Lowell HEARD EVERYWHERE®

INSTALLATION SHEET #IS-SM
Sound Masking Speaker Systems

Electrical and Acoustical Specifications

Model Number	Model Type	Driver Type	Frequency Response	Sensitivity (70V/1W/1M)	Dispersion (-6dB@2kHz Oct.)	Transformer Taps Switch
SM810A	Black With Hangers	#810 8" Dual Cone	117Hz-6.9kHz ± 7dB	97.1dB	115 Degrees Conical	1/4W @ 70V 1/2W @ 70V 1W @ 70V 2W @ 70V 4W @ 70V "Off" Switch Position Is Also Available
SM810AW	White With Hangers					
SM810A-BR	Black, Factory Installed Rails					
SM820A	Black With Hangers	#8A50 8" Coaxial	60Hz-16.5kHz ± 7dB	90.6dB	100 Degrees Conical	
SM820AW	White With Hangers					
SM820A-BR	Black, Factory Installed Rails					
SM410A	Black With Hangers	#JR410 4" Single Cone	85Hz-12.6kHz ± 7dB	92.1dB	170 Degrees Conical	
SM410AW	White With Hangers					
SM410A-BR	Black, Factory Installed Rails					

GENERAL SIGNALING EQUIPMENT

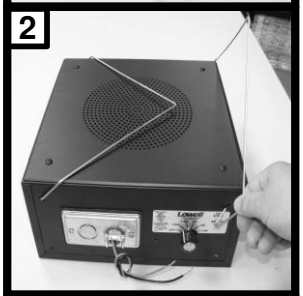
c UL us LISTED

4M24

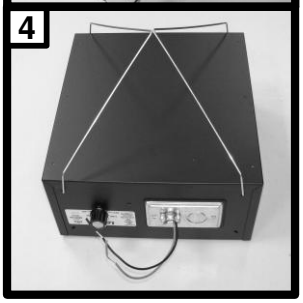
UL1480 5th EDITION GENERAL SIGNALING
CSA C22.2 NO. 205-M1983, UL2043
SUITABLE FOR USE IN PLENUM SPACES

Mounting Note:
The speaker system must be mounted in accordance with local, state, and federal codes and regulations, and industry standard practices.

1


2


3


4


Design Note: Sound masking speakers are typically mounted above the finished ceiling in the plenum space. In most installations, the sound masking speakers are installed with the bottom of the enclosure roughly 1' above the finished ceiling with the speaker aiming upward so the masking noise bounces off of the slab or deck above. When the plenum space is taller than 6', the designer may decide that the sound masking speakers should be installed at 6' or more above the finished ceiling aiming downward. In some instances, plenum spaces crowded with many obstructions may require that the speakers be mounted sideways aiming between the obstructions. For other applications, the designer may choose to rest the masking speakers directly on the lay-in tile ceiling grid. The exact mounting position of the masking speakers dramatically affects the dispersion of the sound masking noise. This installation sheet has been written under the assumption that a qualified consultant or designer has pre-determined the speaker spacing and mounting orientation that will result in the desired sound masking noise coverage.

For models SM810A-BR, SM820A-BR, and SM410A-BR skip to step 6

1 As shipped from the factory, the masking speaker hangers are configured for aiming the speaker upward. Unfold the speaker hangers as shown.

2 To install the masking speakers aiming sideways or aiming down, it is necessary to remove the hangers. To remove and reinstall the hangers, always rotate the hanger to the 45 degree position as shown. Note: If placing the speakers under a computer floor or on a shelf, remove and discard the hangers.

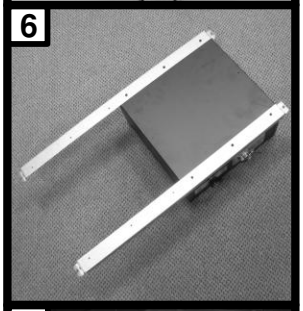
3 To install the speaker aiming sideways, remove the hangers by rotating them to the 45 degree position. Relocate the hangers to the 45 degree position in the new location and reinsert the hangers as shown.

4 To install the speaker aiming downward, remove the hangers by rotating them to the 45 degree position. Relocate the hangers to the 45 degree position in the new location and reinsert the hangers as shown.

Lowell Manufacturing Company • 100 Integram Drive • Pacific, Missouri 63069 U.S.A.
Phone: 800-325-9660 Fax: 636-257-6606 (www.lowellmfg.com)
Printed on 4-24-13

5 Use the two (2) “S” hooks and four (4) foot piece of chain supplied with the masking speaker to suspend the speaker from the building structure. Hanging point hardware to attach the chain to the building structure will be furnished by the installer.

Skip to step 8 .



6 Speaker models SM810A-BR, SM820A-BR, and SM410A-BR are shipped from the factory without hanging brackets, “S” hooks, or chain, because these models are shipped with factory installed SM-BR rails. SM-BR Bridge Rail Kits (sold separately) can be mounted in the field to any of the models that are shipped with hangers and chain. To mount the rails to the enclosure, remove and discard the hangers (see step 2 on page 1). Place the masking speaker face down. Locate the six (6) pilot holes in the rear of the speaker enclosure and six (6) holes on either end of the rails. Use the six (6) Phillips head screws provided to attach the rails to the bottom of the masking speaker as shown.

7 Place the masking speaker with the bridge rails attached above the finished ceiling across the tile grid as shown.

Important Note: Depending upon local codes and regulations, it may be required to attach the bridge rails to the ceiling tile grid. Holes in the ends of the bridge rails have been provided so that sheet metals screws (provided by the installer) can attach the rails to the grid. Also depending upon local codes and regulations, it may be required for the installer to attach earthquake restraint cables to the masking speaker. Holes in the vertical flanges at the ends of the rails are provided for earthquake restraint cables (furnished by the installer).

8 UL recognized wire nuts or crimp type connectors (provided by the installer) may be used to make a simple splice to the provided positive red (+) and common black (-) input wires. After making that splice, loosen the Romex connector screws and insert the splice into the masking speaker through the Romex connector. Tighten down the Romex connector clamp to provide strain relief for the input cable. A cable to the next speaker in the string may be wired in parallel with the incoming speaker wire as shown.

9 The input wiring splice should always be permanently located inside of the masking speaker wiring cavity and not in open space outside of the input plate.

Note: To attach an additional Romex connector or to mount other conduit fittings for flexible conduit, the input plate can be removed from the masking speaker. Two (2) combination ½” & ¾” knock-outs are provided on the input wiring cavity cover plate. The additional Romex connector or flexible conduit and fittings will be furnished by the installer.

10 A transformer tap selector switch is provided on the side of the masking speaker enclosure. “OFF” and 70V 1/4W, 1/2W, 1W, 2W, and 4W select positions are provided. The transformer tap switch is set at 1W when shipped from the factory. Set the selector switch as specified by the system designer.