

Unconventional design, outstanding performance.

he new Bose® 301™ Series II System is the technological successor to one of the world's most popular loudspeaker designs. It offers a level of musical realism unmatched by any conventional bookshelf speaker, with the convenience and versatility of a compact, contemporary enclosure. And, like all Bose Direct/Reflecting® speakers, the 301 Series II system recreates the clear, spacious sound of a live performance.

### A balance of reflected and direct sound.

The design of the 301 Series II system is based on more than 25 years of Bose research into the psychoacoustics of reproduced music. This research shows that most of the sound you hear at a live concert is reflected off the walls, floor and ceiling of the performing environment. Only a small percentage of the total sound reaches your ears directly from the instruments or singers. It is the natural balance of reflected and direct sound that gives

live music its satisfying richness and clarity.

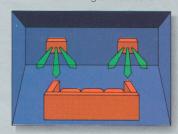
301-II speaker's recreate the experience of a live concert with a unique configuration of three high-performance drivers: a forward-firing 8" woofer and two 3" tweeters.

The tweeters are mounted away from the main cabinet in a 3-dimensional Free Space™ array. One is aimed inward toward the center of the listening area, while the other is angled outward so that its output is reflected off the side wall. An acoustically transparent grille assembly allows unrestricted passage of all frequencies.

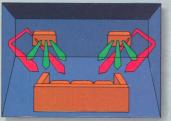
By reflecting music off the walls of your room at precisely optimized angles, the Free Space™ array generates a roomfilling pattern of reflected and direct sound that is similar to what you would hear at a live concert. It lets you enjoy the natural clarity of every instrument, with none of the harshness or 'glare" of ordinary bookshelf speakers. And you can experience this lifelike stereo effect from virtually any seat in the room.



Most of the sound at a live performance is reflected off the interior surfaces of the listening environment.



Conventional bookshelf speakers radiate mid- and high-frequency sound directly into the listening room. The stereo effect is limited to a small area exactly between and in front of the cabinets.



The Free Space™ array in the Bose 301 Series II system radiates a natural-sounding balance of reflected and direct sound energy. Stereo imaging is maintained over a broad listening area.



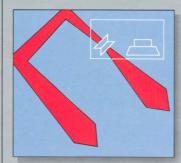
# Uniform frequency response.

Conventional crossover networks are often nothing more than simple filters. They divide the amplifier power among the woofers and tweeters by rapidly cutting off the music above and below a selected "crossover frequency." The relatively sudden transition between the drivers causes coloration which can affect the spectral balance of your music.

The Dual Frequency™ crossover network in the 301™ Series II speaker offers an effective solution for this problem. It precisely balances the phase and amplitude of the power delivered to each driver, allowing them to operate simultaneously over nearly a full octave. This exclusive Bose design assures uniform power radiation across the entire operating range of



The tweeters in the Free Space<sup>rn</sup> array are oriented in a precise 3-dimensional relationship.



The outward-firing tweeter creates a clear and spacious stereo effect, while the inward-firing tweeter establishes presence and directionality.

of the system. All frequencies (including the critical midrange) are radiated evenly into the listening area, for lifelike openness and definition of every instrument.

# High power handling capacity.

The Bose 301 Series II Loudspeaker is designed to reproduce the full dynamic range of digital and other high-technology recordings without strain or damage. The 8" longexcursion woofer features a rugged 6-layer voice coil and a monolithic polepiece to assure precision assembly and high reliability. The ducted-port enclosure of the 301 speaker has been completely redesigned for extended bass response and reduced distortion.

The 301 crossover circuit uses highly stable, computer-grade film capacitors that do not

change value over time like ordinary electrolytic capacitors. And the dual-tweeter array provides the high-frequency headroom you need to safely enjoy all the power and brilliance of your music. These features assure that your 301 Series II speakers will maintain their outstanding performance almost indefinitely, for years of maintenance-free service.

301 Series II speakers are designed and styled for convenient placement in almost any type of listening environment



#### Technical Information





#### **Features**

Free Space™ tweeter array

Dual Frequency™ crossover network

Ducted-port enclosure system

Syncom® II computerized quality control

**Driver Complement**One (1) 8" (20 cm) long-excursion woofer
Two (2) 3" (7.6 cm) high-sensitivity tweeters

Nominal Impedance 8 ohms

Crossover Transition Frequencies 1.5 kHz and 2.5 kHz

Amplifier Power Requirements

10 watts minimum 75 watts rms maximum per speaker



Cabinet

Walnut-grain vinyl veneer

**Dimensions** 

10½" H x 17" W x 9½" D (27 x 43 x 24 cm)

**Weight** 181/2 lbs (7.1 kg)

Covered by patent rights issued and/or pending.
301-II speaker design is a registered trademark of Bose Corporation.
© Copyright 1982 Bose Corporation.
All rights reserved. Printed in USA.

Syncom® Il computer testing. Your guarantee of quality.

No technology, however advanced, is an automatic guarantee of a speaker's performance. Such a guarantee can come only from a highly sophisticated manufacturing process that imposes tight controls on critical design parameters. The first instrument to perform this essential quality testing in day-to-day production is the Bose® Syncom II Computer System.

The Syncom II computer measures the total radiated power output of each driver in a manner representing the way the completed speaker will operate in an actual listening environment. It accurately matches the values of crossover components to the characteristics of individual woofers and tweeters to insure that every 301<sup>TM</sup> speaker will

sound virtually identical to the laboratory reference model.

Because of the unprecedented accuracy of Syncom II computer testing, every Bose 301 Series II Direct/Reflecting® Loudspeaker carries a full five-year warranty on parts and labor. This warranty meets all Federal Trade Commission full-warranty requirements and is far more valuable than the 'limited warranty" offered by many other speaker manufacturers. Ask your authorized Bose High Fidelity dealer for complete 301-II warranty information.

Bose Corporation, The Mountain, Framingham, Massachusetts USA 01701

Australia, Belgium, Canada, England, France, Germany, Greece, Ireland, Italy, Japan, Netherlands, Spain, Switzerland, United States

Better sound through research.

PN 121185