

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.

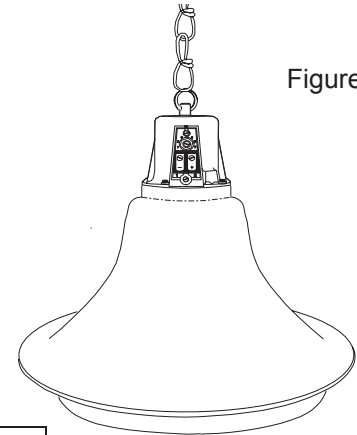


Figure 1

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.

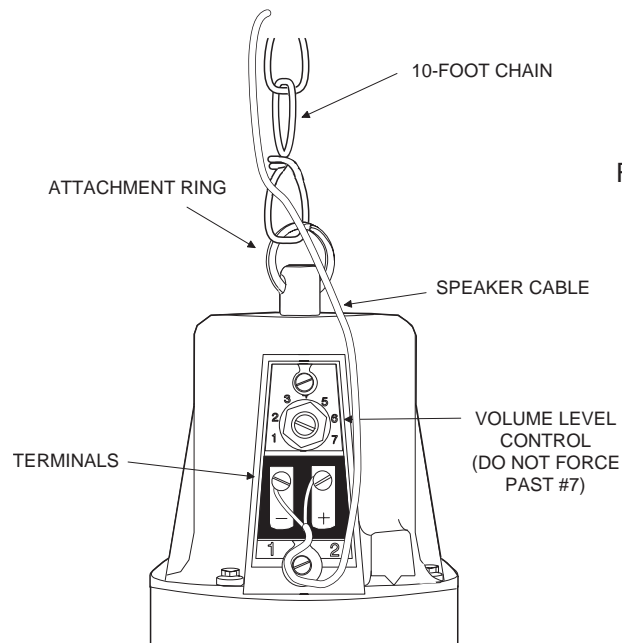


Figure 2

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.

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

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: 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