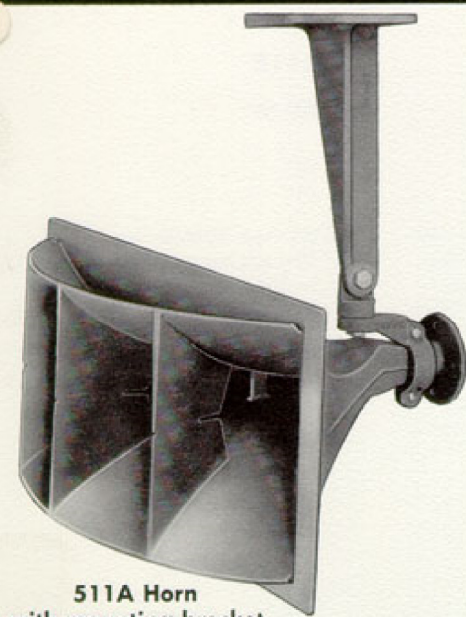
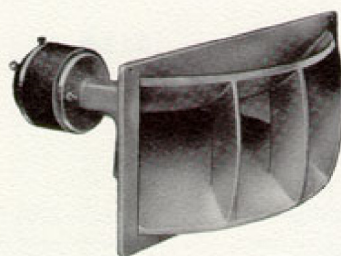


# Sectoral Horns

511A  
811B  
31A



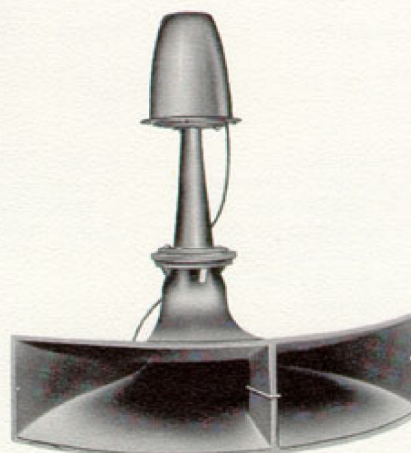
511A Horn  
with mounting bracket



811B Horn  
with 804A Driver



30547  
90° Adaptor



31A Horn  
with 27A Attachment  
and 730B Driver

## Features:

- Sectoral design
- Exponential expansion
- Controlled distribution angle
- Weatherproof cast aluminum
- Rugged construction in every detail

Altec sectoral horns provide inexpensive, space-saving means for uniform control of projection angle with excellent reproduction of middle and high frequencies. A characteristic feature of the sectoral horn is a beam width in the horizontal plane that is constant through the middle and high frequency range. Other horn types (except the multicellular horns) possess beams that become progressively sharper as the frequency increases, and generally cover a narrow area at the high frequencies.

The 31A Horn is designed for speech and background music reproduction in sound systems where wide angles of horizontal coverage and/or lower cutoff are required. It is designed to operate with the 730B Driver Unit through the 27A Receiver Attachment. The long acoustic length and 300-cycle cutoff frequency adapt this horn to high-level operation with excellent projection. As the dispersion pattern is carefully controlled by the sectoral expansion, the full sound spectrum can be placed where needed, without the spray effect of horizontal diffraction or a folded or re-entrant horn. The heavy weatherproofed construction makes this horn ideal for paging systems in or around factories, airports, railroad stations, or other outdoor locations such as military bases or athletic fields. The single 90° bend permits compact and secure attachment to a pole or other vertical surface. The horns are of cast aluminum and have stiffening ribs to assure freedom from resonance and ring.

The Altec 511A Sectoral Horn, with a lower reinforcement limit of 500 cycles, may be used as either the high-frequency component of a large 2-way system or alone as an excellent projector for paging and public address systems. When used with the Altec 802D Driver in wide-range, 2-way systems, the Altec N-500D network should be employed. When used with the Altec 730B Driver (in paging and PA systems), the Altec N-500C Network or 15045A 70-volt transformer should be employed for HF driver protection against damage by low frequencies. A universal mounting bracket is provided with each 511A horn for easy mounting in any position.

The Altec 811B Sectoral Horn has a lower reinforcement limit of 800 cycles and is designed specifically for use in 2-way systems. The Altec 804A Driver and N-800D network should be used with this horn to provide excellent high frequency reproduction from 800 to 22,000 cycles and also as a means whereby protection is afforded the HF driver from damage by low frequencies.



A Subsidiary of Ling-Temco-Vought, Inc.

1515 S. Manchester Ave., Anaheim, Calif.  
New York

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# ALTEC 511A, 811B, 31A

## SPECIFICATIONS

	31A	511A	811B
Low Frequency Cutoff:	300 cps	500 cps	800 cps
Distribution:			
Horizontal	120°	90°	90°
Vertical	40°	40°	40°
Sound Pressure Level: (S.P.L. is based or measured at 30 and 100 feet with full rated power applied to the driver unit, and averaged uniformly over the band of 600 to 2,400 cps.)	SPL from 730B Driver with 60 watts input @ 30 feet = 106 db, or 60 watts input @ 100 feet = 96 db.	SPL from 730B Driver with 60 watts input @ 30 feet = 109 db, or 60 watts input @ 100 feet = 99 db.  SPL from 802D Driver with 30 watts input @ 30 feet = 108 db, or 30 watts input @ 100 feet = 98 db.	SPL from 804A Driver with 30 watts input @ 30 feet = 106 db, or 30 watts input @ 100 feet = 96 db.  SPL from 802D Driver with 30 watts input @ 30 feet = 108 db, or 30 watts input @ 100 feet = 98 db.
Dimensions:			
Height	17" (with attachment)	10½"	8½"
Width	23"	23½"	18¾"
Depth	15"	18½"	14"
Weight:	15 lbs. (including attachment)	17¾ lbs.	9 lbs.

30547 Adaptor 90° for weather protection for 511A and 730B driver only)

## ARCHITECTS AND ENGINEERS SPECIFICATIONS

### 31A

The loudspeaker horn shall be furnished complete with driver attachment. It shall be of the wide-angle, sectoral type and shall employ not more than one bend of not over 90°. Folded or re-entrant type horns will not be acceptable because of inherent phase cancellation occurring in the bends of the air column, and horns not of the sectoral type will not be acceptable due to inherent variation of horizontal distribution with frequency. When equipped with the compression-type driver specified elsewhere, it shall produce a uniform sound pressure level of \_\_\_\_\_ db (see above specifications) at a distance of \_\_\_\_\_ feet (see above specifications) for \_\_\_\_\_ watt input (see above specifications). The distribution angle shall be 120° horizontal and 40° vertical. It shall have a low-frequency cutoff of 300 cycles and shall be constructed of heavy cast aluminum.

Horn shall be Altec Lansing Model 31A with 27A Receiver Attachment.

### 511A — 811B

The loudspeaker horn shall be of the straight sectoral type with exponential expansion and straight throat. Folded or re-entrant type horns will not be acceptable because of phase cancellation occurring in the bends of the air column and horns not of the sectoral type will not be acceptable due to inherent variation of horizontal distribution with frequency. It shall produce a uniform sound pressure level of \_\_\_\_\_ db (see above specifications) at a distance of \_\_\_\_\_ feet (see above specifications) from the horn mouth with \_\_\_\_\_ watt input (see above specifications). The distribution angle shall be 90° horizontal and 40° vertical. (If 730B Driver is used on 511A horn only): The Altec 30547 45° throat shall be installed on all loudspeaker horns to protect the driver unit from damage caused by the accumulation of water and foreign particles:

It shall have a low-frequency cutoff of (500 cps for 511A). It shall be constructed of heavy cast aluminum. (800 cps for 811B).

Horn shall be Altec Lansing Model (511A). (Complete with mounting bracket). (811B).

**NOTICE**  
We recommend that you obtain your Altec products from factory trained authorized Altec Sound Contractors and Distributors. This will assure you of proper installation, a continuing source of knowledgeable advice, service, and quick warranty protection.