



Altec quality speaker systems and new stereo components are built a little better.

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Introducing Altec quality speaker systems and new stereo components. They're built a little better.

This catalog is more than a presentation of our full line of speaker systems and all-new stereo components. In addition to technical specifications and individual features, it includes examples and short descriptions of the finer points that go into making Altec products. It includes the following:

- Examples of the advanced engineering concepts which have produced such improved designs as the Altec Dynamic Force Woofer and Symbiotik Driver.
- Descriptions of the modern manufacturing techniques which still include important hand-assembly processes.
- Details on such exclusive features as the Altec Varitronik Tuner and Fail-Safe Electronic Protection System.

We have devoted special attention to these finer points because they are the differences that set Altec products aside from the ordinary. And because they are the reasons why Altec products have been selected for more than 40 years to perform wherever and whenever the most critical performance is needed.

Altec products are built a little better.

They are performing at the Greek Theatre, Cinerama Theatres, Loew's and Fox Theatres, Lincoln Center's Philharmonic Hall, the Aquarius Theatre, Hilton Hotels, the International and Desert Inn and Tropicana in Las Vegas, plus hundreds of other theatres, concert halls and auditoriums across the country. Altec products have also been selected by the broadcast and recording industries. The list includes Walt Disney Productions, Universal/Decca Recording Studios, Columbia Records, Capitol, Metro-Goldwyn-Mayer, United Artists, Paramount Pictures Corporation, Century Recording, United Recording Studios and Nashboro Records.

A brief explanation of power ratings.

There are three basic power ratings used by high fidelity component manufacturers. Altec uses only the first two because we feel the third is too indefinite and often unrealistic. (To avoid confusion when comparing the power ratings of different amplifiers, be sure the same rating method has been used.)

1. RMS continuous power—both channels driven 8 ohms

The RMS continuous power rating is used exclusively in the professional audio field, testing laboratories and high fidelity magazines for test reports. For this reason we have chosen to rate our components using this method.

2. Total IHF music power—4 ohms

This method was developed by the Institute of High Fidelity and assumes that for an instantaneous moment an amplifier can deliver more power than its RMS rating. For comparison purposes, some of our components are also rated under this method.

3. Total music power ± 1 dB—4 ohms

We have chosen not to rate our components using the ± 1 dB method as this can add as much as 26% more power to the IHF specification.

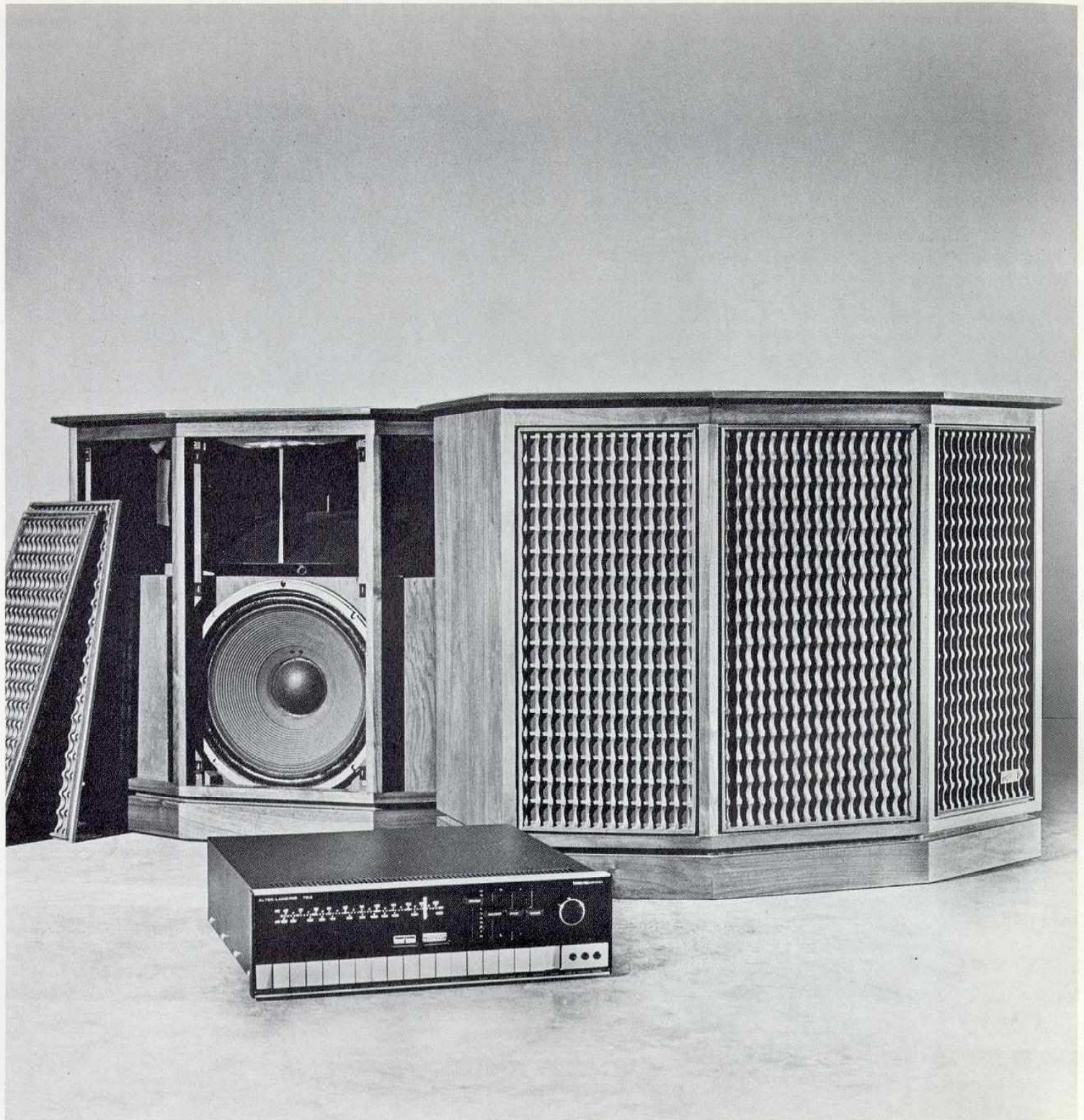
Example

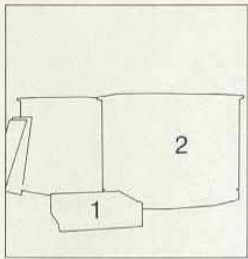
Our new 714A AM/FM Stereo Receiver showing the different power ratings:

- 44/44 watts RMS continuous power. This is how it's rated in this catalog.
- 180 watts IHF music power. For comparison purposes, it is also rated by this method.
- 225 watts Music Power ± 1 dB. We have chosen not to use this unrealistic method.

Our Finest Hi-Fi System

On this page, we've put together the finest home stereo sound system on the market. Our all-new 724A Stereo Tuner Pre-amp is specifically designed for use with our new Barcelona Bi-amp Speaker Systems which feature their own built-in electronic crossover bi-amp. Now, two separate amplifiers are designed right into the speaker system unit to provide individual power sources for both bass and high frequency speakers. The sounds reproduced are unmatched in quality and indefinable from the original.





**1. The New Altec 724A
All-transistorized AM/FM
Stereo Tuner Pre-Amplifier**

This new and versatile tuner pre-amp offers the flexibility to separately drive either a basic amplifier or bi-amp speaker systems. Designed for superior performance with Altec's new electronic crossover bi-amp systems, the new 724A offers the features and performance of a very fine pre-amp and control center combined on the same chassis with an exciting new AM/FM Stereo Tuner.

Features include:

- Exclusive Varitronik tuner with 4 FET's for maximum sensitivity and stability.
- Precision 7½ inch linear FM scale.
- Advanced muting circuit—full muting as low as 2.5 μV—for noise free tuning without loss of stations.
- Combination of Butterworth and crystal filters for greater stereo separation, capture ratio and selectivity.
- Volume range switch for improved low level listening.

**Altec Acousta-Voicette.
For the perfect balance of sound.**

The development of the Altec Acousta-Voicette Stereo Equalizer marks a major breakthrough in reproducing quality sound in your home. It allows a trained Altec dealer to "tune" the frequency responses of your entire component system, even your listening room, to a flat acoustical response at your ears. By utilizing 24 fully-adjustable, critical bandwidth rejection filters per channel, it allows all frequencies to be in perfect balance with each other. Now you can hear the original acoustic environment of the recording hall rather than the acoustics of your listening room.

- All direct-plug-in modular circuitry.
- Altec's Fail-Safe Electronic Protection System.
- Black-out dial with indicator lights on all functions.
- Separate illuminated signal strength and center tune meters on front panel.
- Stereo dubbing inputs and outputs on front panel.
- Accessory jacks for the Altec Acousta-Voicette Stereo Equalizer.
- Positive-contact, push-button controls including muting, mono L & R, high filter, low filter, stereo reverse, loudness, volume-range, speaker 1, speaker 2 and power.
- Slide controls for volume, balance, bass and treble.
- Indicator lights on all push-button functions, FM, AM, phono 1, phono 2, tape, auxiliary, tape monitor and FM stereo.

Specifications Model 724A

FM Tuner Section

IHF sensitivity.....	1.8 μV
Capture ratio.....	1.3 dB
Stereo separation.....	better than 40 dB
(At 1,000 Hz)	
Harmonic distortion.....	0.3%
(At 100% modulation)	
Frequency response.....	±1 dB 20 Hz to 15,000 Hz
Image rejection.....	90 dB
Antenna.....	75 and 300 ohms

AM Tuner Section

Sensitivity (20 dB S/N).....	15 μV
S/N Ratio (at 1 mV).....	48 dB

Pre-amp Section

Phono #1 Sensitivity.....	2.0 mV
Phono #2 Sensitivity.....	2.0 mv or 5.0 mV
Output.....	5 V. RMS
Frequency response.....	±½ dB 20 Hz to 20,000 Hz

Hum and Noise

Aux & Tape.....	90 dB below Rated output
Phono.....	60 dB below Rated output
High Filter.....	12 dB/octave above 6K Hz
Low Filter.....	12 dB/octave below 50 Hz
Tone Control Range.....	±16 dB at 20 Hz and 20,000 Hz
Harmonic Distortion	less than .05% at 1 V. RMS
IM Distortion.....	less than .05% at 2.5 V. RMS
Dimensions.....	5"Hx17¾"Wx16½"D
Accessory Walnut Cabinet..	Model 42161

**2. The New Altec Barcelona
2873A Bi-Amp Speaker System**

This all-new speaker system combines Altec's quality "The Voice of the Theatre" components with the new 770A Electronic Crossover Bi-amplifier.

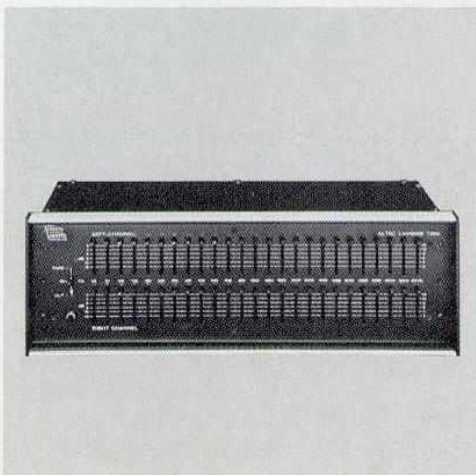
This exclusive Electronic Crossover Bi-amp is built-in and provides a 60 watt RMS amplifier for the low frequency speaker and a separate 30 watt RMS amplifier for the high frequency driver. Design provides absolute minimum distortion, maximum transient response and extremely wide dynamic range. Infinite baffle cabinet made of hand-rubbed walnut offers new angular design to allow the horn its wide angle distribution of all frequencies throughout your listening room.

Features include:

- Built-in electronic crossover Bi-amp.
- Separate gain controls on high frequency and low frequency amplifiers.
- Full advantage of amplifier damping by direct coupling of speaker to amplifier.
- Increased dynamic range—effective undistorted power of bi-amp may be compared to a single amplifier of 175 watts RMS.
- All direct-plug-in circuitry.
- Altec's Fail-Safe Protection System.
- New Symbiotik driver for handling 2 times more power.
- 500 Hz 25 inch cast aluminum sectoral horn for controlled wide angle distribution of mids and highs
- New Dynamic Force 15 inch woofer with 18 lb. mag. structure for lowest distortion and the ultimate in bass response.
- Signal Sentry™ automatic ON/OFF switching circuit.
- Elegant oiled walnut cabinet with snap-on fretwork grilles.
- Excellent for use with new Altec Acousta-Voicette Stereo Equalizer.

Specifications Model 2873A

Freq. response.....	20 Hz to 20,000 Hz
Power Total.....	90 watts RMS
Bass Amp.....	60 watts RMS
Treble Amp.....	30 watts RMS
Input sensitivity.....	0.5 V RMS
Electronic Crossover.....	500 Hz Dual Section 12 dB/octave
Hum & Noise.....	80 dB below rated output
Gain Control Range.....	26 dB
Components.....	770A Bi-amp, 411-8A Woofer, 808-8A Driver & 511B Sectoral Horn
Dimensions.....	29¾"H x 38½"W x 24"D
Weight.....	160 lbs.

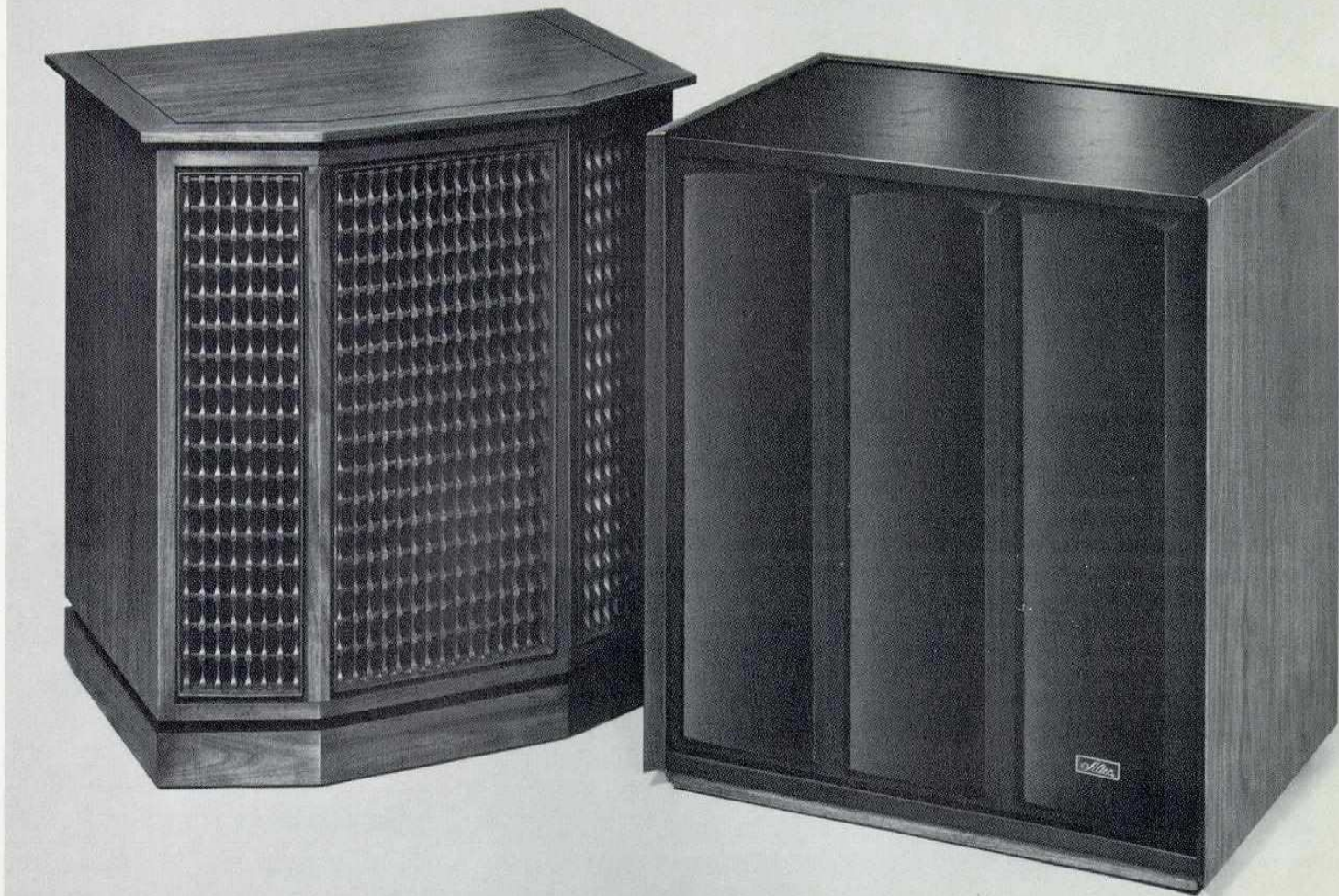


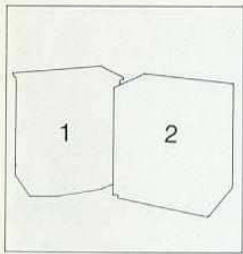
New Electronic Crossover & Bi-Amplifier in One Package

By combining two power amplifiers and an electronic crossover into one compact package that can be mounted directly in the speaker enclosure, some distinct and dramatic benefits are produced.

- Additional power is provided and dynamic range is greatly increased. During loud passages of a recording, the dynamic range of the bass signal often puts such a demand on an amplifier that there is no power left to handle high frequencies. This causes distortion due to clipping. But with separate power sources for each speaker (as provided by a bi-amplification system), the low frequency demands will not effect the high frequency amplifier or driver.
- DC crossover distortion is eliminated and overall sound quality is improved. DC crossover distortion is part of the harmonic distortion in typical high quality class B amplifiers. It is normally heard in the high frequency driver during low level bass passages. By using an electronic crossover the DC distortion never reaches the high frequency driver. In addition, IM distortion is inherently unmeasurable under the normal IHF method.
- The full damping effect of each amplifier is utilized for improved transient response. In the 770A Bi-amp System, the electronic crossover is placed before the amplifier section. This enables the loudspeaker components to be directly connected to the highly damped output of each amplifier. The result is much better transient response and lower distortion.

The all-new 770A Electronic Crossover Bi-Amplifier is a built-in part of our new Barcelona, Santiago and Granada Bi-amp Speaker Systems. (In the Barcelona, the crossover is at 500 Hz. And in the Granada and Santiago, the crossover is at 800 Hz.) Another feature is separate gain controls for individually setting levels of the bass speaker and the high frequency driver.





1. The New Altec Granada 2875A Bi-Amp Speaker System

The new Granada Bi-amp Speaker System is similar to the top-of-the-line Barcelona model except that it is smaller in size and uses the 800 Hz "The Voice of the Theatre" components. It incorporates Altec's exclusive 770A Electronic Crossover Bi-amp. Performance of this system exhibits a wide dynamic range,

absolute minimum distortion, a tight but full bass and excellent transient response. The 18 inch Sectoral horn and compression driver offer smooth response from 800 Hz to beyond audibility and excellent wide angle distribution of sound. The Granada's marked angular design and decorator styling is the perfect final touch that makes this system a handsome addition to your home stereo listening room.

2. The New Altec Santiago 2878A Bi-Amp Speaker System

The new Santiago Bi-amp Speaker System uses the same components as the 2875A Granada mounted in a contemporary oiled walnut cabinet enhanced by a simulated slate top and an attractive sculptured grille.

Features Model 2875A and 2878A

- Built-in model 770A Electronic Crossover Bi-amplifier.
- High power, 60 watts RMS to woofer, 30 watts RMS to driver.
- Separate gain controls to low frequency and high frequency amplifiers.
- 800 Hz electronic crossover.
- Increased dynamic range—effective undistorted power of bi-amp may be compared to a single amplifier of 175 watts RMS.
- New 15 inch Dynamic Force woofer in sealed infinite baffle enclosure.
- Signal Sentry automatic ON/OFF switching circuitry.
- All direct plug-in circuitry.
- Altec's Fail-Safe Protection System.
- Elegant oiled walnut cabinet with snap-on grilles.

Specifications Model 2875A and 2878A

Frequency response	25 Hz to 20,000 Hz
Power Total	90 watts RMS
Bass Amp	60 watts RMS
Treble Amp	30 watts RMS
Input sensitivity	0.5 V RMS
Electronic crossover	800 Hz Dual Section 12 dB/octave
Hum & Noise	80 dB below rated output
Gain Control Range	26 dB
Components	770A Bi-amp, 411 Type Woofer, 807 Type Driver & 811B Sectoral Horn
Dimensions:	
2875A	29 3/4" x 27 1/2" W x 24" D
2878A	29 3/4" x 26 1/16" W x 19 1/4" D

The New Altec 770A Electronic Crossover Bi-Amp

Designed to be mounted in a speaker enclosure, the highly sophisticated 770A



Electronic Crossover Bi-amp combines a very fine bass amplifier rated at 60 watts RMS electronically crossed over at 800 Hz or 500 Hz to an equally fine high frequency amplifier rated at 30 watts RMS. Both are extremely low in harmonic distortion—less than 0.3% at all frequencies, 20 Hz to 20,000 Hz.

Features include:

- High power 90 watts RMS Total: 60 watts RMS low frequency amplifier, 30 watts RMS high frequency amplifier.
- Electronic crossover 12 dB/octave switchable to 800 Hz or 500 Hz.
- Increased dynamic range—effective undistorted power of bi-amp may be compared to a single amplifier of 175 watts RMS.
- Full advantage of amplifier damping by direct coupling of speaker to amplifier.

- IM distortion is inherently decreased to its lowest point.
- Separate gain controls on Bass and Treble amplifiers.
- Exclusive Signal Sentry automatic ON/OFF switching circuit.
- All direct plug-in circuitry.
- Altec's Fail-Safe Protection System.

Specifications Model 770A

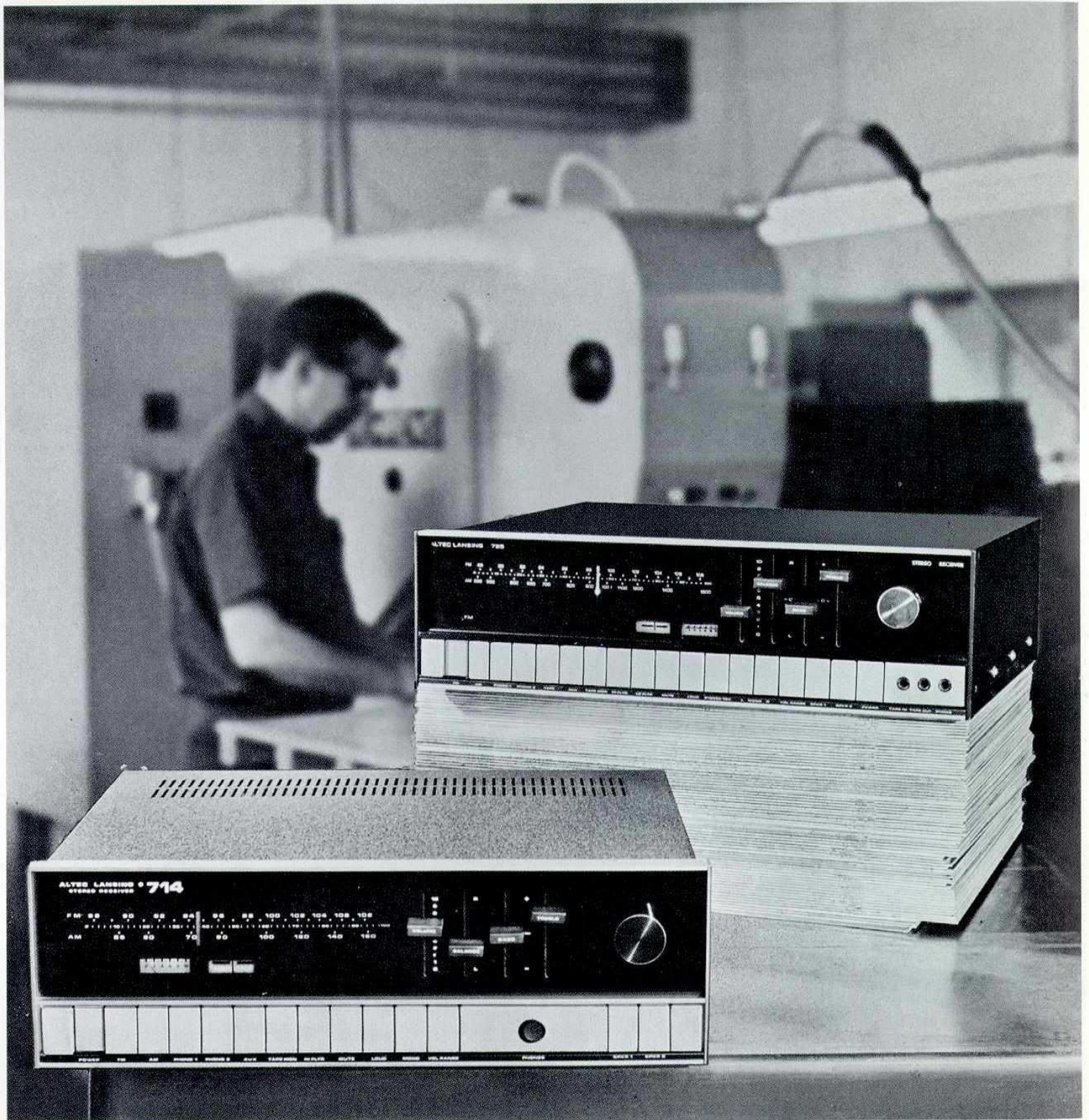
Power output	
Bass Amp	60 watts RMS— 8 ohms
Treble Amp	30 watts RMS— 8 ohms
Harmonic distortion	less than 0.3% at all frequencies 20 Hz to 20,000 Hz
IM distortion	Unmeasurable by normal IHF method

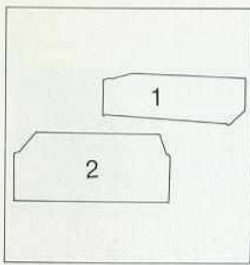
Frequency response	± 1/2 dB 20 Hz to 20,000 Hz (normalized composite output)
IHF Power Bandwidth	15 Hz to 25,000 Hz (normalized composite output)
Damping Factor	25
Hum & Noise	80 dB below rated output
Input sensitivity	0.5 V RMS for rated output
Crossover frequency	800 Hz or 500 Hz switchable
Crossover Slope	12 dB/octave (Dual Section)
Control Range	26 dB
Dimensions	6 1/2" H x 9 7/8" W x 9" D

New AM/FM Stereo Receivers

In designing and building these all-new stereo receivers, we've kept one goal in mind: to build them a little better. Specs are higher—like the 725A's low capture ratio of 1.3 dB. Controls offer more flexibility—you can select a separate volume full-range for convenient low-level listening with our new volume range switch. And features are a little different—like both Butterworth and crystal filters in our top-of-the-line model.

Other features are the black-out dial, separate signal strength and center tune meters for FM and positive spring-loaded speaker terminals for easier connection. Contemporary push buttons and slide controls.



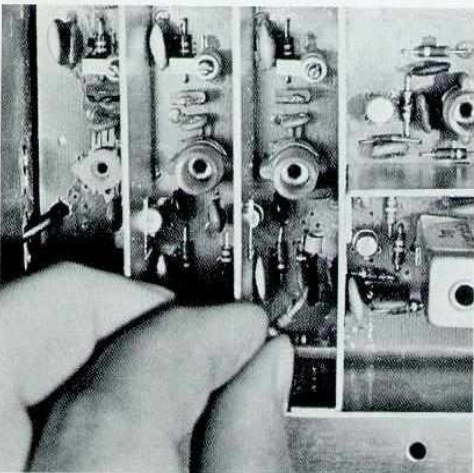


1. New High Performance Altec 725A AM/FM Stereo Receiver 60/60 RMS

This new Altec model is the latest design in a "State-of-the-Art" receiver, specifically designed to give you the highest quality and flexibility available today.

Features include:

- Exclusive Varitronik FM tuner with 4 FET's and balanced Varicap tuning for maximum sensitivity and stability.
- Precision 7 1/2" linear FM scale.
- Advanced muting circuit—full muting at 2.5 μ V—for quiet tuning without loss of stations.
- Combination of Butterworth and crystal filters for greater stereo separation capture ratio and selectivity.
- Ceramic filters in AM section.
- Power output 60/60 watts RMS both channels driven 8 ohms.
- Less than 0.3% harmonic distortion at all frequencies, 30 Hz to 20,000 Hz, at full rated output.
- Volume range switch for improved low level listening.
- All direct plug-in circuitry.



- Altec's Fail-Safe Electronic Protection System.
- Black-out dial with indicator lights on all functions.
- Separate illuminated tuning meters for signal strength and center tune.
- Stereo tape recorder inputs and outputs on front panel.
- Spring loaded terminals for main and remote speakers.
- Accessory jacks for the Altec Acoustavoicette Stereo Equalizer.
- Positive-contact, push-button controls for muting, mono L & R, high filter, low filter, stereo reverse, loudness, volume-range, speaker 1, speaker 2 and power.
- Slide controls for volume, balance, bass and treble.
- Indicator lights and push-button controls on all functions, AM, FM, phono 1, phono 2, tape, auxiliary, tape monitor, and FM stereo.

Specifications Model 725A

FM Tuner Section

IHF sensitivity.....	1.8 μ V
Capture ratio.....	1.3 dB
Stereo separation.....	better than 40 dB (At 1KHz)
Harmonic distortion.....	0.3% (At 100% modulation)
Frequency response.....	± 1 dB 20 Hz to 15,000 Hz
Image rejection.....	90 dB
Antenna.....	75 and 300 ohms

Exclusive Varitronik Tuner

High performance characteristics of the new Varitronik tuner include low distortion and high stability and sensitivity. It features 4 FET's, three provide amplification, the fourth operates as an IF amplifier. Four double Varicaps replace the conventional mechanical tuning capacitor to achieve better balanced circuit performance. A specially designed potentiometer provides linear tracking and accurate calibration of the FM tuning scale to allow identical spacing between each megacycle.

AM Tuner Section

Sensitivity (20 dB S/N).....	15 μ V
S/N Ratio (at 1 mV).....	48 dB

Amplifier Section

Power Output RMS both channels driven at 8 ohms	60/60 watts
Distortion THD.....	less than 0.3% (at all frequencies 30 Hz to 20,000 Hz)
Distortion IM.....	less than 0.3% (1/2 watt to rated output)
Frequency response.....	$\pm 1/2$ dB 20 Hz to 20,000 Hz

IHF Power BandWidth 15 Hz to 25,000 Hz	
Channel separation.....	60 dB
Damping factor.....	25

Hum & Noise

Auxiliary & Tape.....	80 dB below rated output
Phono.....	60 dB below rated output

Phono #1 sensitivity.....	2.0 mV
Phono #2 sensitivity.....	2.0 mV or 5.0 mV
High Filter.....	12 dB/octave above 6 KHz

Low Filter.....	12 dB/octave below 50 Hz
Tone Control Range.....	± 16 dB at 20 Hz & 20,000 Hz

Dimensions.....	5"H x 17 3/4"W x 16 1/2"D
Accessory Walnut Cabinet..	Model 42161

2. The New Altec 714A AM/FM Stereo Receiver 44/44 RMS

This solid state stereo receiver is similar in design to the 725A. With 180 watts IHF music power, the 714A provides more than enough power to drive the lowest efficiency speaker systems.

Features include:

- Power output 44/44 watts RMS both channels driven 8 ohms (180 watts IHF).
- Harmonic and IM distortion less than 0.5% all frequencies 30 to 20K Hz.
- FM tuner features 3 FET's and 4 gang tuning condenser for optimum sensitivity.
- 2 crystal filters and IC's for best stereo separation, capture ratio and selectivity.
- Separate illuminated signal strength and center tuning meters on front panel.
- Black-out dial with 7 inch tuning scale.
- Slide controls for volume, balance, bass and treble.
- Volume range switch for improved low level listening.
- Direct plug-in modular circuitry.

- Altec's Fail-Safe Electronic Protection System.
- Spring loaded terminals for main and remote speakers.
- Accessory jacks for the Altec Acoustavoicette Stereo Equalizer.
- All positive-contact, push-button switches include power, FM, AM, phono 1, phono 2, auxiliary, tape monitor, high filter, mute, loudness, mono, volume range, speaker 1, speaker 2.

Specifications Model 714A

FM Tuner Section

IHF sensitivity.....	1.9 μ V
Capture ratio.....	2.0 dB
Stereo separation.....	40 dB (At 1 KHz)
Harmonic distortion.....	0.5% (At 100% modulation)
Frequency response.....	± 1 dB 20 Hz to 15,000 Hz
Image rejection.....	84 dB
Antenna.....	300 ohms

AM Tuner Section

Sensitivity (20 dB S/N).....	18 μ V
S/N Ratio (at 1 mV).....	40 dB

Amplifier Section

Power output RMS (both channels driven at 8 ohms)	44/44 watts
IHF music power 4 ohms.....	180 watts
Distortion THD.....	less than 0.5%
Distortion IM.....	less than 0.5% (1/2 watt to rated output)
Frequency response.....	± 1 dB 15 Hz to 45,000 Hz

IHF power band width 15 Hz to 25,000 Hz	
Channel separation.....	60 dB
Damping factor.....	30
Hum and Noise	

Auxiliary & Tape.....	75 dB below rated output
Phono.....	60 dB below rated output

Phono #1 sensitivity.....	2.0 mV
Phono #2 sensitivity.....	5.0 mV
High filter.....	12 dB/octave above 6K Hz

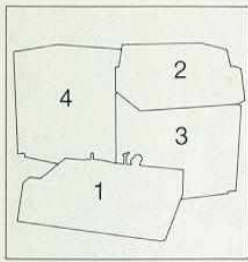
Tone Control Range.....	± 16 dB at 50 Hz 15,000 Hz
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Dimensions.....	5 3/8"H x 16 5/8"W x 13 3/8"D
Accessory Walnut Cabinet...Model	42162

New Quality Component Centers

There's no reason why quality hi-fi components with sophisticated electronics and high-performance characteristics can't be built into component centers. In our opinion none of the compacts currently available are equal in performance to a quality component system. At Altec, we're proud to say that our all-new 911A and 912A component centers are equal in every way to a quality component system and they will save you space and money. For example, both new Altec component centers are built around our new high-performance 714A AM/FM Stereo Receiver. They feature an amplifier section rated at 44/44 watts RMS continuous power (180 watts IHF music power). This is more power than is offered by any other component center on the market — and more than enough power to drive even the lowest efficiency speaker systems. They feature a tuner section with 3 FET's (field effect transistors) and a 4-gang tuning condenser for finer sensitivity and stability. Plus, the IF strip uses 2 crystal filters and IC's for better stereo separation, capture ratio and selectivity. These new component centers also include the best Garrard automatic turntable, Shure "High Track" cartridge and cassette tape recorder. In fact, these new component centers are built a little better in every way. We've left the choice of speakers up to your personal taste. But of course, we hope you'll choose Altec Speakers which are described in the back section of this catalog.





1. The New Altec 912A Stereo AM/FM Cassette Component Center

The 912A offers the highest power, best tuner and most versatility available. It is ideally suited for use with any pair of Altec Lansing full-size or bookshelf speaker systems.

Features include:

- Power output 44/44 watts RMS with both channels driven 8 ohms load. (180 watts IHF.)
- FM tuner features 3 FET's, 2 crystal filters and IC's.
- Staar cassette stereo tape recorder with 2 large VU meters for recording from any source.
- Garrard's automatic turntable SL95B.
- Shure M93E Elliptical "High Track" cartridge.
- Black-out dial with illuminated center tune meter.
- Slide controls for volume, balance, bass and treble.
- Volume range switch for improved low level listening.

- Direct-plug-in modular circuitry.
- Altec's Fail-Safe Electronic Protection System.
- Convenient push-button controls for power, FM, AM, phono, auxiliary, cassette, high filter, mute, loudness, mono, volume range, speaker 1 and speaker 2.
- Front panel microphone inputs and tape recorder gain controls.
- Spring loaded terminals for main and remote speakers.
- Walnut cabinet and molded dust cover included.

2. The New Altec 911A Stereo AM/FM Component Center

The 911A has enough power to drive any speaker system — including lowest efficiency models. With 180 watts IHF music power, this high-performance component center is designed for use with Altec speaker systems.

Features include:

- Power output 44/44 watts RMS with both channels driven 8 ohm load.
- FM Tuner features 3 FET's, 2 crystal filters and IC's.
- Garrard's automatic turntable SL95B.
- Shure Elliptical "High Track" cartridge.
- Black-out dial with illuminated center tune meter and 7 inch tuning scale.
- Slide controls for volume, balance, bass and treble.
- Volume range switch for improved low level listening.

- Push-button controls for FM, AM, phono, auxiliary, tape monitor, high filter, mute, loudness, mono, volume range, speaker 1, speaker 2, and power.
- Spring loaded terminals for main and remote speakers.
- Direct-plug-in modular circuitry.
- Altec's Fail-Safe Electronic Protection System.
- Walnut cabinet and molded dust cover included.

Specifications Model 911A and 912A

FM Tuner Section

IHF sensitivity	1.9 μ V
Capture ratio	2.0 dB
Stereo separation	40 dB (At 1 KHz)
Harmonic distortion	0.5% (At 100% modulation)
Frequency response	± 1 dB 20 Hz to 15,000 Hz
Image rejection	84 dB
Antenna	300 ohms

AM Tuner Section

Sensitivity (20 dB S/N)	18 μ V
S/N Ratio (at 1 mV)	40 dB

Amplifier Section

Power output RMS both channels driven at 8 ohms	44/44 watts
IHF music power at 4 ohms	180 watts
Distortion THD	less than 0.5%
Distortion IM (1/2 watt to rated output)	less than 0.5%
Frequency response	± 1 dB 15 Hz to 45,000 Hz
IHF power band width	15 Hz to 25,000 Hz
Channel separation	60 dB
Damping factor	30
Hum and Noise	
Auxiliary & Tape	75 dB below rated output
Phono	60 dB below rated output
Phono sensitivity	5.0 mV
High filter	12 dB/octave above 6 kHz
Tone Control Range	± 16 dB at 50 Hz and 15,000 Hz

Garrard SL95B Automatic Turntable
 Speed.....33 1/3, 45 & 78 rpm
 Turntable.....12" cast-aluminum

Shure M93E Cartridge
 Stylus—N93E.....Elliptical diamond
 .0007 x .0004

Tracking Force..... 1 1/2 to 3 grams
 Channel separation 1 KHz..... more than 25 dB

Staar Cassette Stereo Tape Recorder (912A only)
 Type.....Standard 4 Track Cassette
 Tape Speed..... 1 7/8 ips
 Frequency response 50 Hz to 10,000 Hz
 Microphone Input...High Imp. 2 K ohms
 Wow and Flutter....less than 0.4% RMS

Overall dimensions
 912A...6 7/8" H x 21 1/2" W x 19 1/2" D
 911A...6 7/8" H x 19 1/4" W x 19 1/2" D

3. New Storage Modules
 Each module matches its corresponding component center in width, depth and styling. With a composition slate top and hand-rubbed oiled walnut finish, each is finished on four sides to stand as an area divider or away from the wall.

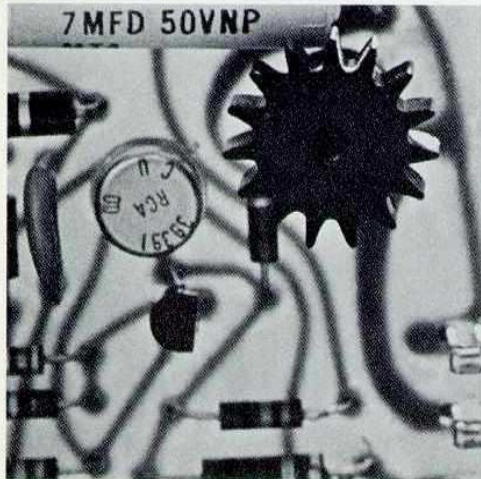
Modules provide storage space for records and tapes. The 899A has a separate rack for tape cassettes.

Each module corresponds with its individual Altec component center.

889A for the 911A
 Overall dimensions: 17 3/4" H x 19 1/2" W x 17" D. Interior dimensions: 15 1/4" H x 17 3/4" W x 14 1/2" D.

899A for the 912A
 Overall dimensions: 17 3/4" H x 21 1/2" W x 17" D. Interior dimensions: 15 1/4" H x 20" W x 14 1/2" D.

4. Santana 879A Speaker System—see page 19.



Altec Fail-Safe Electronic Protection System

In the design of every Altec receiver and component center, an exclusive protection system uses an active dissipation-sensing circuit to instantly sense any malfunction or load mismatch in the presence of high level program material. It automatically prevents components' output transistors from operating in any mode that would cause damage. As action is immediate and effective at all frequencies within the passband of the amplifier, only that portion of the program material which would damage the transistors is limited.

Altec Speakers and Speaker Systems

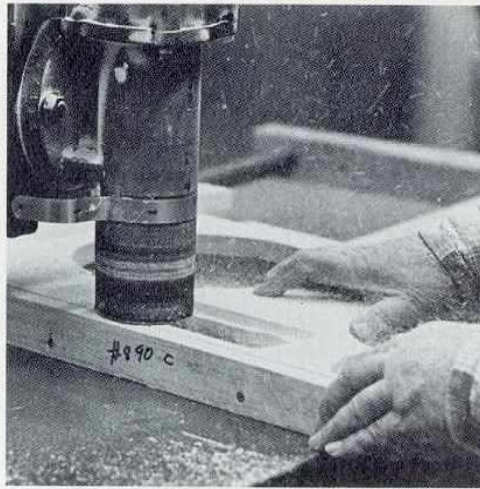
At Altec, we build a wide variety of speakers. Full-size speakers. New bi-amp speakers. Utility models. Furniture models. Bookshelf speakers. Patio speakers. But they're all built with one goal in mind—to offer you quality sound reproduction at all frequencies.

You will notice that we take great care in designing and building speaker enclosures not only for appearance sake but to perform as a vital component of each acoustical system. In fact, we have written a separate ten page brochure titled "Altec Speaker Enclosures; Their Design and Use" which details our thoughts, concepts and designs on this subject. This brochure is available from your local Altec hi-fi dealer or by writing to Altec Lansing, Anaheim, California, directly. We invite you to read it.

We hope the following pages of this catalog will give you a little better understanding of what we mean when we say Altec Speakers and Speaker Systems are built a little better.

(Of course, you can hear all our speakers and speaker systems—both new and old—at your local Altec dealer's. And in addition to the famous places listed on page one, you can hear quality Altec sound at Caesars Palace, Statler Hotels, A & M Records, Empire Photosound, Acuff-Rose Studios, Disney on Parade, Bell Sound Studios, LP Productions, Glen Glenn Sound, Notre Dame's Athletic Fieldhouse, UCLA's Pauley Pavilion, the Houston Astrodome, San Diego Sports Arena, Long Beach Sports Arena, Boston Gardens, Chicago International Amphitheatre, Cincinnati Gardens and many other places.)





Cabinetry by Hill-Craft

"You can't rush good furniture making. Selecting woods, matching grains, milling pieces, bonding, bracing, sanding, finishing, re-sanding, inspecting, and more sanding and hand-rubbing all take patience and time." This is the attitude of the more than 40 skilled craftsmen at Hill-Craft Mfg. Co.—of the cabinetmakers who make all of the speaker cabinets and ensembles for Altec.

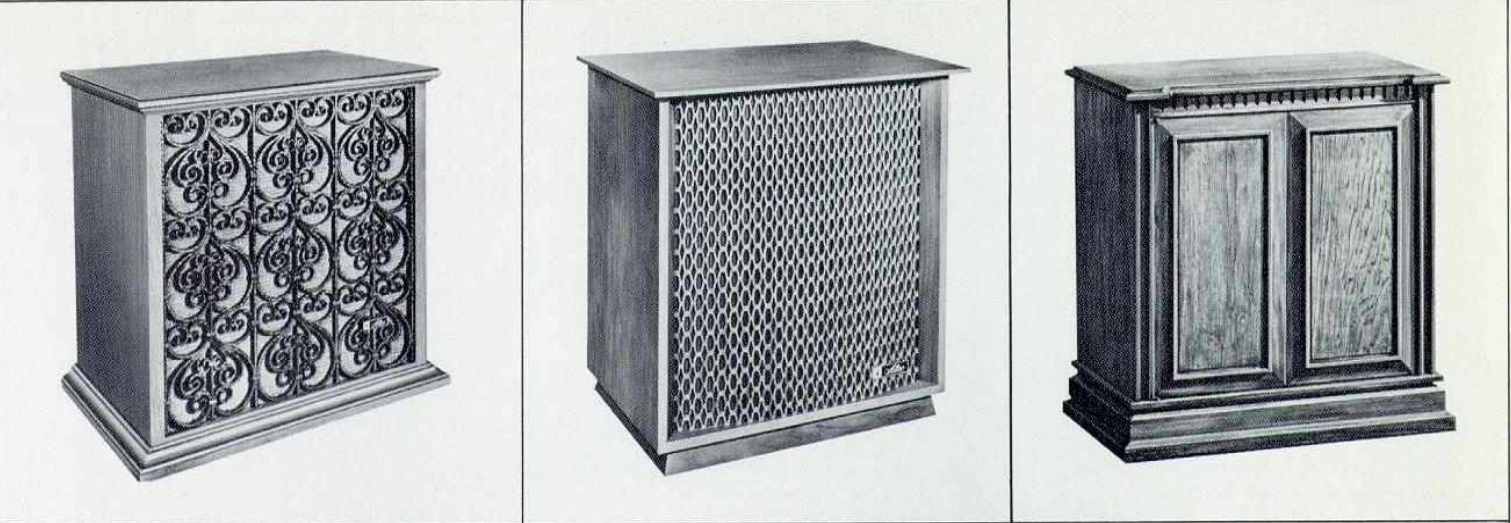
The process begins with the careful selection of both the solid and veneer-faced hardwoods that are to be used in each cabinet. Pieces of the finest grade are individually hand-selected by the cabinetmakers for color and matching wood grain. Next, materials for a specific cabinet are precision milled to exact size and shape. Joints are then glued together, usually with the aid of an electronic wood welder which violently agitates the molecules of the glue to help insure a more permanent and lasting bond. At this point, the rough cabinet receives its first sanding. A detailed inspection follows and any defective cabinet is set aside for salvage.

Finishing procedures vary considerably according to the finish desired for the final Altec cabinet—hand-rubbed oiled walnut, antique oak or pecan finished hickory. But in all cases, the furniture finishes are multicoat applications with meticulous hand sanding between each coat.

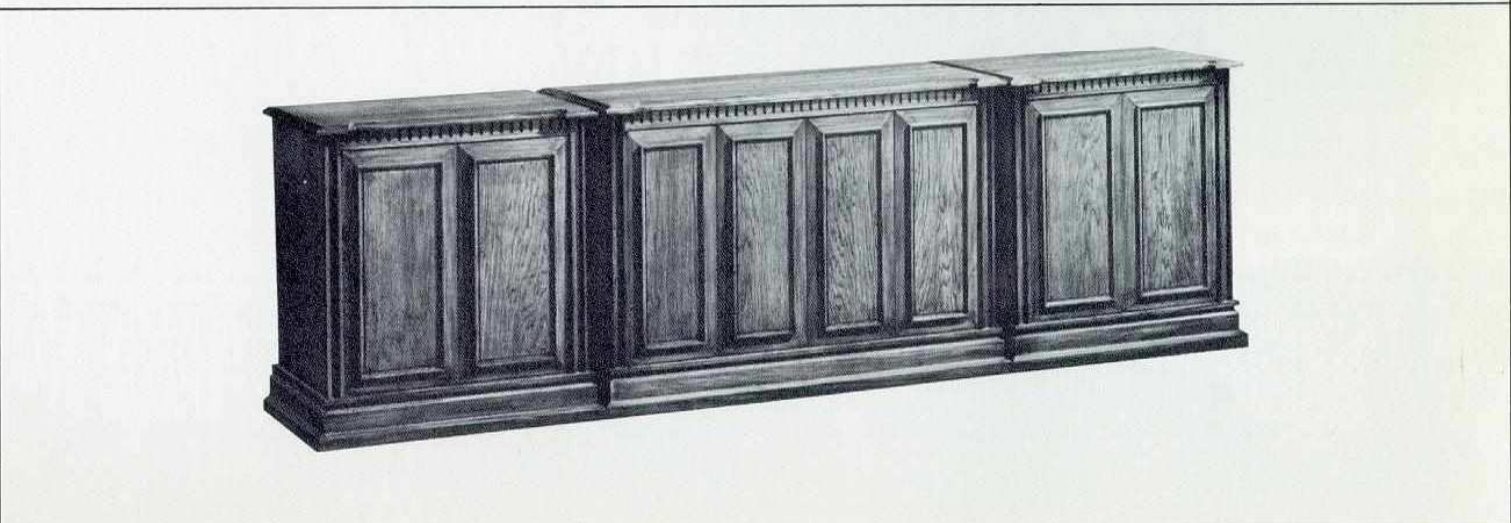
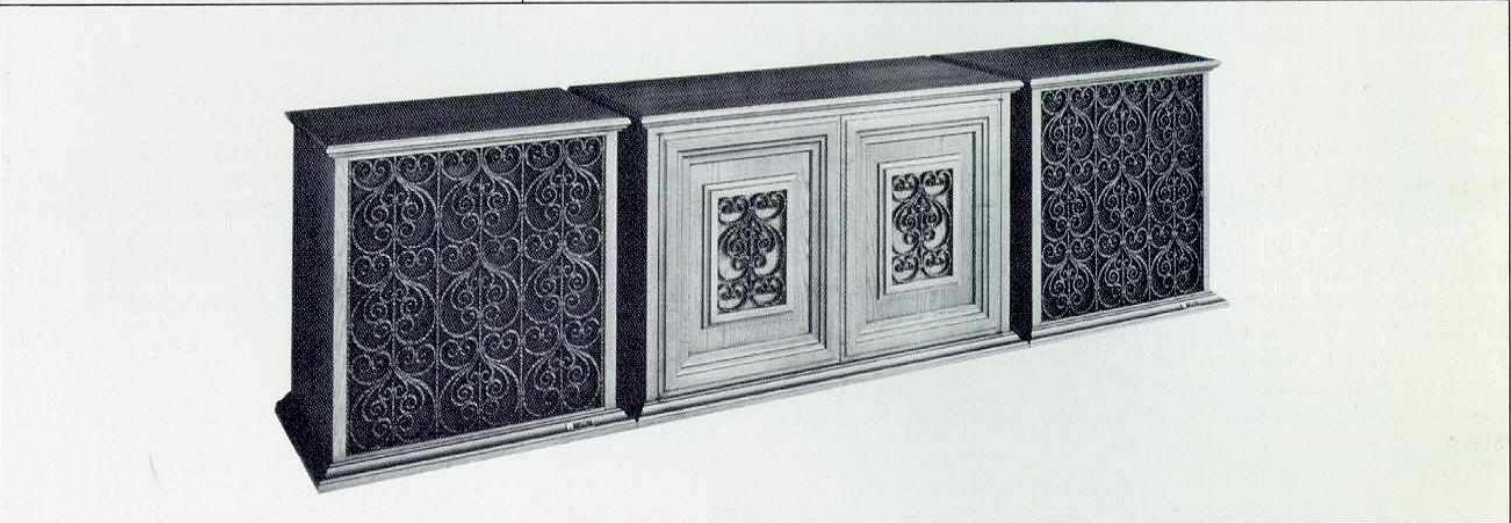
As a point of interest, Hill-Craft probably does more hand sanding than any other cabinet-maker in the country. And this is one reason why we can say that Altec speaker cabinets and ensembles are built a little better.

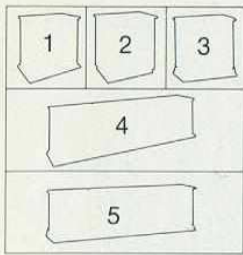
Altec Full-Size Speaker Systems and Ensembles

Altec has brought into the home the sound of the famous A7 "The Voice of the Theatre" Speaker System. It's available in three distinct and striking handcrafted cabinets that are just half the size of the A7 system. The interior cubic volume of these three systems is the same, though the Flamenco is slightly lower in height. Yet all the systems have the unbounded dynamic range normally associated only with theatre systems. Smoothness, flatness of response, high efficiency and body without coloration are some of the distinctions that make these three full-size speaker systems the nation's most popular.



Altec also offers two individually styled equipment cabinets. They are beautifully handcrafted and designed to hold stereo components such as our new 714A or 725A AM/FM Stereo Receivers, record player, and tape recorder, plus they provide ample storage space for both records and tapes.





1. Flamenco Speaker System (848A)

The Flamenco is hand-finished oak with a unique grillework of simulated wrought iron. It offers discerning decorators true Spanish-Mediterranean styling while offering the superb sound that used to be found only in recording studios and concert halls. It features the A7 speaker components which include a massive sectoral horn of heavy cast-aluminum for wide angle distribution of all frequencies from 800 Hz to beyond audibility.

2. Valencia Speaker System (846A)

The Valencia features a beautiful hand-finished walnut cabinet with a curved fretwork grille. With an extremely large power-handling capacity, it faithfully reproduces every frequency from the highest highs to the lowest lows. It features the same speaker components as "The Voice of the Theatre" Speaker System and lets you enjoy concert hall quality sound in your home.

3. Milano Speaker System (871A)

The Milano's pecan-finished hickory is highlighted by handsome, high-relief doors which fold to the side for listening. Model 871AR opens to the right and Model 871AL opens to the left. This superb quality two-way system with an 800 Hz crossover also features our 15 inch theater woofer for more realistic reproduction of even the lowest orchestral frequencies.

4. Flamenco II Stereo Ensemble (882-848)

The Flamenco 2-section equipment cabinet Model 882B (measuring 44 1/2 inches overall and shown center) is hand-crafted of heavy oak. It provides space for stereo components including receiver or separate tuner pre-amplifier, record player and tape recorder. Order Model 882-848 for the complete matching Flamenco Ensemble.

A matching three-section equipment cabinet is also available—Model 884A. Internal compartment dimensions are the same as the 882B which are shown in the adjacent chart except there are three sections instead of two. Overall width is 64 inches. As a complete matched ensemble order Model 884-848.

5. Milano Stereo Ensemble (885-871)

The cabinetmaker's art is reflected in the 885A equipment cabinet made of pecan-finished hickory handcrafted in dramatic, deeply sculptured design to match the 871A Milano Speaker Systems. It provides ample space for tuner, amplifier, tape deck, record player, and storage of records and tapes. Order Milano Model 885-871 for the complete matching Milano Ensemble.

Specifications include:	848A Flamenco	846A Valencia	871A Milano
Frequency Response	35-20,000 Hz	35-20,000 Hz	35-20,000 Hz
Power Rating	50 watts*	50 watts*	50 watts*
Impedance	8/16 ohms	8/16 ohms	8 ohms
Crossover Frequency	800 Hz	800 Hz	800 Hz
Dimensions	27 3/4" H x 27 1/2" W x 19 3/8" D	29 3/4" H x 27 1/2" W x 19" D	29 1/4" H x 27 1/2" W x 19 1/4" D
Speaker Components	416, 807 type, 811B, N-801 type	416, 807 type, 811B, N-801 type	416, 807 type, 811B, N-801 type

*May be used in home entertainment use with amplifiers having up to equal continuous power rating.

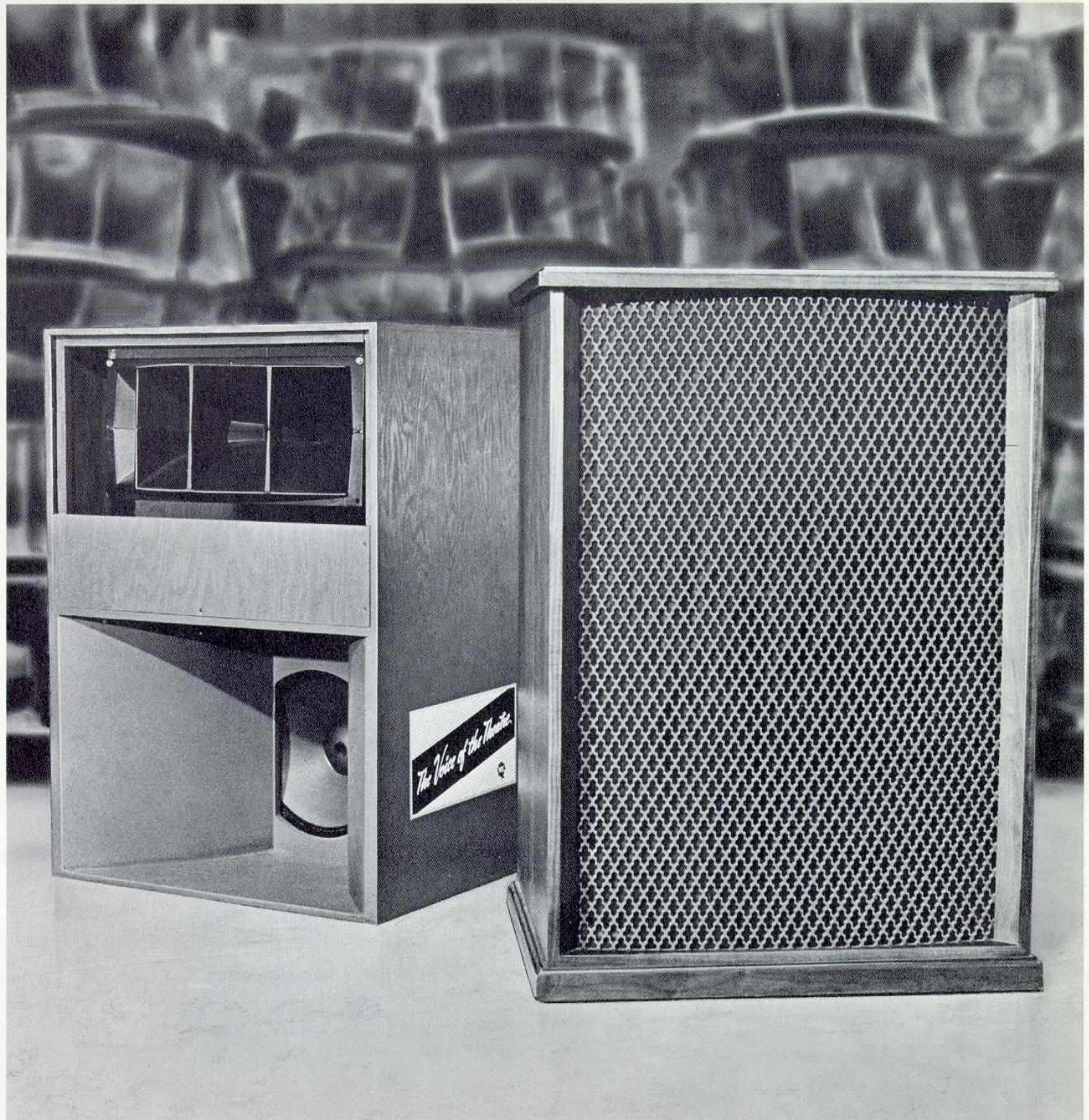
Note: speaker cabinets only are available with cutouts and the flexibility to accept any combination of Altec speakers. Order Valencia Cabinet Model 859A, Flamenco Model 860A or Milano Model 866AL or 866AR.

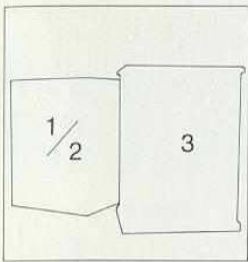
Ensemble Dimensions	Flamenco II	Flamenco III	Milano
	<u>882-848</u>	<u>884-848</u>	<u>885-871</u>
Complete Ensemble:			
Overall	8'3 1/2"	9'11"	8'3"
Height	27 3/4"	27 3/4"	29 1/4"
Depth	19 3/8"	19 3/8"	19 1/4"
Equipment Cabinet:			
Equipment Panels	20"W x 15"D	20"W x 15"D	19 3/4"W x 15 3/4"D
Record and Tape Storage Sections	20"W x 16"D x 15"H	20"W x 16"D x 15"H	19"W x 17 1/4"D x 13 3/4"H
Optional Tape Deck/Drawer	#40733	#40733	#41910

"The Voice of the Theatre" Speaker System.

Since its introduction in 1946, Altec's "The Voice of the Theatre" has been the standard speaker system used by the recording and entertainment industries. These systems offer horn coverage of the entire audio spectrum with a cast-aluminum sectoral horn for mids and highs and a wooden horn for low frequencies. This provides controlled wide angle distribution of sound at all frequencies and the natural uncolored sound required by professionals.

Periodic changes have been made to "The Voice of the Theatre" system throughout the years. Most recently, we added our Symbiotik Driver which will handle twice the power of previous designs. Another new feature of "The Voice of the Theatre" systems is a new crossover network that features an attractive cast-aluminum escutcheon and is rated at 100 watts. Also, all components are now 8 ohms for more efficient matching to transistorized amplifiers.





1. Famous "The Voice of the Theatre" Speaker System (A7-8)

This full-size Altec speaker system is a great value for audiophiles who wish to build it in or enjoy its superb sound in a utility cabinet. It features an extremely wide frequency range and large power-handling capacity. Utilizing Altec's 807-8A high-frequency driver with a large, cast-aluminum 811B sectoral horn, it smoothly distributes frequencies above 800 Hz over a wide angle. An Altec 416-8A 15 inch low frequency speaker is mounted in a front-loaded wooden exponential horn cabinet to faithfully reproduce the lowest orchestral frequencies.

2. "The Voice of the Theatre" Speaker System (A7-500-8)

This system is identical to the A7 except that it has a lower crossover of 500 Hz to provide horn coverage of the lower mid-range. The higher efficiency 808-8A HF driver is coupled to the larger cast-aluminum 511B sectoral horn and provides the cleanest, most realistic sound of any speaker ever made.

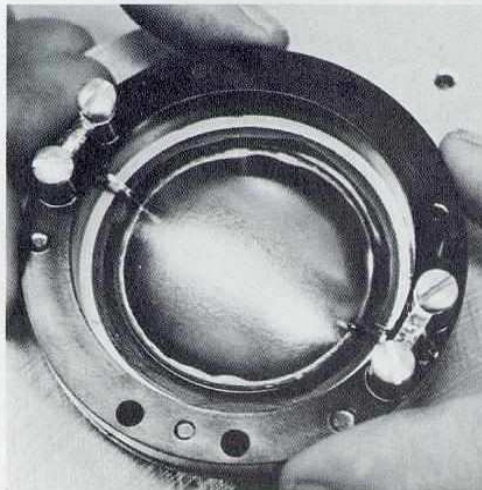
3. Magnificent Speaker System (A7-500W-II)

The Magnificent features a hand-finished, sculptured walnut cabinet patterned in natural wood grain with a delicate curved wood-fretwork grille. Inside, it is identical to the A7-500. Now you can enjoy the sound quality of recording studios and theatres from a speaker enclosure that has been especially styled for your home. (Note: speakers are mounted and individually tuned for the ultimate in performance.)

Specifications

include:	A7-8	A7-500-8	A7-500W-II
Frequency Response.....	30-20,000 Hz	30-20,000 Hz	30-20,000 Hz
Power Rating.....	50 watts*	50 watts*	50 watts*
Impedance.....	8 ohms	8 ohms	8/16 ohms
Crossover Frequency.....	800 Hz	500 Hz	500 Hz
Dimensions.....	42"H x 30"W x 24"D (HF horn within enclosure)	42"H x 30"W x 24"D (HF horn within enclosure)	44"H x 32"W x 25"D
Speaker Components.....	416-8A, 807-8A, 811B, N-801-8A	416-8A, 808-8A, 511B, N-501-8A	416 type, 808 type, 511B, N501 type

*May be used in home entertainment use with amplifiers having up to equal continuous power rating.



Exclusive Symbiotik™ Driver

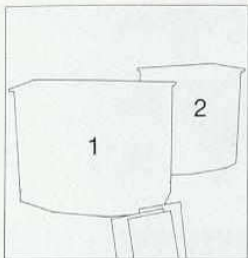
The new voice coil diaphragm assembly of current Altec drivers combine the use of aluminum with a new polyimide material. The result is a better and more efficient driver—called Symbiotik. It maintains a smooth frequency response over an extremely wide range from 500 Hz to 20,000 Hz while handling twice the power of previous designs. Also, it virtually eliminates driver failure caused by

work stress, and fatigue, and it withstands temperatures as high as 350 degrees Fahrenheit. The voice coil wire is made of flat aluminum ribbon that has been edge-wound for greater efficiency. (Note the individual voice-coil diaphragm assembly is a field replaceable part of the basic driver. Order part number 21545.)

New Dynamic Force Speaker Systems

These two new speaker systems are the first in Altec's new Dynamic Force Series. They feature a new type of low frequency speaker recently developed by Altec, providing a lower system resonance, lower distortion and better control of the speaker's cone movement. This improves low frequency transient response and extends low frequencies almost an octave.





1. New Barcelona Speaker System (873A)

This all-new Altec speaker system incorporates the new Dynamic Force 15 inch woofer with 4 inch edge wound voice coil and 18 lb. magnetic structure for the lowest possible distortion and the ultimate in low end frequency response. The high frequency horn is our 511 model with a crossover at 500 Hz. This 25 inch massive sectoral horn of cast-aluminum extends the sound distribution angles to 90° horizontal and 40° vertical for a uniform distribution of mids and highs. It is driven

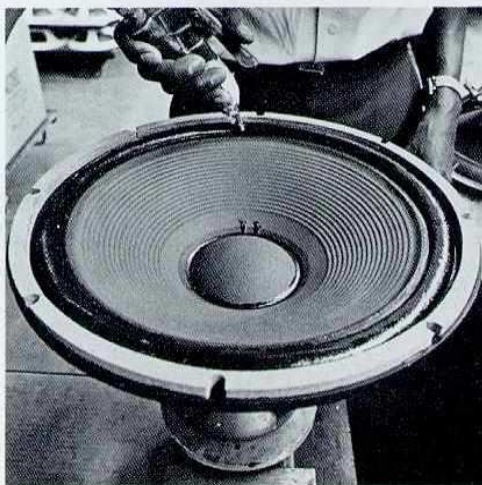
by the new 808-8A Symbiotik driver for twice the power handling capacity and a very smooth high frequency response. The elegant hand-rubbed walnut cabinet features an infinite baffle design inside and new styling with snap-on fretwork grilles outside. The new Barcelona is undoubtedly one of the finest speaker systems available.

2. New Granada Speaker System (875A)

Smaller in size than the new Barcelona, this new speaker system also incorporates many new design features. They include the exclusive Dynamic Force 15 inch woofer with a 17 lb. magnetic structure and 3 inch edge wound ribbon voice coil. This woofer has a cast-aluminum frame and is set in a new infinite baffle enclosure for excellent reproduction of low frequencies. The high frequency horn utilizes an 800 Hz crossover and is compression driven for a smooth response to beyond audibility. The combination of an 18 inch wide angle horn and the Granada's marked angular design allows all frequencies to be clearly distributed throughout your listening room.

Specifications include:	Barcelona (873A)	Granada (875A)
Frequency Response.....	20-20,000 Hz	20-20,000 Hz
Power Rating.....	60 watts*	60 watts*
Impedance.....	8 ohms	8 ohms
Crossover Frequency.....	500 Hz	800 Hz
Dynamic Force.....	16 lbs.	14 lbs.
Dimensions.....	29¾"H x 38½"W x 24"D	29¾"H x 27½"W x 24"D
Speaker Components.....	411-8A, 808-8A, 511-B, N501-8A	411 type, 807 type, 811B, N801-8A

*May be used in home entertainment use with amplifiers having up to equal continuous power rating.



Exclusive Dynamic Force Concept

Altec has developed a new type of low frequency speaker. It features a long voice coil with edge wound, copper ribbon and a magnetic structure specifically designed for the highest possible efficiency. (Note this magnetic assembly controls the motion of the cone to an extent not normally found in infinite baffle systems.) Operating in a properly designed and sealed infinite baffle enclosure, this uniquely designed speaker unit

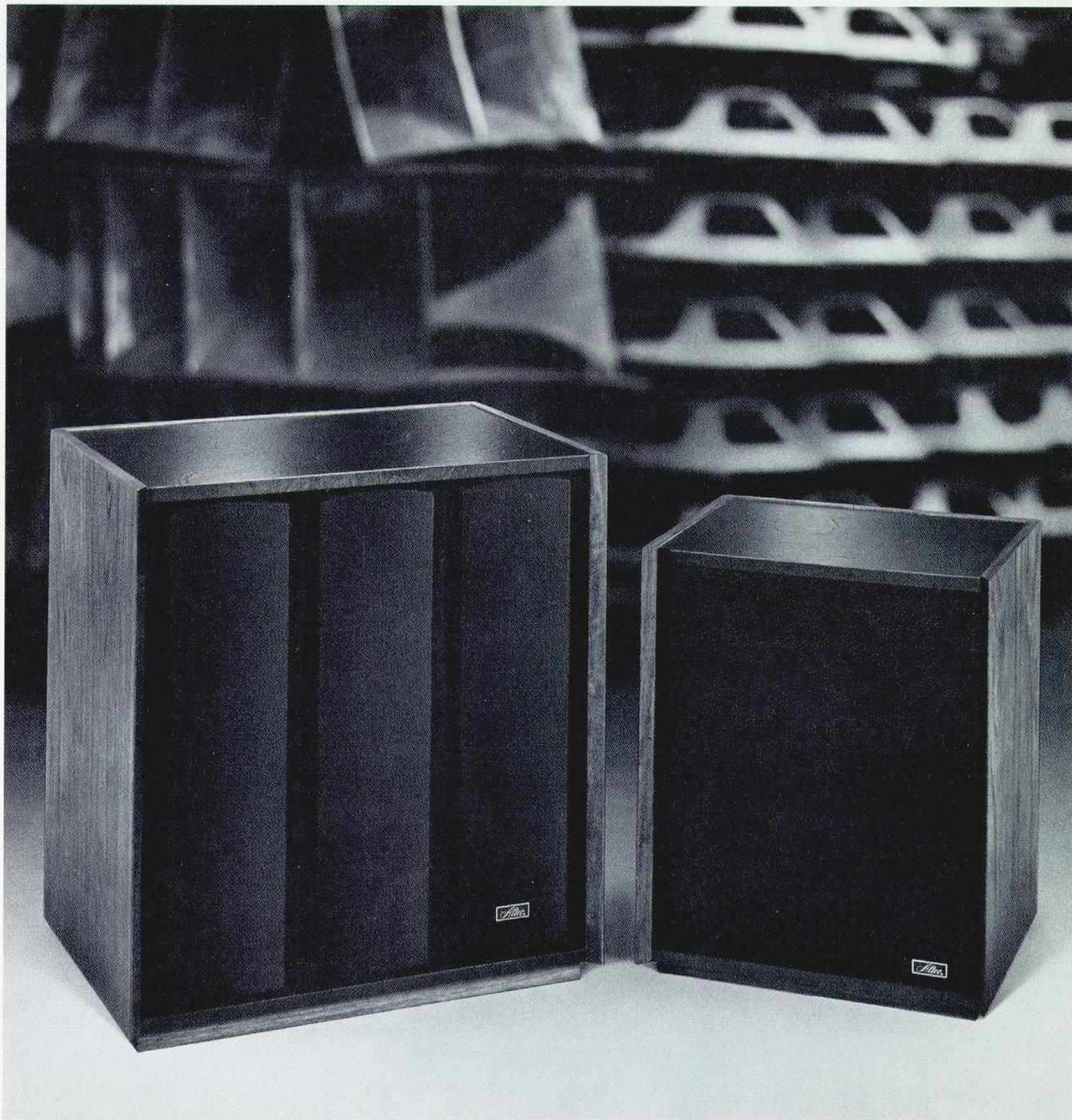
is capable of producing a Dynamic Force of up to 16 lbs. With this unusually large force capability, as much as twice the compression can be produced than is normal in acoustic suspension speakers. The result is greatly improved low frequency transient performance. Other benefits include better linearity, extended low frequency response and reduced distortion while maintaining medium efficiency.

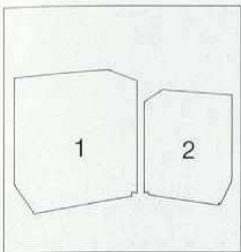
Floor-standing Speaker Systems

Two new additions to our high styled floor standing systems are the Santana and the Santiago. As you read about them, you'll see they are designed to deliver the same quality sound that is identified with Altec's other full sized systems, plus they introduce a new and exciting idea in speaker enclosure styling. They are hand-finished in oiled walnut with styling that easily complements any decor.

The Santiago features a new Dynamic Force low frequency speaker that gives concert-hall performance. "Voice of the Theatre" components give the Santiago the smoothness, flatness of response, high efficiency and body without coloration that is synonymous with Altec.

The Santana's wide dynamic range and excellent transient response is enhanced by a styling first. Hand-finished in oiled walnut on all four sides, the Santana can be used as a handsome room divider or as the focal piece of fine furniture.





1. Santiago Speaker System (878A)

The Santiago uses Altec's well-known "Voice of the Theatre" components. The new Dynamic Force 15" woofer with a 3-inch edge wound voice coil and 17 pound magnetic structure has so much control over the cone of this speaker that it will produce a compression force of up to 16 lbs. The result is a greatly improved low frequency transient response with better linearity and reduced distortion. The high frequency sectoral horn coupled with a compression driver provides an extremely smooth response up to 90° off axis. The dividing network provides a crossover frequency of 800 Hz with complete control of the high frequencies by a continuously variable shelving control. The styling is contemporary; a rich, natural oiled walnut finish is enhanced by a simulated slate top and an attractive sculptured grille.

2. New Santana Speaker System (879A)

This all-new, two-way speaker system features Altec's patented 15 inch Biflex® speaker with a 10-1/2 lb. magnetic structure together with a high frequency tweeter. The uniquely styled cabinet is of contemporary oiled walnut with a composition slate top and is hand-finished on all four sides so it can be placed anywhere in the room. The system's impedance is 8 ohms and it can be used with amplifiers having continuous power ratings up to 45 watts. The system has high efficiency, wide dynamic range and excellent transient response.

A New Idea in Speaker Cabinets

For the first time, you can set a speaker system anywhere in your listening room and have beautifully hand-finished furniture in view. This is what the cabinet designers at Altec set out to achieve when they started designing the all-new Santana Speaker System. The basic design includes all-mitered corners, both sides and the back finished in elegant oiled walnut, a full-length-snap-on front grille, and a contemporary inset black composition slate top. The speaker connections are carefully tucked out of sight under the lip formed by the slightly recessed pedestal type base.

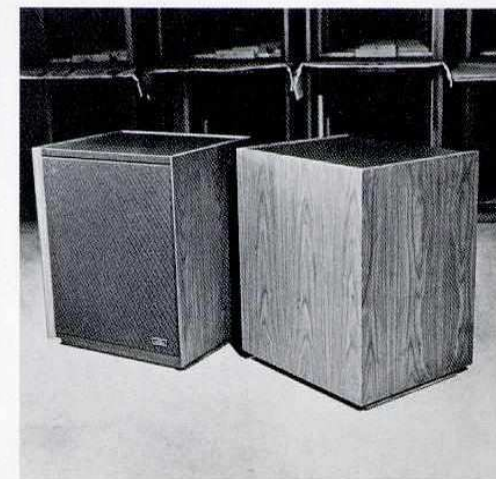
Specifications

include:	Santiago (878A)	Santana (879A)
Frequency Response	20-20,000 Hz	35-18,000 Hz
Power Rating	60 watts*	45 watts*
Impedance	8 ohms	8 ohms
Crossover Frequency	800 Hz	2500 Hz
Dimensions	29 3/4" H x 26 1/16" W x 19 1/4" D	25 5/8" H x 20 1/2" W x 17" D
Speaker Components	411 Type Woofer, 811B Sectoral Horn, 807 Type Driver, N801-8A Crossover	420A Biflex, and direct radiating tweeter

*May be used in home entertainment use with amplifiers having up to equal continuous power rating.

With the speaker back completely finished, the Santana handsomely fits into the basic design of your room no matter where or how you place it. As an area divider away from the wall. As part of a free standing sound system complex. As a side piece alongside your favorite chair.

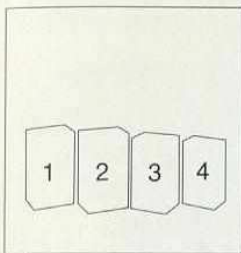
The perfect blend of quality sound and beautiful furniture will make the new Santana the most functional and enjoyable speaker system on the market.



Altec Bookshelf Speaker Systems

Some of the most popular Altec speaker systems are covered in this section. They feature the finest quality components, precision matched to their infinite baffle enclosures for smooth wide range frequency response (both on and off axis), high power handling and low distortion. The small size of these bookshelf systems allow us to offer an outstanding value in sound reproduction and versatility in speaker placement.





1. Segovia Speaker System (874A)

The new 3-way Segovia incorporates all the exclusive Dynamic Force design concepts which are featured in the Barcelona, Granada and Santiago speaker systems. Housed in a contemporary cabinet with an attractive fretwork grille, is a completely new 12-inch Dynamic Force woofer capable of producing an extended low frequency range with very low distortion characteristics. The popular Altec 405A 4-inch speaker provides a smooth mid frequency response with wide dispersion characteristics. The high frequency tweeter is a high quality dome radiator with excellent dispersion and virtually flat response to 20,000 Hz. The dividing networks are a full 12 dB per octave filters at 500 Hz and 4,000 Hz. Mid-range and high frequency attenuator controls are provided on the rear of the enclosure.

2. Bolero Speaker System (890C)

The Bolero is one bookshelf system that fills even the largest rooms with full natural sound. It features the 406-8C high-compliance woofer reinforced by an Altec 10 inch free-suspension phase inverter and the result is effortless low-end reproduction that meets the finest standards. Above 2000 Hz, a new extended-response compression driver coupled to a cast-aluminum horn spreads silky highs throughout any room. A three-position shelving control adjusts the high frequencies to accommodate your room acoustics. The Bolero's finish is in hand-rubbed walnut and its exclusive snap-on fretwork grille adds a sophisticated touch of three-dimensional sculptured curves.

3. Madera Speaker System (892A)

One of Altec's newest bookshelf models, this system is designed to reproduce an unusually wide dynamic range of frequencies. The Madera features wide band frequency response of 45 to 18,000 Hz with extremely low distortion, wide angular distribution and a 50 watt power handling capability. The enclosure is an infinite baffle design with the Altec Model 406-8C high-compliance low frequency 10 inch speaker for optimum bass response. The high frequency end includes a compression driven exponential horn of die cast-aluminum. And the crossover network utilizes a crossover frequency of 2500 Hz and produces extremely smooth response throughout the audio range. The Madera is finished in beautiful, hand-rubbed walnut and features a contemporary styled snap-on grille.

4. Corona Speaker System (893A)

The Corona is an attractive two-way bookshelf system that delivers excellent sound throughout a wide frequency range. It has a continuous power rating up to 45 watts but may be used with amplifiers rated as low as 15 watts per channel. A high compliance 10 inch speaker is mounted in an infinite baffle to provide optimum bass response. High frequencies are reproduced crisp and clear by an Altec 3 inch direct radiating speaker. Distortion is extremely low.

The Corona's dividing network is tailored to the overall system, using a crossover frequency of 2500 Hz. It includes high frequency attenuation in 3 dB steps above 2000 Hz. The enclosure finish is a rich, hand-rubbed walnut and features a contemporary styled snap-on grille.

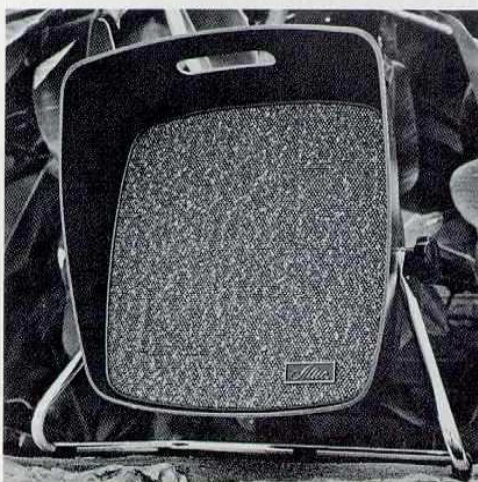
Specifications include:

	Segovia (874A)	Bolero (890C)	Madera (892A)	Corona (893A)
Frequency Response.....	20-20,000 Hz	40-20,000 Hz	45-18,000 Hz	50-18,000 Hz
Power Rating.....	60 watts*	50 watts*	50 watts*	45 watts*
Impedance.....	4 ohms	8 ohms	8 ohms	8 ohms
Crossover Frequency.....	500-4,000 Hz	2000 Hz	2500 Hz	2500 Hz
Dimensions.....	25 5/8" H x 11 5/8" W x 11 7/8" D	14 3/4" H x 25 3/4" W x 12" D	13" H x 23 3/4" W x 11 3/4" D	12 1/4" H x 22" W x 9 1/2" D

*May be used with amplifiers having up to equal continuous power rating in home entertainment use.

The Altec Patio Speaker System (829A)

The 829A answers the needs of those who enjoy outdoor living as well as good music. Specially designed for outdoor use, it features the proven-popular 755E Altec speaker. One 829A alone will cover even the largest patio with true high fidelity sound. The cabinet is made of a tough impact-resistant molded material which forms an infinite baffle enclosure. A special coating keeps the speaker cone weather-resistant. Attractive knurled knobs on a chrome-plated stand allow easy angular adjustment of the cabinet for free standing use or wall mounting.



Specifications of the 829A include: frequency response, 60-15,000 Hz; power rating, 20 watts*; impedance, 8 ohms; overall dimensions, 14 7/8" H x 17 1/8" W x 12 1/8" D; weight, 10 1/2 lbs.

Full Range and Duplex Speakers

Full-range Biflex® Speakers

The patented multiple compliance of the Biflex achieves an unusually wide frequency range by allowing a smaller center cone and new aluminum Diacone™ to operate independently for more efficient reproduction of high frequencies. The entire cone area functions to reproduce the lower frequencies. Crossover is effected mechanically at 1000 Hz through the patented mid-cone compliance.



Specifications include:	420A Biflex Speaker	419-8B Biflex Speaker
Power Rating.....	50 watts*	50 watts*
Frequency Response	25-14,000 Hz	30-15,000 Hz
Impedance.....	8 ohms	8 ohms
Cone Resonance	27 Hz	39 Hz
Magnet Structure	10 lbs. 8 ozs. Alnico V	9 lbs. 7 ozs. Alnico V
Diameter.....	15 ⁵ / ₁₆ "	12 ¹ / ₈ "
Weight.....	17 ¹ / ₂ lbs.	15 lbs.
Depth	7"	5 ⁵ / ₈ "

Super Duplex® 604E Speaker

Altec's 604 speakers are the most widely used by professional recording studios of all speakers made! The original 604 has been improved to provide superlative purity of mid-range, exceptional attack time, and distortion-free frequency range of 20-20,000 Hz (when used in optimum enclosure). The massive 604E uses a true multicell high frequency horn combined with a high-compliance 15 inch cone for perfectly controlled distribution and the point-source relationship obtainable only from a coaxially mounted speaker.



605B Duplex Speaker

Essentially the same system as the 604E, efficiency of this speaker is just 3 dB less. It has a 15 inch high-compliance cone and a true multicell HF horn. Like the 604E, the 605B provides pure mid-range, exceptional attack time, and distortion-free frequency range of 20-20,000 Hz (when used in an optimum enclosure).

601-8D Duplex Speaker

The best 12 inch speaker made, the 601-8D is excellent for reproducing beautiful sound from enclosures as small as 3 cubic feet. This true two-way system uses Altec's N-3000E crossover network for optimum frequency division. High-compliance low frequency cone and center-mounted multicell cast-zinc horn combine for smooth, realistic sound and perfect point-source relationship.



755E Wide Range Speaker

This extended-range 8 inch speaker makes an excellent patio or wall-mounted speaker because of its flat, pancake shape. It projects a large volume of smooth sound with minimum distortion from enclosures as small as one cubic foot. (It is also an excellent choice for a bookshelf enclosure.) A ceramic-type magnet permits speaker depth of only 2¹/₄ inches, and a flat cone design provides an unusually wide angle (90 degrees) of sound distribution. Cone resonance is 52 Hz; and baffle cut-out is 7 inches.



405A Full Range Mini-Speaker

Though only 4 inches in diameter, the 405A is a high quality, full-range speaker that is ideal for high fidelity applications in miniature bookshelves, in auto stereo tape systems, or in any other use requiring extremely small size.



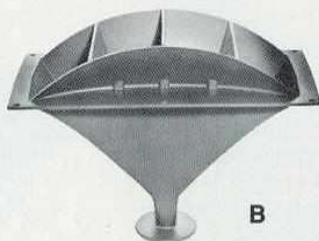
Specifications include:	755E Wide Range Speaker	405A Full Range Mini-Speaker
Power Rating.....	20 watts*	15 watts*
Frequency Response	40-15,000 Hz	60-15,000 Hz
Impedance.....	8 ohms	8 ohms
Diameter.....	8 ³ / ₈ "	4"
Weight.....	4 ¹ / ₄ " lbs.	2 ¹ / ₁₆ lbs.
Depth	2 ¹ / ₄ "	2 ¹ / ₈ "

Specifications include:	604E Super Duplex	605B Duplex	601-8D Duplex
Power Rating.....	50 watts*	50 watts*	35 watts*
Frequency Response	20-20,000 Hz	20-20,000 Hz	30-20,000 Hz
Impedance	16 ohms	16 ohms	8 ohms
Cone Resonance.....	25 Hz	25 Hz	39 Hz
Magnet Structure.....	27 lbs.	20 lbs.	9 lbs. 11 ozs.
	Alnico V	Alnico V	Alnico V
Crossover Network.....	1500 Hz	1600 Hz	3000 Hz
(included)			
Diameter	15 ⁵ / ₁₆ "	15 ⁵ / ₁₆ "	12 ¹ / ₈ "
Weight	34 lbs.	28 lbs.	15 lbs.
Depth	11 ¹ / ₈ "	10"	5 ⁵ / ₈ "

**A7-8 "The Voice of the Theatre"
Speaker Components**



A



B



C



D

(A) 416-8A Low Frequency Speaker. Famous 15 inch theater woofer. Voice coil of edge-wound copper ribbon, 3 inches in diameter. Rigid cast-aluminum frame. Power Rating.....50 watts*

Frequency
Response.....20-1,600 Hz
Impedance.....8 ohms
Cone Resonance...25 Hz
Diameter.....15⁵/₁₆"
Magnetic
Structure.....10 lbs., 8 oz. Alnico V
Weight.....17¹/₂ lbs.
Depth.....7"

(B) 811B High Frequency Horn. A massive sectoral horn of heavy cast-aluminum. Operates from 800 Hz to beyond audibility.

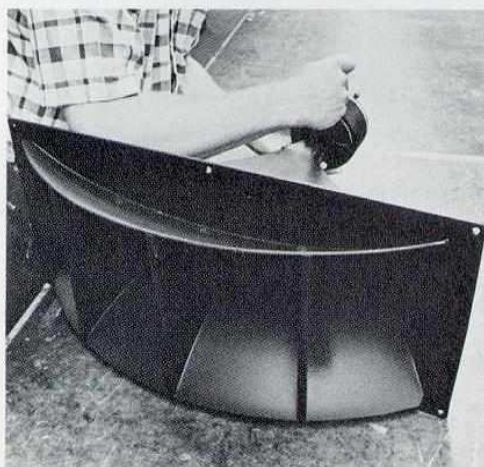
Recommended
Driver.....807-8A
Sound
Distribution.....90° horizontal
40° vertical
Dimensions.....8⁵/₈"H x 18³/₄"W x
13¹/₂"D
Weight.....9 lbs.

(C) 807-8A High Frequency Driver. Provides the ultimate in smooth sound from 800 to 20,000 Hz by allowing the mid-range to be reproduced in a sectoral horn with no additional crossover in the critical high frequency range. New Symbiotik voice coil diaphragm assembly for twice the power handling of previous models.

Frequency
Range.....800-20,000 Hz
Horn.....811B with N-801-8A
network
Power Rating.....50 watts*
Impedance.....8 ohms
Depth.....3¹/₄"

(D) N801-8A Dividing Network. A precision two-section crossover network designed to work with the 807-8A Driver.

Input Impedance...8 ohms
Power Rating.....100 watts*
HF Attenuation
Control.....continuously
variable
Crossover.....800 Hz
Slopes of
Crossover.....12 dB/octave



**New Dynamic Force Woofer
(411-8A low frequency Loudspeaker)**

This 15 inch speaker with a heavy cast aluminum frame is a high performance, high compliance unit designed specifically to be front or rear mounted in infinite baffle enclosures. The new Dynamic Force Woofer possesses a robust 4 inch voice coil assembly with edge wound copper ribbon utilizing an aluminum coil support and a heavy wide angle cone. It is capable of high power handling, and when used in a suitable infinite baffle enclosure, it has exceptionally low distortion. An 18 lb. magnet structure allows this speaker to develop a dynamic force of 16 lbs. for extremely good transient response.

Specifications include:	411-8A Dynamic Force Woofer
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Power Rating.....	60 watts*
Frequency Response.....	20 Hz to 1 kHz
Cone Resonance...	15 Hz
Diameter.....	15 ¹ / ₄ "
Impedance.....	8 ohms
Magnet Assembly...	18 lbs.
Depth.....	5 ¹ / ₂ "
Weight.....	20 ¹ / ₂ lbs.

*May be used with amplifiers in home entertainment use having up to equal continuous power rating.

Sectoral horns

Altec's "Voice of the Theater" Systems all feature an exclusive cast-aluminum sectoral horn for controlled angular distribution of mid and high frequencies. This allows us to keep our off axis response almost identical to the on axis response even in the critical mid range (above 500 Hz) where most low frequency speakers have a narrow angle of distribution. This horn also helps to extend the direct field (the area of listening where the sound from the speaker system is predominant as compared with the

reverberant field where the predominant sound is bounced off the walls and ceiling). If you are in the direct field you can begin to hear the original acoustics of the recording rather than the acoustics of your playback room.

A7-500-8 Speaker Components

(A) 416-8A Low Frequency Speaker. Famous 15 inch theater woofer. Voice coil of edge-wound copper ribbon, 3 inches in diameter. Rigid cast-aluminum frame. Power Rating.....50 watts*

Frequency
 Response.....20-1,600 Hz
 Impedance.....8 ohms
 Cone Resonance...25 Hz
 Diameter.....15⁵/₁₆"
 Magnetic
 Structure.....10 lbs. 8 oz. Alnico V
 Weight.....17¹/₂ lbs.
 Depth.....7"

(E) 511B High Frequency Horn. A massive sectoral horn of heavy cast-aluminum. Operates from 500 Hz to beyond audibility.

Frequency Cut-off.500 Hz
 Recommended
 Driver.....808-8A
 Sound
 Distribution.....90° horizontal
 40° vertical
 Dimensions.....10⁵/₈"H x 23³/₈"W
 x 18¹/₂"D
 Weight.....17³/₄ lbs.

(F) 808-8A High Frequency Driver. The ultimate in smooth sound from 500-20,000 Hz. When coupled to the Altec 511B sectoral horn, the 808-8A reproduces from below the midrange to beyond audibility without a crossover in the critical high frequency range. New Symbiotik voice coil diaphragm assembly for twice the power handling of previous models.

Frequency
 Range.....500-20,000 Hz
 Horn.....511B with N501-8A
 network
 Power Rating.....50 watts*
 Impedance.....8 ohms
 Depth.....3¹/₁₆"

(G) N501-8A Dividing Network. A precision, two-section, crossover network designed to work with the 808-8A Driver. Input

Impedance.....8 ohms
 Power Rating.....100 watts*
 HF Attenuation
 Control.....continuously
 variable
 Crossover.....500 Hz



A



E



F



G

Two-Way Speaker Components for Small Enclosures

(H) 414-8B Low Frequency Speaker. A Hefty 12 inch speaker offering the cleanest reproduction of low frequencies of any speaker its size. It may be front or rear mounted. 3 inch edge-wound voice coil and cast-aluminum frame.

Power Rating.....50 watts*
 Frequency Response...30-4,000 Hz
 Impedance.....8 ohms
 Cone Resonance.....30 Hz
 Diameter.....12¹/₄"
 Magnet Structure.....9 lbs. 7 ozs. Alnico V
 Weight.....15 lbs.
 Depth.....5⁵/₈"

(I) 406-8C Low Frequency Speaker. Has cast-aluminum frame, 9 lbs. 7 ozs., magnetic structure, highest efficiency and exceptional bass response in a bookshelf enclosure. May be front or rear mounted. 3 inch voice coil.

Power Rating.....50 watts*
 Frequency Response...25-4,500 Hz
 Impedance.....8 ohms
 Cone Resonance.....28 Hz
 Diameter.....10"
 Weight.....11³/₄ lbs.
 Depth.....5¹/₄"

(J) 3000H High Frequency Speaker. A cast-zinc multicell horn and integrally mounted driver. A true super tweeter, the 3000H extends system range to 20,000 Hz with excellent dispersion of highest frequencies.

Power Rating.....35 watts*
 Frequency Response...3,000-20,000 Hz
 Recommended
 Network.....N-3000E
 Distribution.....90° horizontal
 40° vertical
 Impedance.....8 ohms

Dimensions.....2¹/₈"H x 3¹/₈"W x
 3¹/₈"D
 Weight.....13 ounces

(K) N3000H. Provides accurate crossover at 3000 Hz between the 414-8B or 406-8C woofer and 3000H tweeter. Continuously variable shelving control. Impedance: 8 ohms.



H



I



J



K

Comments by Customers

To ensure Altec customers the highest possible quality and complete compatibility of all components within the Altec line, most of our subcomponents are built in our own modern manufacturing facility in Anaheim, California. Both large and small parts are handcrafted by skilled machinists in ultra-modern shops. Voice coils and transformers are hand-wound by highly trained technicians. Quality is carefully checked and re-checked at every step of the way.

From their original design to their precision manufacture, Altec home stereo systems are built a little better. And they'll continue to be built a little better—to reflect the quality of the name that is synonymous with quality sound.

Now, here's what some Altec customers have to say about our products.

- Professional Musician, "... best speakers I've heard in a home."
- Chemist, "... very pleased with quality workmanship and clean sound."
- Student, "... excellent sound for my wide variety in taste."
- Nurse, "... we listened to several speakers. Altec was best for us in sound and price."
- Airline pilot, "... neatness sold my wife, sound sold me on the 912A."
- Minister, "... my 714A is much more than I had ever hoped for!"
- Architect, "... functional design is foremost in my mind, your component centers are truly functional, in every sense of the word."
- Doctor, "... the sensitivity of the 714A is what really sold me. I pick up stations completely out of the range of my old system."
- School Teacher, "... my new 911A is really the ultimate... why didn't someone put quality components together before?"
- Retired Theatre Owner, "... sold on Altec since installed 'The Voice of the Theatre' in about 1940."
- Hi-Fi Salesman, "... I found Altec to be far superior to other speakers that I sell."
- Navy Pilot, "... liked the sound. Best overall I heard."
- Design Student, "... they just sounded better than the others."
- Public Accountant, "... I think I have the finest in equipment money could buy anywhere. I receive very favorable comments on them."
- Electrician, "... this equipment has superior reproduction without adding or taking away from the original recording."
- Student, "... best reproduction for price I've heard."
- Acoustic Engineer, "... we use Altec products at my place of business."

And of course, all Altec products are backed by the Altec Nationwide Warranty.

In case of defects in materials or workmanship, Altec Lansing will replace defective parts and repair malfunctioning products at no charge for a full two years on stereo components and one year on speakers, record changer and tape cassette. Warranty coverage starts from date of purchase.

Full details and conditions are available on the warranty document issued with each Altec product purchased.

Carry-in service is provided at all Altec Lansing authorized service centers across the country.

Because our products are subject to continuous improvement, Altec Lansing reserves the right to modify any design or specifications without notice and without incurring any obligations.



ALTEC DIVISION OF BENTON LING ALTEC, INC.

1515 South Manchester Avenue, Anaheim, California 92803
Member Institute of HIGH FIDELITY Inc.