



70V Suspended Radial Horn Speaker

Description

Horn speakers produce high sound levels, and are capable of covering large noisy areas. Minimum effective mounting height for a horn is 15 feet, 20 feet is preferable. The 70V Suspended Radial Horn Speaker (see Figure 1) is used when its 360-degree sound dispersion pattern is required.

The chart below lists specifications for the 70V Suspended Radial Horn Speaker.

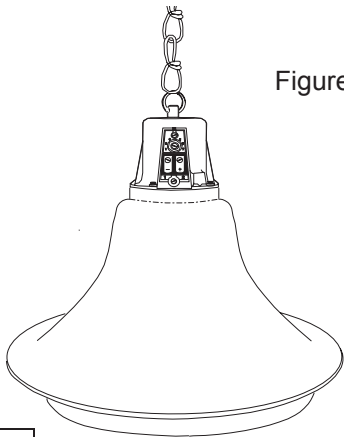


Figure 1

Chart 1. 70V Suspended Radial Horn Speaker Specifications

Power	Frequency	Dispersion	Sound Level *	Dimensions
30 watts	300 Hz 14 kHz	360°	113 dBspl	13" W x 11-3/4" H 6.0 lbs.
*Measured 1 meter from speaker at rated power.				

Speaker Installation

Mounting

The 70V Suspended Radial Horn Speaker has a post and ring located on the base of the speaker (see Figure 2). The ring is used to attach the speaker post to the supplied 10-foot metal chain. The means of attaching the chain to the ceiling or other overhead structure must be sufficiently secure to withstand a pull test of 30 pounds; if local construction or safety codes specify a greater value, then that value shall govern.

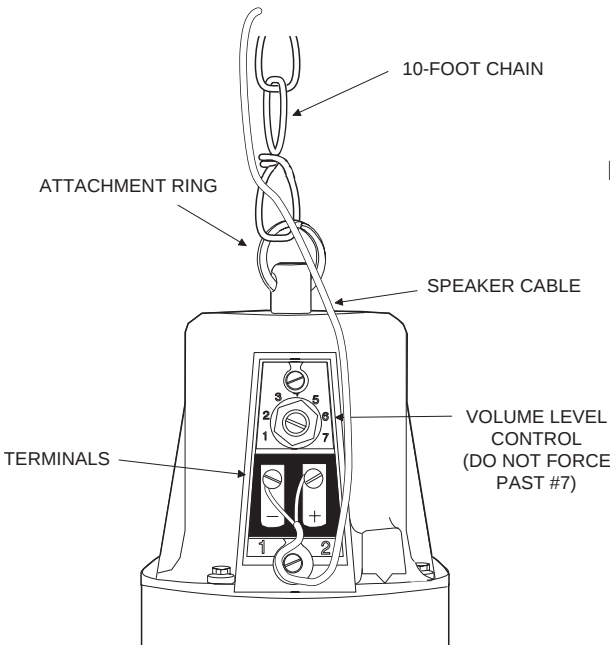


Figure 2

Wire Connections

The speaker has screw-type terminals, which are protected by a clear plastic cover. The cover also acts as a strain relief for the wires after they are connected. The procedure for connecting the speaker is given in the following steps:

- 1. Remove the plastic cover from the terminal area by removing the two screws. Replace the screws so they will not be misplaced.
- 2. Make the connections and dress the wire as shown in Figure 2.
- 3. When using shielded speaker wire and wiring from speaker to speaker, wire the shield drains to provide a continuous shield to the next speaker. Otherwise, clip the shield wire at the point it emerges from the main cable. The shield wire **should never** be terminated on the speaker.
- 4. Do not replace the plastic cover until final power adjustments have been made.

Note: Use 22 AWG shielded, twisted pair on all wire runs.

Note: When connecting from speaker to speaker, the speaker must be kept in phase. This means that all number 1 (-) terminals must connect on the same wire, and all number 2 (+) terminals must be connected on the other wire.

Final Power Adjustments

- 1. Ensure that the speaker is set to its lowest setting (this will prevent an excessively loud page when first used).
- 2. While a page is in process, adjust the volume control with a screwdriver. Turn clockwise to increase the volume (see Chart 2).
- 3. Install the plastic cover.

Chart 2. Sound Pressure Level and Power Output

Switch Setting	dB SPL @ 70V*	Watts
1	98	0.9
2	101	1.9
3	104	3.8
4	107	7.5
5	110	15
6	113	30
7**	113	30
8**	Not Used	Not Used

* at four feet on axis
** 7 is the furthest position control switch will turn