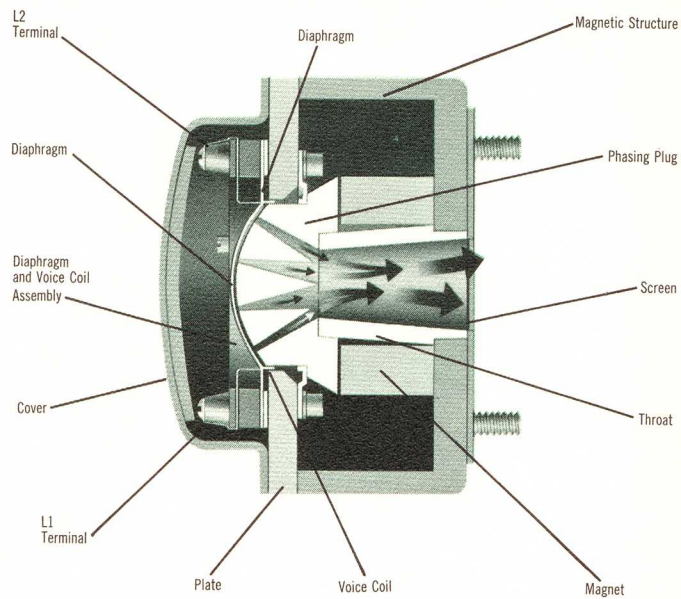


807-8A, 808-8A & 808-16A Driver Loudspeakers

807-8A
808-8A
808-16A



Features:

- Symbiotik*™ Diaphragm
- 500-20,000 Hz Response
- Smooth, Peak-Free Response
- Extremely High Efficiency
- Low Distortion
- Faithful Reproduction
- Edge-Wound Voice Coil
- Greater Power Capacity
- Compact — Easily Installed
- Field Replaceable Diaphragm and 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 807-8A and 808-16A 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 or 800 Hz (depending on the dividing network and horn employed) to over 20,000 Hz.

The 807-8A and 808-8A furnish the realistic sound reproduction demanded by all major broadcasting stations, recording studios, theatres, auditoriums and music halls when used in conjunction with the ALTEC 511A, 511B, 511D (500 Hz) or 811B (800 Hz) sectoral horn, the N501-8A (500 Hz crossover) or N801-8A (800 Hz crossover) dividing network and the 414-8B or 416-8B low-frequency loudspeaker.

The 808-16A furnishes the same superb reproduction of sound when used in the ALTEC A9 Loudspeaker System (511D sectoral horn, N500-F dividing network and 515B low-frequency loudspeaker).

Each 807-8A, 808-8A and 808-16A driver uses a voice coil of notably large diameter (1-3/4"), edge-wound with aluminum ribbon and coupled to a large *Symbiotik* diaphragm. A mechanical phasing plug, 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 ensuring maximum high-frequency reproduction while maintaining smooth overall response. Each 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 each 807-8A, 808-8A and 808-16A driver is field replaceable; no special tools are required.

In full-range systems where maximum efficiency is required for reproducing speech and music at high sound pressure level (SPL), the heavier magnet weight and greater flux density of the 808-8A and 808-16A are preferred. The 808-8A and 808-16A represent two of the finest high-frequency driver loudspeakers manufactured by ALTEC; their 2.2 dB greater efficiency (over the 807 series), coupled with precision production tolerances, help to make them an industry standard for laboratory and professional usage alike.

These factors, together with the all-important ALTEC criteria of engineering exactness, combine to produce the 807-8A, 808-8A and 808-16A high-frequency driver loudspeakers of virtually matchless quality and limitless application.



ALTEC DIVISION OF LANSING ALTEC, INC.

1515 S. Manchester Ave., Anaheim, Calif. 92803

(FOR ALTEC 807-8A)

The high-frequency driver loudspeaker shall utilize a *Symbiotek* diaphragm coupled to a voice coil that shall be edge-wound of aluminum ribbon and that shall be 1-3/4" in diameter. 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, shall have two exponential acoustic slots and 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 ensuring 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 loudspeaker shall incorporate self-centering dowels to ensure 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 2500 Hz 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 one):

500 to 20,000 Hz with the ALTEC 511A, 511B or 511D sectoral horn and N501-8A dividing network.

800 to 20,000 Hz with the ALTEC 811B sectoral horn and N801-8A 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 807-8A.

(FOR ALTEC 808-8A)

The high-frequency driver loudspeaker shall utilize a *Symbiotek* diaphragm coupled to a voice coil that shall be edge-wound of aluminum ribbon and that shall be 1-3/4" in diameter. 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, shall have two exponential acoustic slots and 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 ensuring 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 loudspeaker shall incorporate self-centering dowels to ensure 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 2500 Hz 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 one):

500 to 20,000 Hz with the ALTEC 511A, 511B or 511D sectoral horn and N501-8A dividing network.

800 to 20,000 Hz with the ALTEC 811B sectoral horn and N801-8A 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 808-8A.

(FOR ALTEC 808-16A)

The high-frequency driver loudspeaker shall utilize a *Symbiotek* diaphragm coupled to a voice coil that shall be edge-wound of aluminum ribbon and that shall be 1-3/4" in diameter. 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, shall have two exponential acoustic slots and 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 ensuring 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 loudspeaker shall incorporate self-centering dowels to ensure 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 2500 Hz 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 one):

500 to 20,000 Hz with the ALTEC 511A, 511B or 511D sectoral horn and N500-F or N500-G dividing network.

800 to 20,000 Hz with the ALTEC 811B sectoral horn and N800-D dividing network.

Impedance shall be 16 ohms. Any high-frequency driver loudspeaker not meeting all of the foregoing requirements shall be unacceptable under this specification.

The high-frequency driver loudspeaker shall be ALTEC Lansing model 808-16A.

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.

807-8A

ALTEC 808-8A Driver Loudspeaker

808-16A

SPECIFICATIONS

DESCRIPTION	MODEL 807-8A	MODEL 808-8A	MODEL 808-16A
Power Rating:	Up to 30 watts RMS (based on continuous operation with white noise 500 Hz to 20,000 Hz and with ALTEC model N501-8A or N801-8A dividing network and 511A, 511B, 511D or 811B sectoral horn)	Same as 807-8A	Up to 30 watts RMS (based on continuous operation with white noise 500 Hz to 20,000 Hz and with ALTEC model N500-F or N500-G dividing network and 511A, 511B, 511D or 811B sectoral horn)
Frequency Response:	500 to 20,000 Hz	Same as 807-8A	Same as 807-8A
Pressure Sensitivity:	109.5 dB w/1 watt input measured 4' from mouth of 30" horn over warble frequency range 500-2500 Hz (Ref.: 0.0002 dyne/cm ² for 1 watt input) 124.2 dB at 30 watts	111.7 dB w/1 watt input measured 4' from mouth of 30" horn over warble frequency range 500-2500 Hz (Ref.: 0.0002 dyne/cm ² for 1 watt input) 126.4 dB at 30 watts	Same as 808-8A Same as 808-8A
Impedance:	8 ohms	8 ohms	16 ohms
Voice Coil Diameter:	1.75"	1.75"	1.75"
Application:	HF Driver Loudspeaker for wide-range, 2-way studio 'Playback' systems	Same as 807-8A	Same as 807-8A
Protection:	N501-8A dividing network and 511A, 511B or 511D sectoral horn for 500-Hz crossover N801-A dividing network and 811B sectoral horn for 800-Hz crossover	Same as 807-8A Same as 807-8A	N500-F or N500-G dividing network and 511A, 511B or 511D sectoral horn for 500-Hz crossover N800-D dividing network and 811B sectoral horn for 800-Hz crossover
Magnet Weight:	0.8 pound	1.2 pounds	1.2 pounds
Flux Density:	13,000 Gauss	15,250 Gauss	15,250 Gauss
Dimensions:	4-1/2" diameter 3-1/4" depth	4-1/2" diameter 3-11/16" depth	Same as 808-8A
Weight:	5 pounds, 11 ounces	7 pounds	7 pounds
Finish:	Black matte	Black matte	Black matte
Accessories:	511A, 511B, 511D or 811B sectoral horn; N501-8A or N801-8A dividing network; 15067 auto transformer	Same as 807-8A	511A, 511B, 511D or 811B sectoral horn; 500-F, N500-G or N800-D dividing network; 15067 auto transformer and 10-02-03-120 attenuator

NOTE: For multicellular horns, use ALTEC driver loudspeaker models 730, 288, 290 or 291.

Specifications and components subject to change without notice. Overall performance will be maintained or improved.

