

FIGURE A



FIGURE B



FIGURE C



FIGURE D



FIGURE E



Electrical Ratings:

(For Both Drivers On Models: LT2810SM810, LT2810SM810VL, LT810SM810, LT810SM810VL)

Input Voltage (each driver): 70V Input. Transformer taps ¼, ½, 1, 2, 4 Watts

Frequency Response (each driver): 117Hz-6.9kHz ± 7dB

Sensitivity (each driver): 97.1dB @ 70V, 1W, 1M

Dispersion (each driver): 115 Degrees Conical (-6dB @ 2kHz Octave)

Installation Instructions for 2x2 Masking Up/Paging Down Speakers

LT2810SM810, LT2810SM810VL

Note: See Page 2 for LT810SM810 & LT810SM810VL 1x2 Lay-In Speaker Installation Instructions

Installation Note:

The LT-SM speaker systems must be installed and wired in accordance with all local, state, and federal building codes and regulations, and the installation must conform with industry standard practices.

The Lowell LTSM Masking-Up/Paging-Down 2' x 2' speakers will quickly replace a 2' x 2' lay-in ceiling tile. The LT2810SM810 and LT2810SM810VL speaker systems are UL Listed in the USA for UL1480A General Signaling for indoor dry use, UL2043 suitable for use in a return air plenum space, and CSA C22.2 No. 205-12 for use in Canada.

STEP 1

Remove a 2' x 2' ceiling tile as shown in **FIGURE A**.

STEP 2

Note that the termination cover farthest from the white front grille and closest to the rear black speaker grille is for the "Masking-Up" speaker. Use wire nuts or crimp connectors (furnished by the installer) to connect the red wire to the incoming "+" positive conductor and the black wire to the incoming "-" negative conductor of the "Masking-Up" speaker. Normally this can be done without removing the wiring cavity termination plate and the completed splice can simply be shoved through the Romex hole before the Romex clamp is tightened. Set the tap selector switch for the desired power setting for the "Masking-Up" speaker. On the LT810SM810VL model, a white volume knob is also available to make fine adjustments to the volume of the "Masking-Up" speaker after the tap switch has been set.

STEP 3

Repeat the steps described in **STEP 2** to terminate the incoming wiring for the "Paging-Down" speaker.

STEP 4

Lowell Manufacturing Company recommends that a safety cable always be used when speakers are installed over-head. In certain areas of the country, the building inspector (AHJ - Authority Having Jurisdiction) may require that one (1) or two (2) earthquake restraint cables be attached between the speaker and the building structure. Four (4) restraint cable tabs are supplied on the speaker rear (one in each corner) that can be bent up with a screwdriver as shown in **FIGURE B**. Safety cables and earthquake restraint cables to be furnished by the installer.

STEP 5

Push the speaker up through the open 2'X2' hole in the ceiling as shown in **FIGURE C** and set it in place on the ceiling grid as shown in **FIGURE D**.

STEP 6

If earthquake restraint cables are required, you can use an adjacent tile opening to get above the ceiling to attach the cables from the structure to the speaker's restraint tabs. Most AHJs require restraint cables attached to opposing corners as shown in **FIGURE E**.

Installation Instructions for 1x2 Masking Up/Paging Down Speakers

LT810SM810, LT810SM810VL

Note: See Page 1 for LT2810SM810 & LT2810SM810VL 2x2 Lay-In Speaker Installation Instructions

FIGURE F



FIGURE G



FIGURE H



FIGURE I



FIGURE J



Installation Note:

The LT-SM speaker systems must be installed and wired in accordance with all local, state, and federal building codes and regulations, and the installation must conform with industry standard practices.

The Lowell LT-SM Sound Masking 1' x 2' speakers feature an integral T-bar that allows the speaker to quickly replace 1/2 of a non-regular 2' x 2' lay-in ceiling tile, or 1/4 of a non-regular 2' x 4' lay-in ceiling tile. Note: A regular ceiling tile protrudes slightly below the lay-in ceiling grid. Cutting a regular tile results in an unfinished edge that can be seen from the office below. For a ceiling with 2' x 2' regular ceiling tiles, a better choice would be to use the Lowell LT2810SM810 or LT2810SM810VL speakers which don't require the regular tile to be cut (See 2'x2' Lay-in speaker installation instructions on Page 1). The LT-SM speaker systems are UL Listed in the USA for UL1480A General Signaling for indoor dry use, UL2043 suitable for use in a return air plenum space, and CSA C22.2 No. 205-12 for use in Canada. Note that all instructions and pictures in this installation sheet refer to 2' x 2' non-regular ceiling tiles. The same procedure may be followed for 2' x 4' non-regular ceiling tiles.

STEP 1

Remove a 2' x 2' non-regular ceiling tile as shown in **FIGURE F**.

STEP 2

Lay the ceiling tile face-down on a soft surface that won't damage the front of the tile. Place the 1' x 2' speaker face-down on the rear of the ceiling tile with the protruding T-bar piece lined up with the edge of the tile as shown in **FIGURE G**. Mark the ceiling tile at the speaker edge with a pencil as shown in **FIGURE H**.

STEP 3

Cut the ceiling tile with a saw or other cutting tool as shown in **Figure I**. Discard the portion of the ceiling tile that was under the speaker when the line was drawn and keep the other portion to be reinstalled.

STEP 4

Note that the termination cover farthest from the white front grille and closest to the rear black speaker grille is for the "Masking-Up" speaker. Use wire nuts or crimp connectors (furnished by the installer) to connect the red wire to the incoming "+" positive conductor and the black wire to the incoming "-" negative conductor of the "Masking-Up" speaker. Normally this can be done without removing the wiring cavity termination plate and the completed splice can simply be shoved through the Romex hole before the Romex clamp is tightened. Set the tap selector switch for the desired power setting for the "Masking-Up" speaker. On the LT810SM810VL model, a white volume knob is also available to make fine adjustments to the volume of the "Masking-Up" speaker after the tap switch has been set.

STEP 5

Repeat the steps described in **STEP 4** to terminate the incoming wiring for the "Paging-Down" speaker.

STEP 6

Lowell Manufacturing recommends that a safety cable (furnished by others) always be used when speakers are installed over-head. In certain areas of the country, the building inspector (AHJ - Authority Having Jurisdiction) may require that one (1) or two (2) earthquake restraint cables be attached between the speaker and the building structure. One (1) restraint cable tab is supplied that can be bent up with a screwdriver as shown in **FIGURE J**. Three additional holes for restraint cables are available on the integral T-bar rail.

STEP 7

Place the speaker in the open 2'X2' hole in the ceiling with the integral T-bar in the center of the hole as shown in **FIGURE K**.

STEP 8

Place the cut half tile (from **STEP 3**) in the half open hole as shown in **FIGURE L**. It may be necessary to remove the adjacent tile so you can push the half tile in place from above.

STEP 9

If earthquake restraint cables are required, use an adjacent tile opening to get above the ceiling to attach the cables to structure. Most AHJs will require restraint that cables be attached to the bend-up tab and to the rail on the opposing corner as shown in **FIGURE M**.

FIGURE K

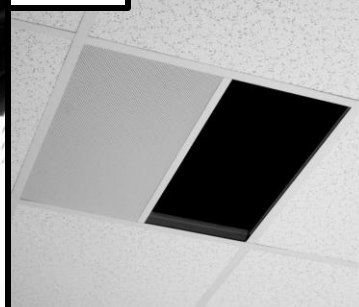


FIGURE L



FIGURE M

