speaker	8" 50W coaxial	4,2,1,.5,.25 @ 70V	black	760 cu.in.	wire hangers/chain	8.6
SM820A-BR	Sound masking speaker	8" 50W coaxial	4,2,1,.5,.25 @ 70V	black	760 cu.in.	bridge rails	9.85
SM820AW	Sound masking speaker	8" 50W coaxial	4,2,1,.5,.25 @ 70V	white	760 cu.in.	wire hangers/chain	8.6
SM-BR	Bridge rails (1 pair)						
SMGA-5	Sound masking generator with amplifier, rackmount chassis						
SMG-1R	Sound masking generator, rackmount chassis						
SMG-1	Sound masking generator, compact						

NOTE: Sound Masking Speaker Model No. SM820A is the basic stock model — other speaker models are made to order. All speaker assemblies feature pre-drilled pilot holes to allow field installation of bridge rails (No. SM-BR rails include six black sheet metal screws). In that case remove the wire hangers to prevent rattling.

ONLINE ASSISTANCE: To determine speaker spacing, see the technical paper "Distributed System Speaker Spacing for the Integrator" — free download available at LowellMfg.com. An online spacing calculator is also available.