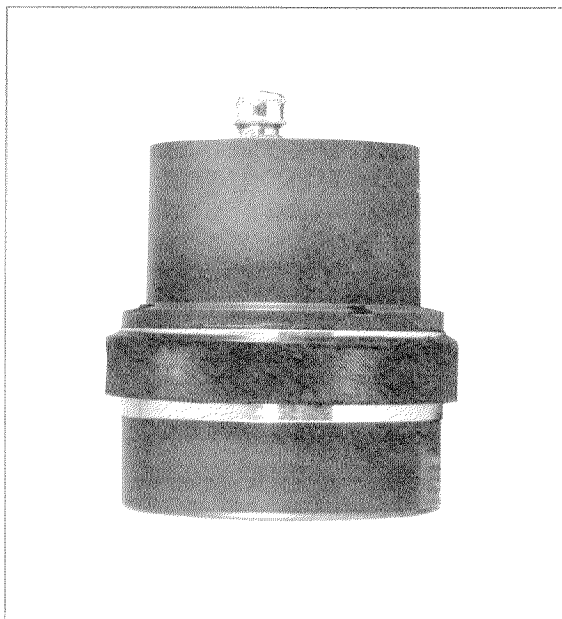




# 290-8L/290-16L COMPRESSION DRIVER LOUDSPEAKERS



## DESCRIPTION

The Altec 290-8L and 290-16L Compression Driver Loudspeakers have exceptionally high power-handling capacity and efficiency. The 290-8L and 290-16L, designed primarily for outdoor use with any of the Altec multicellular or large format Mantaray horns, may be used for public address speech reinforcement in large outdoor systems such as ball parks, race tracks and stadiums, and are ideal for voice warning systems.

Improvements in top plate and phasing plug designs allow the 290-8L and 290-16L to exhibit a more uniform and extended response characteristic over the 500-7000 Hz band. The 290-8L provides a minimum impedance of 8 ohms; the 290-16L, 16 ohms.

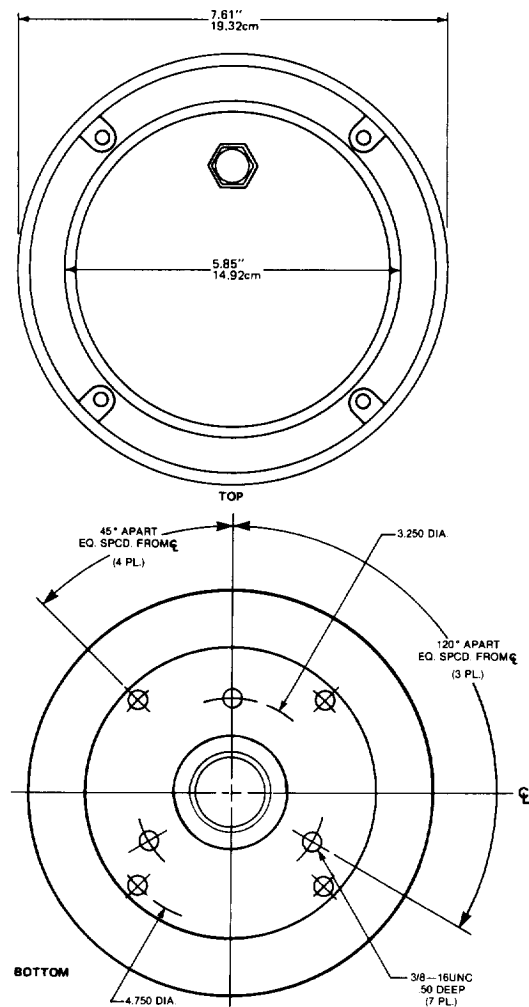
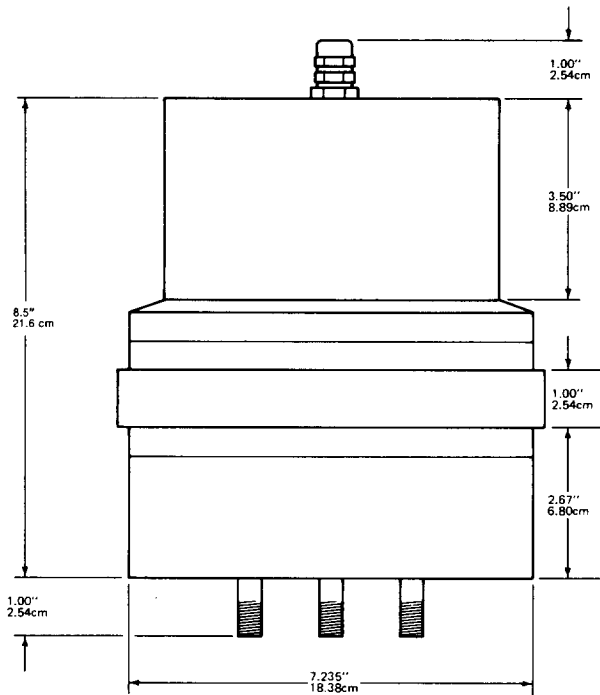
The diaphragm/voice coil assembly of the 290-8L and 290-16L can be replaced in the field by untrained personnel without the use of special tools. Adjustable dowel pins allow each voice coil to be precisely centered in the voice coil gap, which has a flux density of 1.85 tesla derived from a 6.87-pound Ferrite V magnet. The weatherproof cover on the rear of the speaker is drilled and tapped to house the Altec 15480 matching transformer for 70.7V line operation. A cable can be installed through the rear of the

cover via a waterproof sealing gland, further ensuring complete weather protection.

When the 290-8L and 290-16L are used in large systems, rather than a number of speakers having lower sensitivity and/or less power capacity, the results are higher quality and intelligibility, and a reduction in overall system cost and upkeep.

## SPECIFICATIONS

<b>Power Rating:</b>	120 watts of band-limited pink noise (300-10,000 Hz) when mounted on Altec 300 or 500 Hz horn
<b>Frequency Response:</b>	300-7000 Hz
<b>Pressure Sensitivity:</b>	114 ± 1.5 dB SPL measured at 4' from mouth of Altec MR42B horn with 1 watt input of band-limited pink noise from 500-2500 Hz (Ref.: 0 dB = 20 µPa). See appropriate Altec horn catalog sheets for specific pressure sensitivity when driver is combined with other horns.
<b>Minimum Impedance:</b>	290-8L — 8 ohms 290-16L — 16 ohms
<b>Magnet:</b>	6.87-pound Ferrite V, 1.85 T flux density
<b>Diaphragm:</b>	Phenolic with phenolic roll-type suspension
<b>Voice Coil:</b>	2.8" diameter of edge-wound copper ribbon
<b>Dimensions:</b>	7.61" (19.32 cm) diameter 8.5" (21.6 cm) depth, less mounting studs
<b>Weight:</b>	32 pounds (14.5 kg), without matching 70.7V transformer
<b>Finish:</b>	Gray "Hammerstone" enamel
<b>Mounting Data:</b>	User adjustable for Altec standard 3-hole throat or 4-hole throat.
<b>Accessories (must be ordered separately):</b>	Altec 30546 — 45° Weatherproof Throat Adapter Altec 15480 — 100 Watt 70.7V Transformer
<b>Replacement Diaphragm:</b>	23372 (8Ω) 34333 (16Ω)



### ARCHITECT'S AND ENGINEER'S SPECIFICATIONS

The compression driver loudspeaker shall meet the following performance criteria. Power rating: 120 watts of band-limited pink noise (300-10,000 Hz). Frequency response: uniform from 300 to 7000 Hz. Pressure sensitivity:  $114 \pm 1.5$  dB SPL when measured at 4' on axis from mouth of Altec MR42B horn with 1 watt input of band-limited pink noise from 500-2500 Hz (Ref.: 0 dB = 20  $\mu$ Pa). Minimum impedance: 8 ohms (290-8L); 16 ohms (290-16L). The voice coil shall be 2.8" in diameter, of edge-wound copper ribbon, and shall operate in a magnetic gap having a flux density of 1.85 tesla derived from a 6.87-pound Ferrite V magnet. The diaphragm shall be phenolic, and shall have phenolic roll-type suspension. Provision shall be incorporated to permit mounting an Altec 70.7V matching transformer on the speaker and the entire assembly shall be enclosed in a weather-proof housing. Each driver loudspeaker shall be provided with a water-proof sealing gland, providing complete protection against the entrance of water, dirt and dust. A Tangerine®

phasing plug with 13 radial acoustic slots shall serve as the pole piece and shall also be utilized to provide the proper phase relationship between the sound emanating from the center and edges of the diaphragm and voice coil assembly. The entire diaphragm and voice coil assembly shall be field replaceable without requiring special tools or skills; adjustable dowel pins shall allow each voice coil to be precisely centered in the voice coil gap.

The compression driver loudspeaker shall be the Altec Model 290-8L.

The compression driver loudspeaker shall be the Altec Model 290-16L.



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