



# 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.

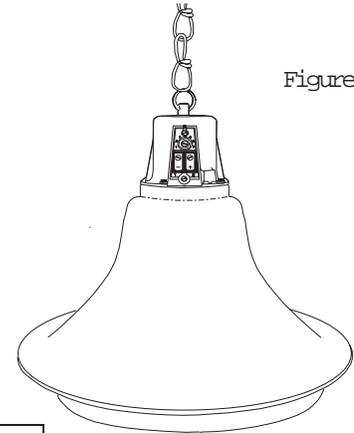


Figure 1

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.

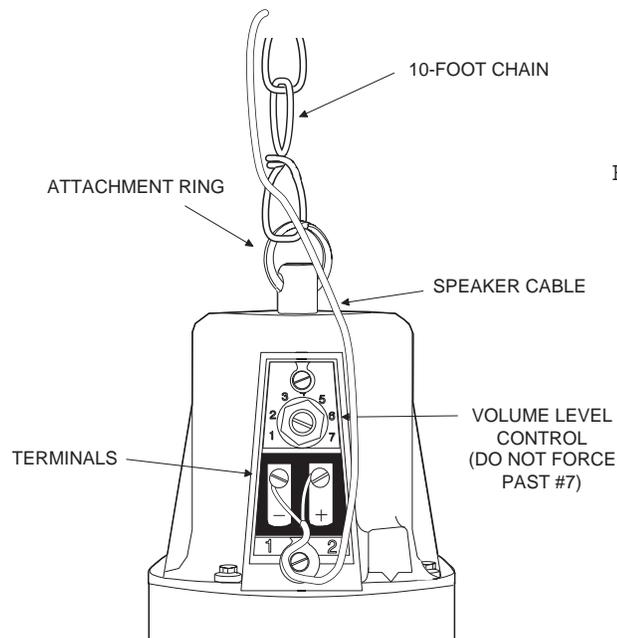


Figure 2

## 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. COM Code: 401882956. PEC Code: 2734-SPK.

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. Impedance and Power Output

Switch Setting	Ohms	70V, Watts
1	2500	1.8
2	1300	3.7
3	666	7.5
4	333	15
5	167	30
6	89	Do Not Use
7	45	Do Not Use