

**high fidelity  
home music  
systems**



**ALTEC**<sup>®</sup>  
LANSING CORPORATION

## the bass reflex enclosure

The loudspeaker enclosure is an important part of your home music system and should be given as much consideration as any other part of your system. In the last few years many different types of enclosures have become available. Few of these represent anything new in the art of enclosure design. The majority are various forms of the folded horn type enclosure and have achieved considerable popularity because of their excellent bass response. However, this good bass response is usually accomplished at the expense of reproduction in the mid-range. Folded horns were used in theatrical speaker systems for many years but were obsoleted and discarded in favor of speaker systems using a combination of a straight horn and the bass reflex principle.

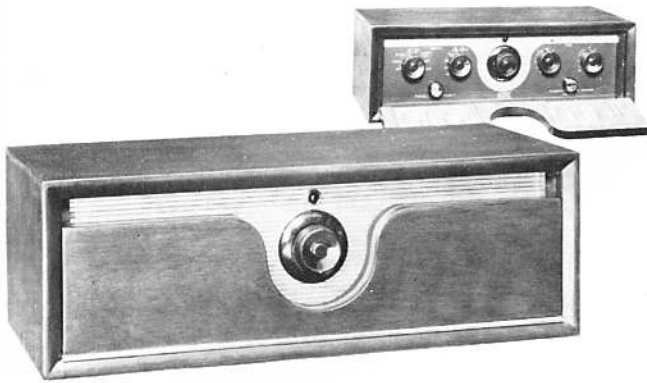
Altec Lansing has made detailed and exhaustive measurements in its acoustic laboratory on all types of enclosures, and these measurements disclose that no type can equal a carefully designed enclosure using the bass reflex principle for smoothness in frequency response and over-all listening fidelity. The reason for this is the freedom from phasing difficulties in the bass reflex enclosure as compared to other types.

All Altec Lansing loudspeaker enclosures are designed around the bass reflex principle and have been carefully engineered to take the fullest advantage of the potentials of your Altec Lansing loudspeaker.



ALTEC LANSING CORPORATION: 9356 SANTA MONICA BLVD. BEVERLY HILLS, CALIF.  
161 6TH AVE. • NEW YORK 13, NEW YORK

**ALTEC**

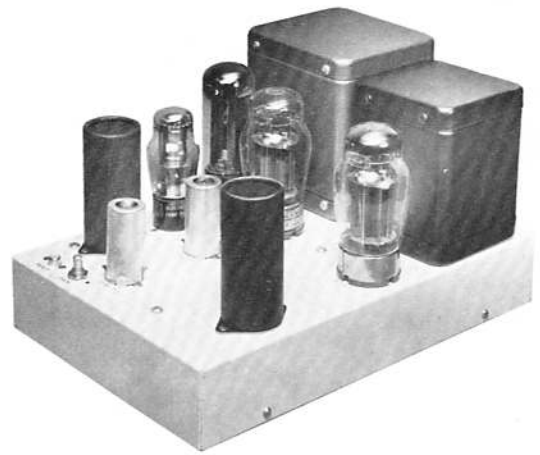


**A-440A control preamplifier**

The A-440A is designed for your home. With the door shut it is simple and will blend perfectly with your furnishings. Open there are controls to satisfy the most particular. 25 crossover selections make it possible to choose the correct recording characteristic for every record. Five inputs are provided, three high level for ceramic or crystal phonos, tape machines, tuner or television and two low level inputs for micro-phones or equalized for magnetic phono cartridges. A special circuit permits monitoring from the tape playback head while recording. Full range tone controls and selection of either loudness or volume complete the facility.

**specifications**

inputs:	Three high level, two low level equalized or flat.
outputs:	Two—one main amplifier, one recorder.
gain at 1 kc—tone controls flat	
low level, equalized (phono):	60 db
low level, flat (mic.):	63.5 db
high level (tv, tape, radio):	26 db
frequency response:	See curves.
noise level:	High level inputs—volume max., better than 95 db, below 1.5 volts output. Phono inputs—better than 95 db.
controls:	Seven: Switch for choice of inputs and low frequency crossover, H.F. equalization switch. Total combinations, 25. Phono selector switch. Volume—loudness control with power switch. Volume—loudness-tape monitor switch. Bass and treble controls. Five independent level controls on back.
power supply:	Self-contained. Three AC receptacles controlled by On-Off switch, 117V., 60 cycles.
tube complement:	Two—12AY7, One—12AU7.
dimensions:	4-3/4" H. x 6-7/8" D. x 14-3/8" W.
finish:	Mahogany or blond.
shipping weight:	15 pounds.
price:	\$139.00 (available without furniture cabinet for custom installation, \$126.00)



**A-340A power amplifier**

An audio engineer's dream, the A-340A uses premium power tubes of 100 watt capacity rated at a conservative 35 watts in a simple class A1 circuit for long-lived performance stability.

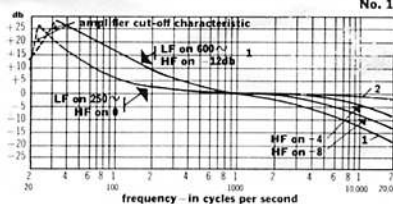
**specifications**

output power and distortion:*	35 watts, less than 0.5% total harmonic distortion.
gain:*	66.5 db.
input sensitivity:*	1.3 volts RMS for 35 watts output.
input impedance:*	200,000 ohms.
frequency response:*	Within 1 db, 5 c.p.s. to 100,000 c.p.s.
noise level:*	95 db below full output.
load impedance:	8, 16 ohms.
output impedance:	Adjustable from -4 to +4.5 ohms on 8 ohm tap. Less than .52 ohms on 16 ohm tap.
damping factor:	Greater than 35 on 16 ohm tap, +1.8 through infinity to -2.0 on 8 ohm tap.
controls:	Gain Adjustment, R <sub>G</sub> Adjustment.
power supply:	117V., 60 cycles.
tubes:	One—12AY7, One—12AU7, Two—6550, One—5U4GB, One—OA3/VR75.
shipping weight:	30 pounds.
price:	\$159.00.

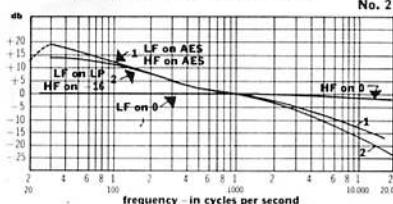
\*Normal setting of R<sub>G</sub> control.

The A-440A preamplifier and A-340A amplifier represent the highest development of the electronic engineer's art. They are exceptional in performance, operation and their amazing flexibility of control. Through the use of the most expensive professional components it has been possible to provide simple circuitry that will continue to meet Altec's stringent specifications for years. Only Altec home music systems have this hidden value of professional quality.

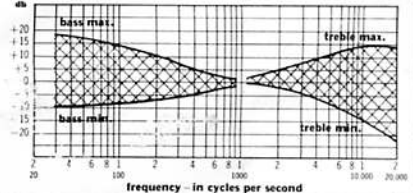
A440A preamplifier—phono equalizer curves



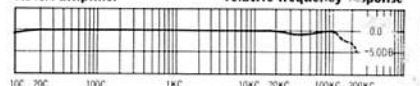
A440A preamplifier—phono equalizer curves



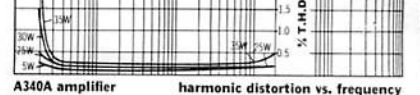
A440A preamplifier—range at base and treble tone controls



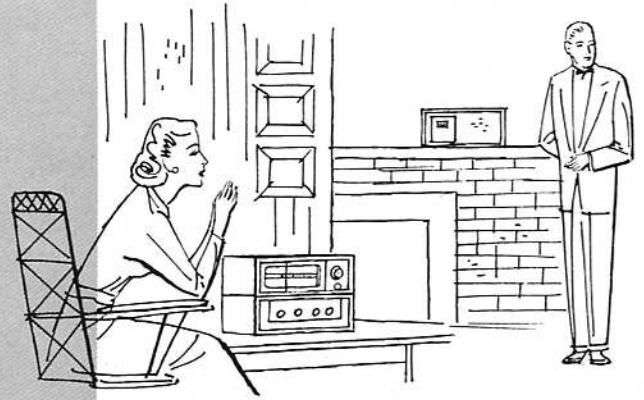
A340A amplifier relative frequency response



A340A amplifier harmonic distortion vs. frequency



Here is a 10 watt amplifier and control preamplifier in one compact furniture unit for smaller systems, apartments and dormitories. Its circuitry and performance fully represent the professional audio quality that is the criterion of all Altec products. The use of the finest components is your assurance of years of perfect listening pleasure. Its controls are simple yet sufficiently comprehensive to assure proper listening quality from all types of records. There is a choice of four recording curves, facilities for microphone, and two inputs for tape or radio tuner. Fully variable tone controls provide a wide range of selection for individual taste.

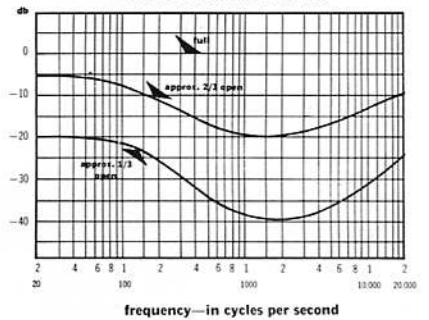


**A-339A melodist amplifier**

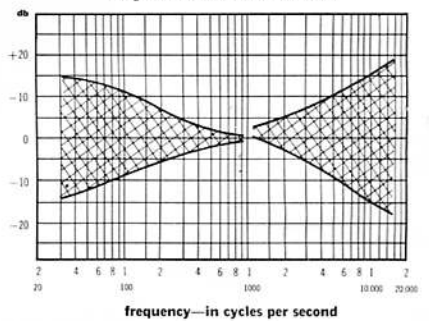
**specifications**

dimensions:	13" wide, 4-7/8" high, 9-3/4" deep.
finish:	Mahogany or blond.
frequency range:	20-22,000 cycles.
power output:	10 watts. Less than 2% total harmonic distortion under critical measurement.
output impedance:	4, 8 or 16 ohms.
system gain:	132 db maximum.
power requirements:	75 watts, 110V, 60 cycles.
inputs:	1 low level for magnetic phono pickup or microphone. 2 high level for ceramic or crystal phone pickup, tape reproducer, radio tuner or tv audio.
equalization:	4 compensation curves: European, LP, new AES (NARTB, RIAA, RCA, orthophonic), old RCA.
tone control:	Treble, 15 db boost or droop at 10,000 cycles. Bass, 13 db boost or droop at 50 cycles.
volume control:	Individual volume adjustments for all three inputs.
loudness control:	Compensated loudness control, flat at maximum position, approaches Fletcher-Munson curves at lower settings.
facilities:	2 110V, 60 cycle outlets controlled by amplifier power switch.
shipping weight:	17 pounds.
price:	\$129.00

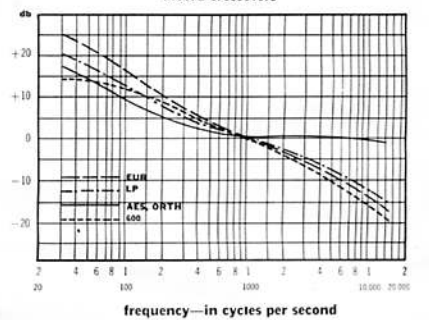
**loudness control characteristics**



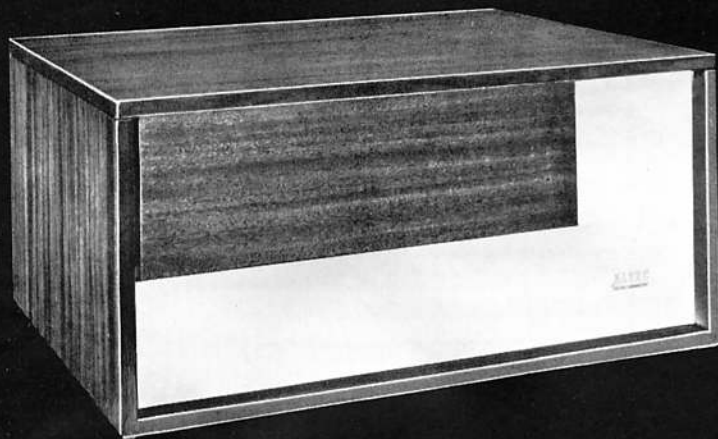
**range of bass and treble controls**



**record crossovers**



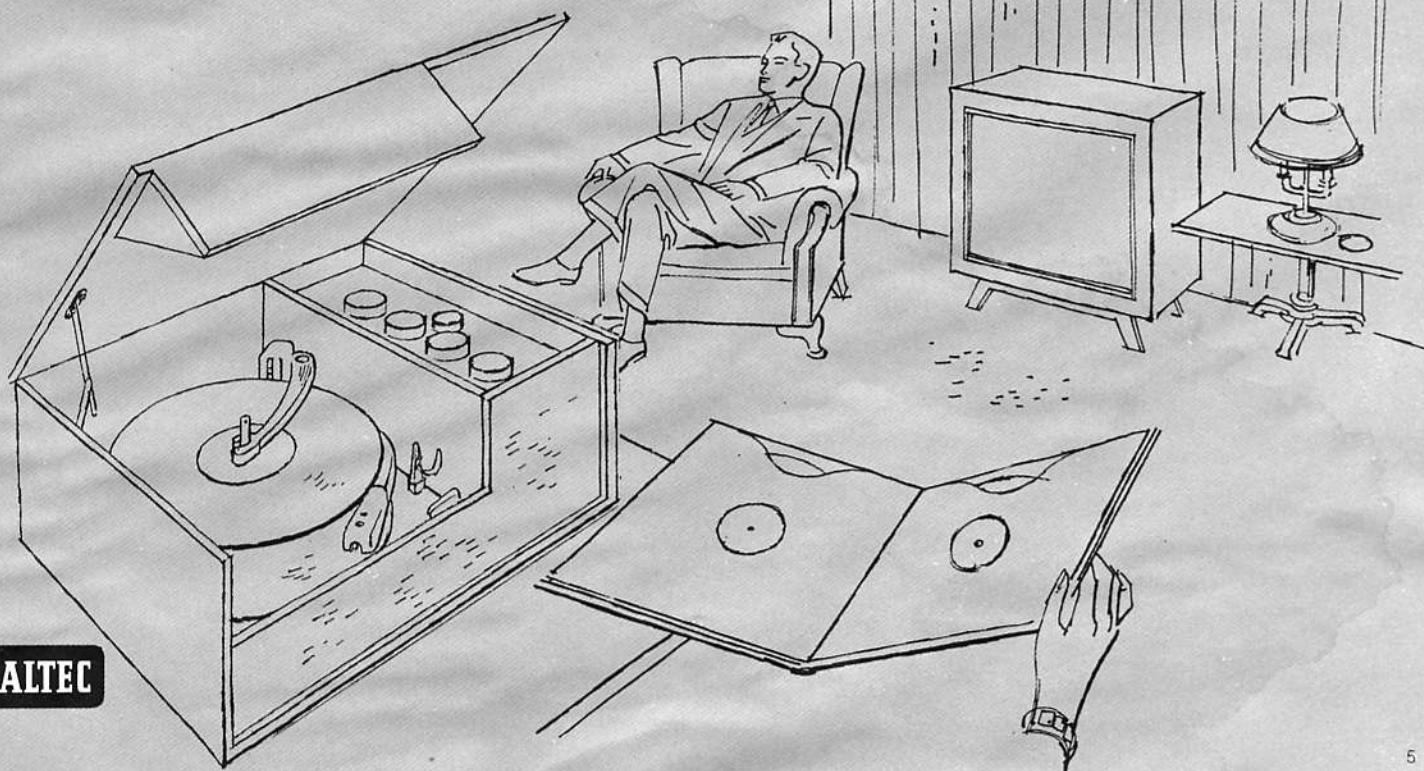
For inexpensive high fidelity with the utmost simplicity this beautiful reproducer matched with any of the Altec speaker systems is truly a dream come true. The 901A contains a world renowned Collaro three speed record changer, a G.E. variable reluctance cartridge with separate sapphire needles for 78 and 33-1/3 or 45 rpm records, and the superb quality of the Altec A-339A Melodist amplifier and control preamplifier. You'll enjoy the quality and simplicity of this system, either for yourself or as the perfect gift.



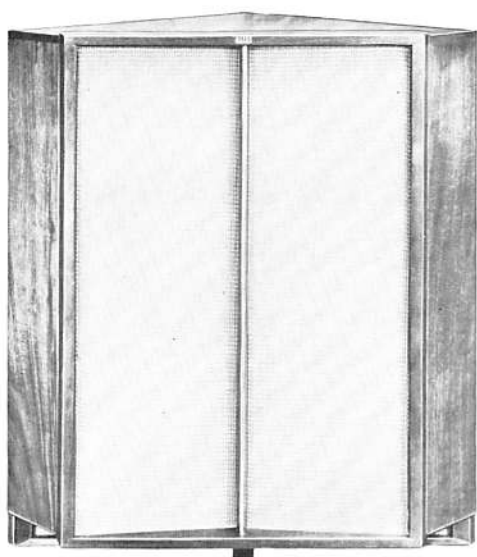
**901A melodist record reproducer**

**specifications**

dimensions:	20-3/8" W; 15-3/4" D; 11-1/2" H.
finish:	Mahogany or blond.
frequency range:	20-22,000 cycles.
power output:	10 watts. Less than 2% total harmonic distortion under critical measurement.
output impedance:	4, 8 or 16 ohms.
system gain:	132 db maximum.
power requirements:	75 watts, 110V, 60 cycles.
inputs:	1 low level for magnetic phono pickup or microphone. 2 high level for ceramic or crystal phone pickup, tape reproducer, radio tuner or tv audio.
equalization:	4 compensation curves: European, LP, new AES (NARTB, RIAA, RCA, orthophonic), old RCA.
tone control:	Treble, 15 db boost or droop at 10,000 cycles. Bass, 13 db boost or droop at 50 cycles.
volume control:	Individual volume adjustments for all three inputs.
loudness control:	Compensated loudness control, flat at maximum position, approaches Fletcher-Munson curves at lower settings.
facilities:	2 110V, 60 cycle outlets controlled by amplifier power switch.
shipping weight:	55 pounds.
price:	\$225.00 (without legs. The 16" modern iron legs are available as an accessory for \$4.05 a set.)



**ALTEC**



**820C speaker system**

Ask any audio engineer, he will confirm that the 820C is the finest speaker system in existence, for the home, regardless of price. Its smooth frequency response is guaranteed from 30 to 22,000 cycles, is without false bass or other misleading frequency accentuations. Internally the 820C consists of two 15" 803A low frequency speakers in an exclusive direct radiating exponential horn using a modified bass reflex principle with the additional advantages of a corner enclosure. From 800 cycles to 22,000 cycles tones are reproduced by the 802C driver speaker mounted on the H-811B horn. Individual specifications on these units will be found elsewhere in this book. Truly the 820C is the finest speaker system for your Altec home music system.

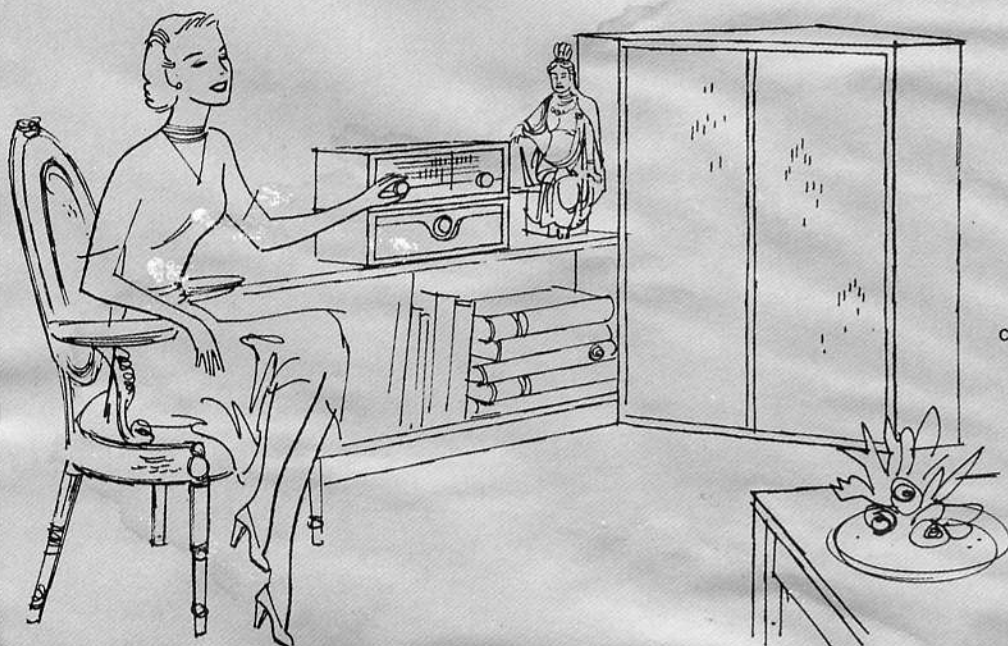
**price: \$525.00**



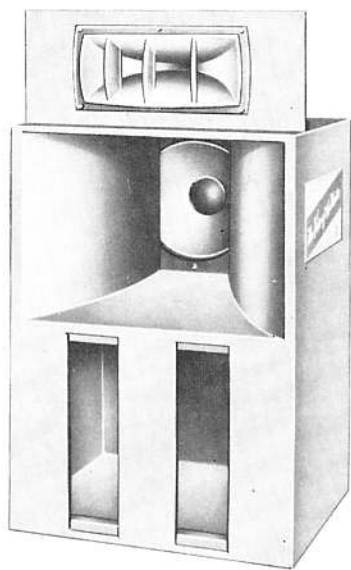
**826A iconic speaker system**

This wonderful new speaker system incorporates one 15" 803A low frequency speaker, an N-800D dividing network and an 802C high frequency driver mounted on the H-811B horn. These professional components combined with the acoustically engineered bass reflex enclosure provide exceptional performance. The low chairside cabinet is an outstanding example of the cabinetmaker's art, reflecting the finest taste in furniture design. Guaranteed frequency range, 35 to 22,000 cycles.

**price: \$324.00**



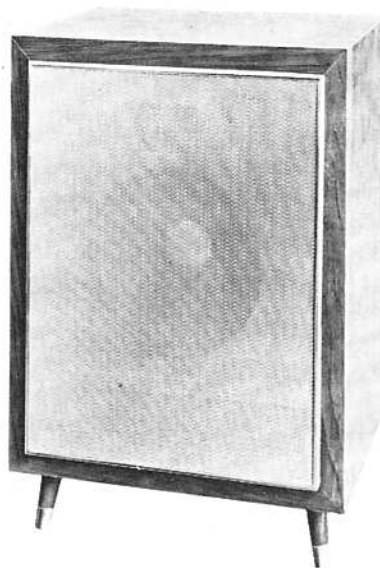
Altec "Voice of the Theatre" loudspeaker systems are used in more than 12,000 motion picture theatres throughout the world. Because of their superior quality they are used by all major motion picture studios as a performance standard for reproduction. This same engineering excellence is reflected in the design and construction of these Altec speaker systems for the home. They represent the finest product of years of development and research in one of the world's finest acoustical laboratories. From the massive 820C to the compact 700 each of these systems is the finest available.



**A-7 voice of the theatre speaker system**

The A-7 which uses one 15" 803A, an N-800D network and an 802C on the H-811B horn is the smallest of Altec's famous theatrical sound systems. The industrial finish enclosure uses Altec's exclusive direct radiating exponential horn combined with a modified bass reflex principle for smooth realistic bass. This system is of particular interest to those who wish to achieve the perfection of an Altec engineered system in a custom installation. Guaranteed frequency range, 35 to 22,000 cycles.

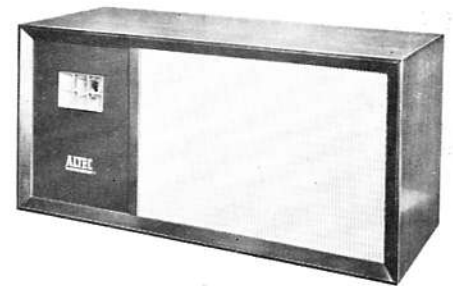
price: \$260.00



**824A iconic speaker system**

This little iconic system utilizing the Altec developed phase computed reflex enclosure provides exceptional performance for smaller installations. Using the new 412A 12" speaker, the N-3000A network and the famous 3000A high frequency speaker, this amazing system is guaranteed to have a range from 50 to 22,000 cycles.

price: \$180.00



**700A melodist speaker system**

The smallest of Altec's engineered speaker systems, the 700A uses a special 10" speaker coupled with the N-3000B network and the 3000A high frequency speaker to obtain amazing performance. With its phase computed reflex enclosure it has a guaranteed range from 70 to 22,000 cycles and is ideal for use in apartments, as a second speaker system in large installations or as an exceptional part of an economical Altec home music system.

price: \$99.00

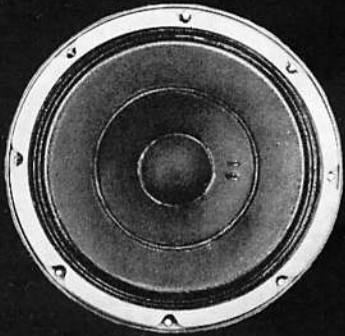
**specifications**

	Power Rating	Impedance	Finish	Dimensions			Weight
				W	D	H	
<b>820C</b>	30 watts	16 ohms	Mahogany Blond	42-1/4"	29"	47-3/8"	230 pounds
<b>826A</b>	25 watts	16 ohms	Mahogany Blond	37-1/2"	20-1/2"	28"	164 pounds
<b>A-7</b>	25 watts	16 ohms	Gray	30"	24"	54"	180 pounds
<b>824A</b>	20 watts	8 ohms	Mahogany Blond	19-1/2"	16"	28"	55 pounds
<b>700A</b>	20 watts	8 ohms	Mahogany Blond	22-3/4"	10-1/8"	11-1/4"	30 pounds



## "biflex" speakers

These Altec BIFLEX speakers are the latest development from Altec's famous acoustic laboratories. They are completely new in design concept and efficiently reproduce a smooth frequency range that has never before been achieved in any single cone loudspeaker. The development and use of multiple concentric compliances in these speakers is but another example of Altec's engineering leadership. Like all Altec speakers the new BIFLEX units have frequency ranges guaranteed by Altec Lansing Corporation.



**408A 8"**

The ideal speaker for smaller critical uses where the benefits of a larger unit are prohibited by space, weight or other factors. This economical new unit is truly amazing. Through the use of a large magnet and a carefully designed magnetic structure this speaker achieves an efficiency that is outstanding for such a small unit. Using the newly developed BIFLEX principle this compact 408A speaker has a guaranteed frequency range from 60 to 13,000 cycles.

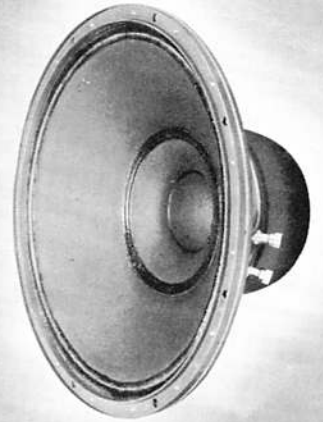
price: \$24.00



**412A 12"**

This new 12" speaker, employing the multiple concentric compliances, is truly outstanding in efficiency, quality of reproduction, smoothness and breadth of frequency response. It is guaranteed by Altec to have a range of at least 40 to 13,000 cycles when mounted in a proper enclosure. For design, performance and craftsmanship the 412A BIFLEX is a speaker that will please the most critical.

price: \$45.00



**415A 15"**

A massive 15" speaker that will provide full bass and wide range high fidelity reproduction at a moderate price. The new 415A is the outstanding example of the amazing performance that has been made possible with the exclusive Altec BIFLEX principle of multiple concentric compliances. Guaranteed for a range of 30 to 13,000 cycles the 415A is years ahead in performance.

price: \$60.00

The quality of a loudspeaker is determined by its frequency response, its efficiency and its lack of distortion... by its ability to reproduce accurately in sounds the electrical energy presented to it by the amplifier.

Altec Lansing speakers are unsurpassed. Years of experience in the field and research in one of the most comprehensive private acoustical laboratories in the world combine with the highest standards of precision engineering and craftsmanship to make Altec Lansing speakers the very finest procurable.







**"duplex"® speakers**

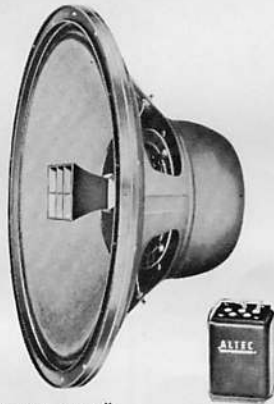
Altec "Duplex" speakers are mechanically and electrically independent high and low frequency loudspeakers mounted within the physical size of a single frame. They are, without exception, the finest speakers in the world. Every "Duplex" speaker carries the unconditional quality guarantee that it will reproduce smoothly and efficiently the entire frequency range from 30 cycles to 22,000 cycles per second when mounted in a proper cabinet. *No other speaker or combination of speakers carries such a guarantee.*



**601A 12"**

This speaker combines in one superlative unit an efficient 12" low frequency speaker with the 3000A high frequency driver unit and horn and a 3000 cycle cross-over network. Unconditionally guaranteed frequency response: 30 cycles — 22,000 cycles.

**price: \$99.00**  
including network



**602A 15"**

A companion piece to the 601A and identical in every way with the exception that it is mounted on a 15" frame and uses a 15" cone with a larger low frequency magnet for more efficient reproduction of very low frequency bass.

**price: \$114.00**  
including network



**604C 15"**

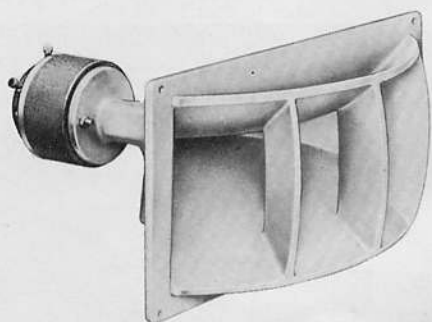
The 604C is the newest model of the famous professional type Altec 604 "Duplex" speaker which has long been the quality standard of the audio industry. An improved 15" cone and newly designed exponential multicellular horn and 1600 cycle network make it possible for the 604C "Duplex" to now have a guaranteed frequency response from 30 cycles to 22,000 cycles. Further design improvements enable this speaker to handle 50 watts of peak power without distortion. This speaker has no peer for high quality music and monitoring systems.

**price: \$156.00**  
including network

**specifications**

	Power	Impedance	Magnet Weight	Voice Coil Diam.	Max. Cone Resonance	Distribution		Dimensions		Weight
						Hor.	Vert.	Diam.	Depth	
<b>408A</b>	15 watts	8 ohms	.65 lb.	1.7"	75 cycles			8-1/4"	3-7/16"	6 lbs.
<b>412A</b>	20 watts	8 ohms	1.8 lb.	3"	50 cycles			12-1/4"	5-5/8"	15 lbs.
<b>415A</b>	25 watts	8 ohms	2.4 lb.	3"	45 cycles			15-3/16"	7"	25 lbs.
<b>601A</b>	20 watts	8 ohms	1.0 lb.	2"	55 cycles					

For the finest custom high fidelity speaker system the 802C and H-811B used with the 803A and mounted in a properly designed enclosure will provide a 30 to 22,000 cycle range of amazing faithfulness and accuracy.



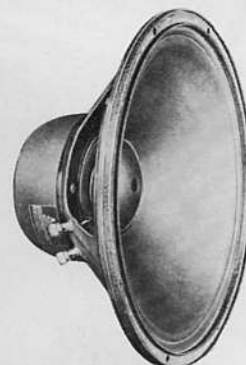
**802C driver and H-811B horn**

power: 30 watts.  
 range: 800-22,000 cycles.  
 impedance: 16 ohms.  
 distribution: Hor., 90°; vert. 40°.  
 dimensions: 8-5/8" H; 18-3/8" W; 16" D.  
 price: 802C—\$57.00  
 H-811B—\$27.00



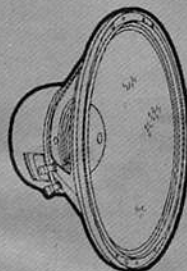
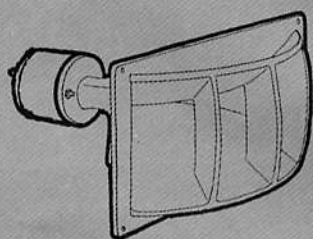
**N-800D network**

impedance: 16 ohms.  
 hf attenuation: 4—1 db steps.  
 crossover: 800 cycles.  
 dimensions: 8-1/2" H; 5-1/2" W; 3-1/2" D.  
 price: \$42.00



**803A speaker**

power: 30 watts.  
 impedance: 16 ohms.  
 range: 30-800 cycles.  
 mag. weight: 2.4 lbs.  
 v. c. diam.: 3"  
 cone res.: 45 cycles.  
 dimensions: Diam., 15-5/16"; Depth, 7"  
 price: \$60.00

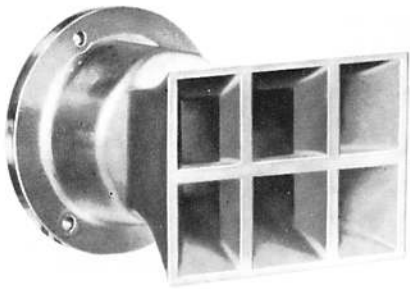


**30 to  
 22,000  
 cycles**



In many homes the finest high fidelity installation can be made by building-in the components. For this reason Altec Lansing Corporation makes these professional quality components available so that you may have the finest in your custom home music system. Either of these speaker systems will provide perfect reproduction when mounted in a proper enclosure. To assist you in the construction of your cabinet Altec Lansing Corporation has prepared a special brochure describing the proper methods of design and construction and also provides a user assistance service to answer special questions and give advice so that you may be sure to realize the full potential of your Altec home music system.

Use the famous Altec 3000A high frequency speaker and N-3000A network with either the 412A or 415A to achieve full 22,000 cycle performance. Or if you already have a system, the two units can be used to modernize it and achieve true Altec quality. Only Altec speakers provide a full 22,000 cycles range. This high frequency unit is ideal to extend the frequency range of your present Altec 600B or 603B speaker or any other good single cone speaker.



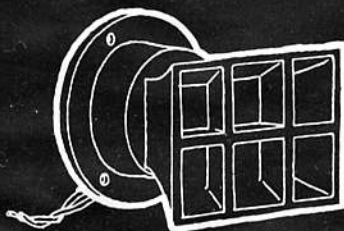
**3000A high frequency speaker**

power: 20 watts.  
 impedance: 8 ohms.  
 range: 3000—22,000 cycles.  
 distribution: Hor., 90°; vert., 40°.  
 dimensions: 2-5/8" H; 2-7/8" W; 3" D.  
 price: \$40.00



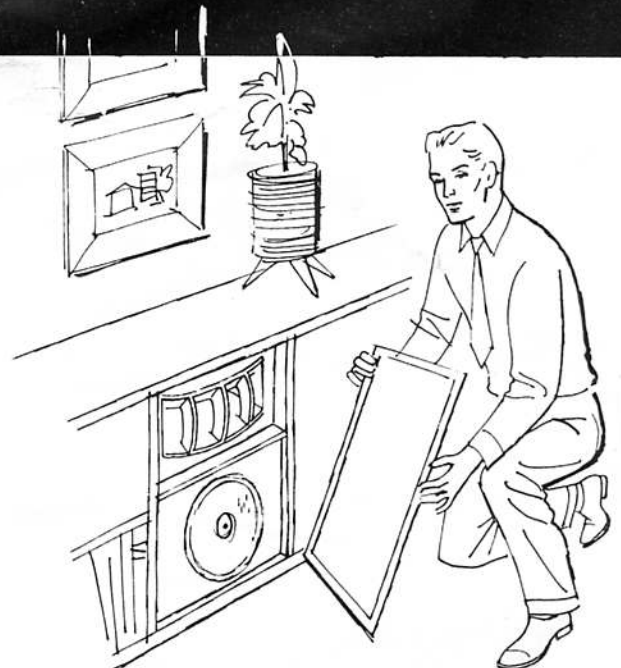
**N-3000A network**

impedance: 8 ohms.  
 hf attenuation: 2—2 db steps.  
 crossover: 3000 cycles.  
 dimensions: 3-1/8" H;  
 2-5/8" Square.  
 price: \$18.00

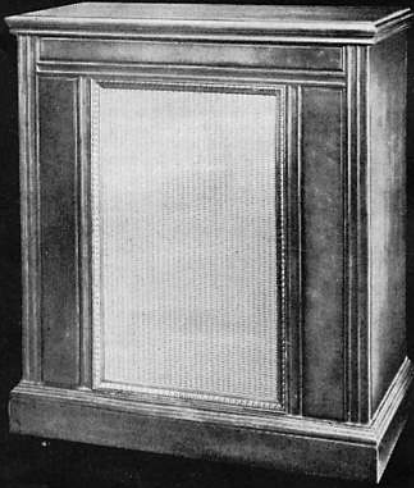


415A or = } 30 to  
 = } 22,000 cycles  
 412A = } 40 to  
 speaker = } 22,000 cycles

See your dealer or write Altec for information regarding the design and construction of enclosures that will realize the full potential of these wonderful speaker systems.



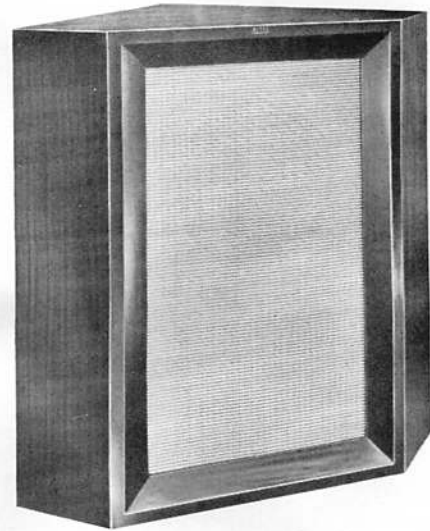
The enclosure for your speaker is an important part of your system. A poorly engineered cabinet may create false resonances, cause distortion, create holes in the mid-frequency response, and even destroy tones; while a properly designed enclosure actually enhances the speaker's performance. These Altec enclosures have been designed and tested in Altec's acoustic laboratories to assure maximum performance from your Altec speaker. They, like all other parts of your Altec home music system, have been designed with but one thought: to give you matched components that will provide the finest quality.



a period cabinet in mahogany, 35" x 31" x 17"  
\$160.00

**607**

**606**



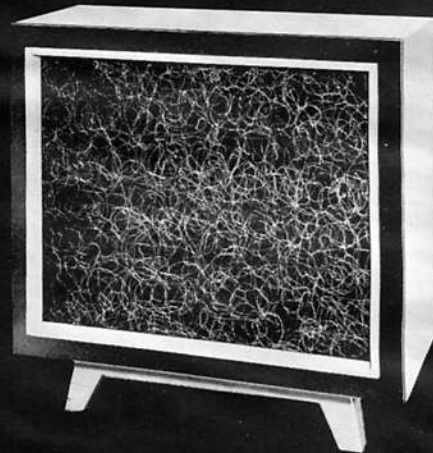
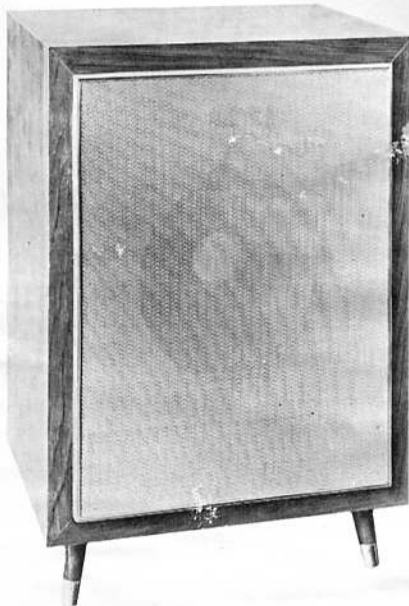
a corner enclosure, always the best for extreme bass, in mahogany or blond, 36-1/2" x 36" x 23-1/2"  
\$138.00

a compact phase computed enclosure for 8" and 12" speakers, in mahogany or blond, 28" x 19-1/2" x 16"  
\$81.00

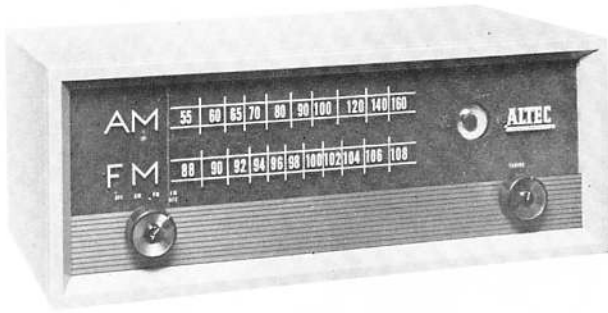
**609**

**608**

modern, can be used either vertically or horizontally, with or without legs; cabinet, 30" x 36" x 16-1/2"; legs, 5" high; in mahogany, matte walnut, or blond  
\$143.00



For 15" speakers order 606A, 607A, or 608A.  
For 12" speakers order 606B, 607B, 608B or 609B.  
For 8" speakers order 609C.

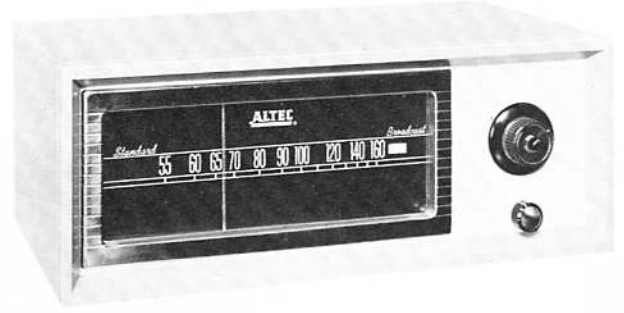


### 304A AM-FM broadcast tuner

The 304A belongs in the finest homes as part of a complete Altec home music system. It is without peer and will provide years of listening enjoyment of the finest broadcast quality. Requires a control amplifier such as the A-440A or A-339.

#### specifications

controls:	Tuning; on-off, AM, FM, FM-AFC.
broadcast range:	AM: 540—1720 kilocycles. FM: 88—108 megacycles.
fm sensitivity:	Absolute—0.8 microvolt. Quieting—6.0 microvolts.
output:	1 volt cathode follower matched for A-440A & A-339.
power supply:	117 volts; 60 cycles; 65 watts.
tubes:	4-6BA6, 2-6AL5, 2-6AB4, 1 each 6BE6, 6U5/6G5, 6BQ7A, 6AU6, 12AT7.
dimensions:	14-1/2" W; 8-1/2" D; 6-1/2" H.
finish:	Mahogany or blond.
shipping weight:	14 pounds.
price:	\$186.00

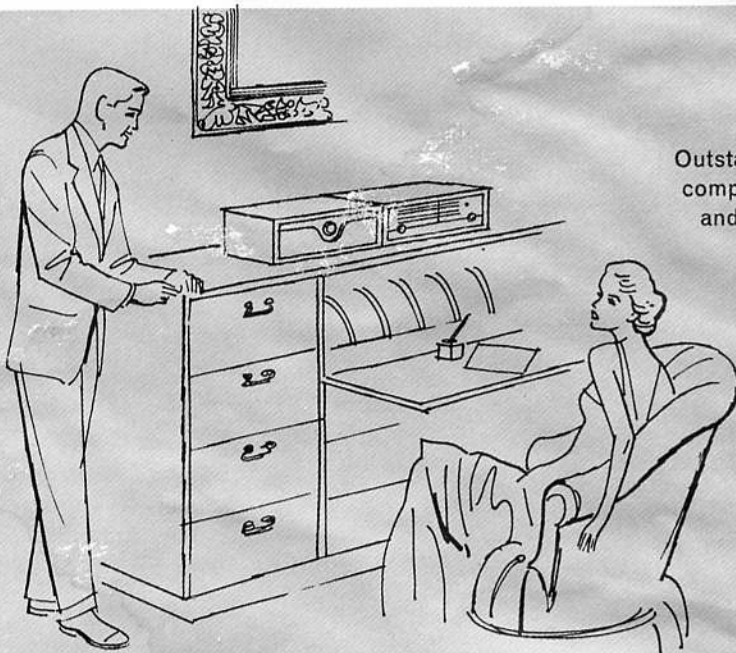


### 305A AM broadcast tuner

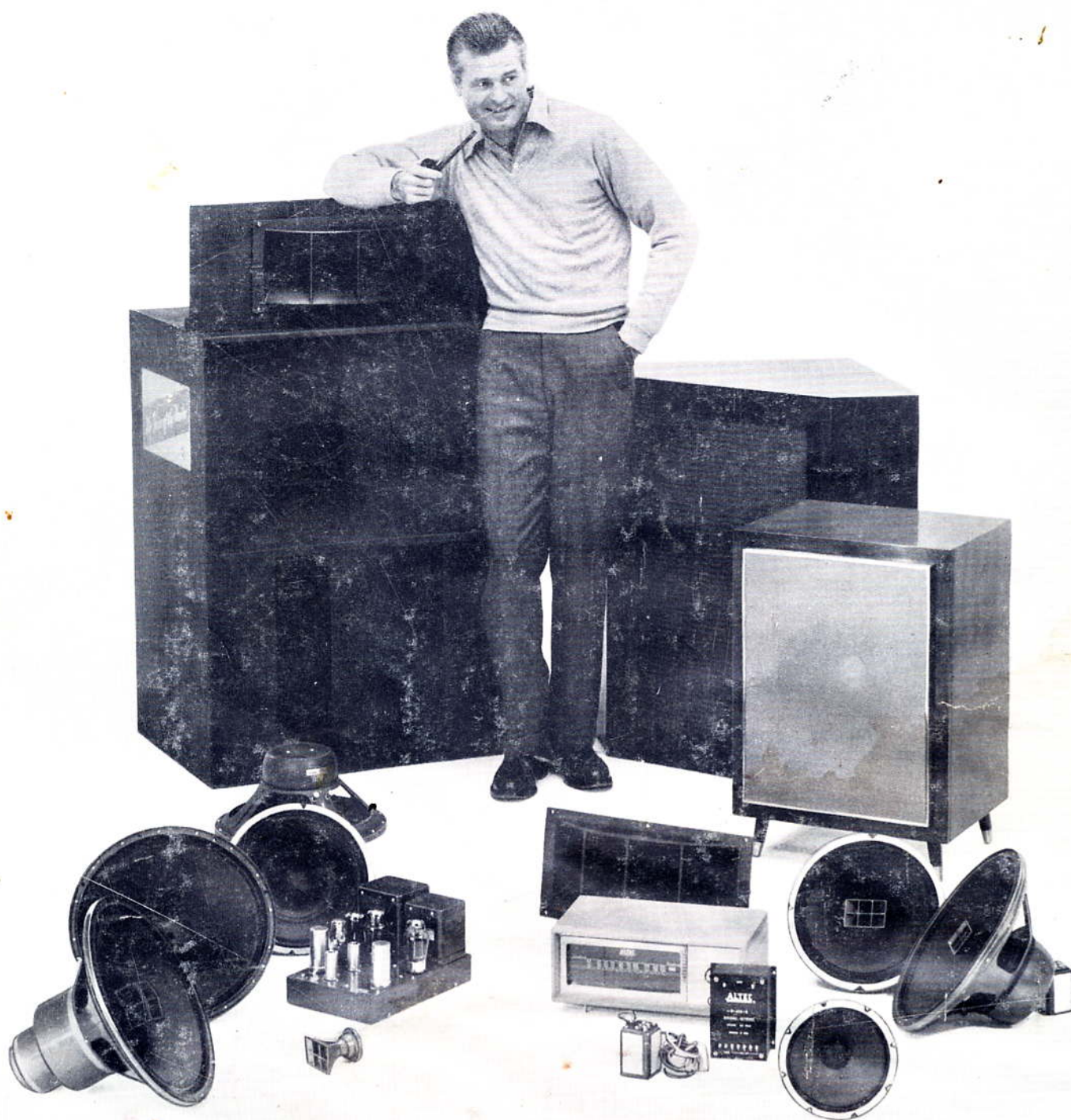
For areas where FM broadcasting is not available and for more economical installations the 305A provides flawless reception, utilizing fully the quality potentials of AM broadcasting. Requires a control amplifier such as the A-440A or A-339.

#### specifications

controls:	Tuning, On-off.
broadcast range:	AM: 540—1720 kilocycles.
output:	1 volt cathode follower matched for A-440A & A-339.
power supply:	117 volts; 60 cycles; 20 watts.
tubes:	2-6BA6, 1 each 6BE6, 6AL5, 6AB4.
dimensions:	14-1/2" W; 8-1/2" D; 6-1/2" H.
finish:	Mahogany or blond.
shipping weight:	12 pounds.
price:	\$99.00



Outstanding engineering design, the use of the finest available components with large safety factors, precision craftsmanship and intensive production testing make Altec tuners the choice of the professional broadcast industry. They are exceptional for their sensitivity, selectivity and above all their stability and freedom from drift even after hundreds of hours of use. They are housed in beautiful hardwood cabinets designer-matched to blend with your entire Altec home music system and to complement your finest furnishings.



microphones • amplifiers • control consoles •  
loudspeakers • horns • am-fm tuners • scientific  
instruments • theatre systems • public  
address systems • high fidelity systems • transformers

