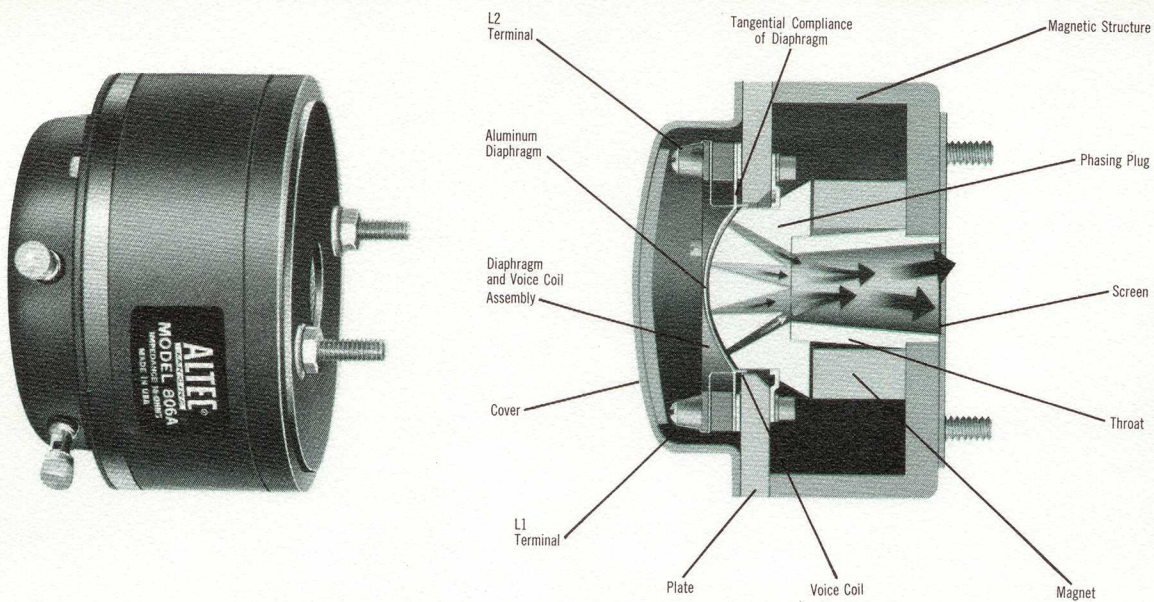


802D & 806A Driver Loudspeakers

802D
806A



Features

- 500-22,000 Cycle Response
- Smooth, Peak-Free Response
- Extremely High Efficiency
- Low Distortion
- Faithful Reproduction
- Aluminum Diaphragm with Tangential Compliance
- Edge-Wound Voice Coil
- 30-Watt Capacity
- Compact — Easily Installed
- Field Replaceable Diaphragm & Voice Coil Assembly

PROFESSIONAL 'PLAYBACK' SOUND SYSTEMS BROADCAST & RECORDING STUDIOS • BALL ROOMS AUDITORIUMS • SCHOOL & CHURCH MUSIC ROOMS MUSIC HALLS • THEATRES • NIGHT CLUBS DANCE STUDIOS • WIDE RANGE MUSIC SYSTEMS

The Altec 802D and 806A High Frequency Driver Loudspeakers are designed for all professional **PLAYBACK** applications requiring outstanding reproduction of sound over an extremely wide frequency range at substantial power levels. Such conditions are readily fulfilled with unusually high efficiency and exceptionally uniform response from 500/800 (dependent on the dividing network and horn employed) to over 22,000 cycles.

When used in conjunction with the Altec 511A, 511B (500 cycle) or 811B (800 cycle) sectoral horn, the N-500E (500 cycle) or N-800D (800 cycle) network, and the 414, 515, or 803 low frequency loudspeaker, the 802D and 806A furnish the realistic reproduction demanded by all major broadcasting stations, recording studios, theatres, auditoriums and music halls.

Both the 802D and 806A transducers utilize a voice coil of notably large diameter (1 3/4") edge wound with aluminum ribbon and coupled to a large 2 1/4" aluminum diaphragm having tangential compliance. A mechanical phasing plug (i.e., pole piece), having two exponential acoustic slots, is utilized to provide the proper phase relationship between the sound emanating from the center and outer edges of the diaphragm and voice coil assembly, thus insuring maximum high frequency reproduction while maintaining a smooth overall response. Either driver is capable of uniform, peak-free reproduction to a point far above the range of human hearing. The entire diaphragm and voice coil assembly of the 802D and 806A is field replaceable; no special tools or skills are required.

For full range systems utilizing low frequency loudspeakers of relatively low efficiency, located in non-reverberant areas having moderate ambient noise levels, the Altec 806A driver proves a perfect match (Such conditions would be analogous to the average listening room or smaller broadcast and recording studio).

In instances wherein relatively high ambience is present, and where maximum efficiency of both vocal speech and music must be reproduced with greatest clarity, the heavier magnet weight and greater flux density of the 802D are preferred. The 802D represents one of the finest high frequency transducers manufactured by Altec; the 2 db greater efficiency (over the 806A), coupled with the same precision accuracy of minute production tolerances, make the 802D the industry standard for laboratory and professional usage alike.

These factors, together with the all-important Altec criterion of engineering experience, combine to produce the 802D and 806A high frequency loudspeakers of virtually matchless quality and limitless application.



A Division of *LSPT* Ling Altec, Inc.

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

RECORDING &

BROADCASTING

EQUIPMENT

ALTEC 802D 806A

SPECIFICATIONS

	802D	806A
Power:	30 watts (with N-500E or N-800D Network)	30 watts (with N-500E or N-800D Network)
Frequency Response:	500-22,000 cycles	500-22,000 cycles
Pressure Sensitivity:	111.7db* at 1 watt; 126.4db at 30 watts	109.5db* at 1 watt; 124.2db at 30 watts
Impedance:	16 ohms	16 ohms
Voice Coil Diameter:	1.75"	1.75"
Application:	HF Driver unit for wide-range, two-way studio 'Playback' Systems	HF Driver for wide-range, two-way, studio 'Playback' Systems
Protection:	N-500E Network and 511A or 511B horn for 500 cycle crossover N-800D Network and 811B horn for 800 cycle crossover	N-500E Network and 511A or 511B horn for 500 cycle crossover N-800D Network and 811B horn for 800 cycle crossover
Magnet Weight:	1.2 lbs.	13 oz.
Flux:	15,250 Gauss	13,000 Gauss
Dimensions:	Diameter: 4½" Depth: 3¼"	Diameter: 4½" Depth: 3¼"
Weight:	7 lbs.	5 lbs., 11 oz.
Finish:	Altec Green	Altec Green
Accessories:	511A, 511B, 811B Sectoral Horns; N-500E, N-800D Dividing Networks; 70.7v transformers	511A, 511B, 811B Sectoral Horns; N-500E, N-800D Dividing Networks; 70.7v transformers

* (Ref: .0002 dynes/cm² measured with warble frequency 500 - 2,500 cycles, 4' from mouth of 30" trumpet)

Note: For Multicellular Horns use Altec drivers 730, 288 and 290 types.

ARCHITECTS' & ENGINEERS' SPECIFICATIONS

(FOR ALTEC 802D):

The high frequency driver loudspeaker shall utilize a 2¼" diameter aluminum diaphragm having tangential compliance, coupled to a voice coil of edge wound aluminum ribbon having a diameter of 1¾". The voice coil gap shall have a flux density of at least 15,250 Gauss, produced by a magnet having a weight of 1.2 pounds. A machined phasing plug, which also serves as the pole piece, having two exponential acoustic slots shall be utilized to provide the proper phase relationship between the sound emanating from the center and edges of the diaphragm and voice coil assembly, thus insuring maximum high frequency reproduction while maintaining a smooth overall response. The entire diaphragm and voice coil assembly shall be field replaceable without requiring special tools or skills; this shall be interpreted to mean that the speaker shall incorporate self-centering dowels to insure proper spacing and alignment of the diaphragm and voice coil assembly.

The HF driver loudspeaker shall produce a sound pressure level of at least 111.7 db with 1 watt input and 126.4 db with 30 watts input at a distance of 4 feet from the mouth of a 30" trumpet when a warble band of 500 to 2,500 cycles is used. Single frequency measurements shall not be acceptable under this specification. The frequency response of the HF driver shall be uniform over the range of (SPECIFY):

500 to 22,000 cycles, when used with the Altec 511A or 511B sectoral horn and N-500E dividing network.
800 to 22,000 cycles, when used with the Altec 811B sectoral horn and N-800D dividing network.

Any high frequency driver loudspeaker not meeting all of the foregoing requirements shall not be acceptable under this specification.

The high frequency driver loudspeaker shall be Altec Lansing Model 802D.

(FOR ALTEC 806A):

The high frequency driver loudspeaker shall utilize a 2¼" diameter aluminum diaphragm having tangential compliance, coupled to a voice coil of edge wound aluminum ribbon having a diameter of 1¾". The voice coil gap shall have a flux density of at least 13,000 Gauss, produced by a magnet having a weight of 13 ounces. A machined phasing plug, which also serves as the pole piece, having two exponential acoustic slots, shall be utilized to provide the proper phase relationship between the sound emanating from the center and edges of the diaphragm and voice coil assembly, thus insuring maximum high frequency reproduction while maintaining a smooth overall response. The entire diaphragm and voice coil assembly shall be field replaceable without requiring special tools or skills; this shall be interpreted to mean that the speaker shall incorporate self-centering dowels to insure proper spacing and alignment of the diaphragm and voice coil assembly.

The HF driver loudspeaker shall produce a sound pressure level of at least 109.5 db with 1 watt input and 124.2 db with 30 watts input at a distance of 4 feet from the mouth of a 30" trumpet when a warble band of 500 to 2,500 cycles is used. Single frequency measurements shall not be acceptable under this specification. The frequency response of the HF driver shall be uniform over the range of (SPECIFY):

500 to 22,000 cycles with the Altec 511A, 511B sectoral horn and N-500E dividing network.
800 to 22,000 cycles with the Altec 811B sectoral horn and N-800D dividing network.

Any high frequency driver loudspeaker not meeting all of the foregoing requirements shall not be acceptable under this specification.

The high frequency driver loudspeaker shall be Altec Lansing Model 806A.

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.