The Altec 290D Driver Loudspeaker is a high quality permanent magnet unit of exceptionally high power handling capacity and efficiency primarily for outdoor use. It is designed for use with any of the Altec Lansing multicellular horns. The 290D finds wide application for public address speech reinforcement in large outdoor systems such as ball parks, race tracks, stadiums, etc., ideally adaptable for voice warning systems for civil defense. As many as four of these 290D speakers may be mounted on a single horn to achieve continuous sound levels as high as 82.5 db one-half mile distant from the horn.

The moving element of the driver consists of a sturdy, weather-resistant phenolic diaphragm and aluminum ribbon voice coil using an aluminum coil form for maximum heat dissipation at high power.

The entire voice coil, diaphragm assembly can be replaced in the field by un-trained personnel without any special tools. The weatherproof cover on the rear of the speaker is drilled and tapped to house the 15045A matching transformer for 70 v line operation.

Experience has proven that the use of the 290D in large systems rather than a number of speakers of less capacity not only results in higher quality and intelligibility but affords a reduction in overall system cost and upkeep.
SPECIFICATIONS

Power: 100 watts (above 300 cps)
Frequency Response: 300-8,000 cps
Sound Pressure Level: 114 db ref. .0002 dynes/cm² with 1 volt-ampere (1 watt) input, measured with warble frequency 500-2,500 cps 4' from mouth of 30'' trumpet; or 124 db at 100 watts.
Impedance: 4 ohms
Voice Coil Diameter: 2.8''
Protection: Low frequencies should be attenuated by network providing 6 db slope per octave below 300 cps when used at or near maximum power rating. (500 C Altec network or the 15045A transformer is recommended for this purpose).
Usage: Weather proofed construction for outdoor use.
Dimensions: Diameter 6½''
Height 7''
Finish: Gray
Weight: 19 lbs.

ACCESSORIES

30546 — 45° Weatherproof Throat Adaptor
15045A — 100 watt 70 v. Transformer

ARCHITECTS AND ENGINEERS SPECIFICATIONS

The driver-loudspeaker shall employ a phenolic diaphragm and a voice coil of edge wound aluminum ribbon. The voice coil diameter shall be at least 2.8''diameter and the voice coil gap shall have a flux density of at least 16,800 gauss. The entire diaphragm-voice coil assembly shall be field replaceable without special tools or skills. This shall be interpreted to mean that the speaker shall incorporate self-centering dowels to insure proper indexing. With 1 watt input, the speaker shall produce a sound pressure level of at least 114 db at a distance of four feet over the warble band of 500 to 2500 cycles. Single frequency measurements will not be acceptable under this specification. The frequency response shall be uniform over the range 300 to 8,000 cycles. The unit shall be capable of handling a continuous power level of 100 watts above 300 cycles. Provision shall be incorporated to permit mounting an Altec 70 volt matching transformer on the speaker and the entire assembly shall be enclosed in a weatherproofed housing. This speaker shall be used in conjunction with 500 cycle network or the 15045A transformer for low frequency protection. The driver-loudspeaker shall be 19 lbs. in weight.

The driver-loudspeaker shall be Altec Lansing Model 290D.