

31A AND 511A SECTORAL HORNS



DESCRIPTION

These heavy cast aluminum sectoral horns have exponential expansion to uniformly control the pattern of sound distribution and produce clear, crisp reproduction of middle and high frequencies.

The Altec 31A Sectoral Horn is designed for speech and background music reproduction in sound systems where wide angles of horizontal coverage and a low cutoff frequency are required. The 31A is designed to operate with the 730C Driver unit through the Altec 27A Throat Attachment. Use of an Altec N-500C Network or 15045A 70-Volt Matching Transformer will provide driver protection. The long acoustic length and 300 Hz cutoff frequency adapt the 31A to high-level operation with excellent projection. The 31A has a 120° horizontal by 40° vertical distribution pattern. Like all Altec Sectoral Horns, the 31A is weatherproof; an ideal horn for paging systems in outdoor installations.

The single 90° bend permits compact and secure attachment to a pole or other vertical surface. The Altec 511A Sectoral Horn has a frequency cutoff of 500 Hz. It may be used as the highfrequency component of a large two-way system, or-by itself-as an excellent projector for paging and public address systems. When used with Altec 800 series Drivers in wide-range, two-way sound systems, the appropriate Altec Dividing Network should be included. When the 511A is used with the Altec 730C Driver (in paging or public address systems), the Altec 15045A 70-Volt Matching Transformer should be used to provide the high-frequency driver with protection against damage by low frequencies. The 511A distributes sound in a 90° horizontal by 40° vertical pattern. A universal mounting bracket is supplied with each 511A Sectoral Horn, making it simple to install the 511A in any position desired.

SPECIFICATIONS

31A 511A

Distribution Pattern: 120°H x 40°V 90°H x 40°V

Cutoff Frequency: 300 Hz 500 Hz

Pressure Sensitivity*: 101 dB SPL with 730C 103 dB SPL with 730C

104 dB SPL with 802-8E

Dimensions-

Height:17'' (43.2 cm) w/27A $10^{5/8}''$ (27.0 cm)Width:23'' (58.4 cm) $23^{3/8}''$ (59.4 cm)Depth:14'' (35.6 cm) $18^{1/2}''$ (48.0 cm)

Weight: 15 pounds (6.80 kg) w/27A 17³/₄ pounds (8.05 kg)

Accessories: ALTEC 27A Throat Attachment ALTEC 30619 90° Throat Adaptor

ARCHITECT'S AND ENGINEER'S SPECIFICATIONS

31A

The loudspeaker horn shall be sectoral with exponential expansion and one bend of 90° . It shall be furnished complete with throat attachment and shall be constructed of heavy cast aluminum. When equipped with a compression-type driver (specified elsewhere), the loudspeaker horn shall meet the following performance criteria. Distribution pattern, $120^\circ H \times 40^\circ V$. Cutoff frequency, $300 \ Hz$. Pressure sensitivity, $101 \ dB \ SPL$ at 4' when measured on axis with 1 watt input of band-limited pink noise from $500\text{-}3000 \ Hz$ (Ref.: $0 \ dB = 0.0002 \ dyne/cm^2$). The horn shall be 17''H (including throat attachment) $\times 23''W \times 14''D$, and shall weigh $15 \ pounds$ (including throat attachment).

The loudspeaker horn shall be the ALTEC Model 31A.

511A

The loudspeaker horn shall be the straight sectoral type with exponential expansion and straight throat, and shall be constructed of heavy cast aluminum. When equipped with a compression-type driver (specified elsewhere), the loudspeaker horn shall meet the following performance criteria. Distribution pattern, $90^{\circ}\text{H} \times 40^{\circ}\text{V}$. Cutoff frequency, 500 Hz. Pressure sensitivity, ___ dB SPL at 4' when measured on axis with 1 watt input of band-limited pink noise from 500-3000 Hz (Ref.: 0 dB = 0.0002 dyne/cm²). The horn shall be 10^{5} /8"H x 23^{3} /8"W x 18^{1} /2"D, and shall weigh 17^{3} /4 pounds.

The loudspeaker horn shall be the ALTEC Model 511A.

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^{*}Measured at 4' axis with 1 watt input of band-limited pink noise from 500-3000 Hz (Ref.: 0 dB = 0.0002 dyne/cm²)