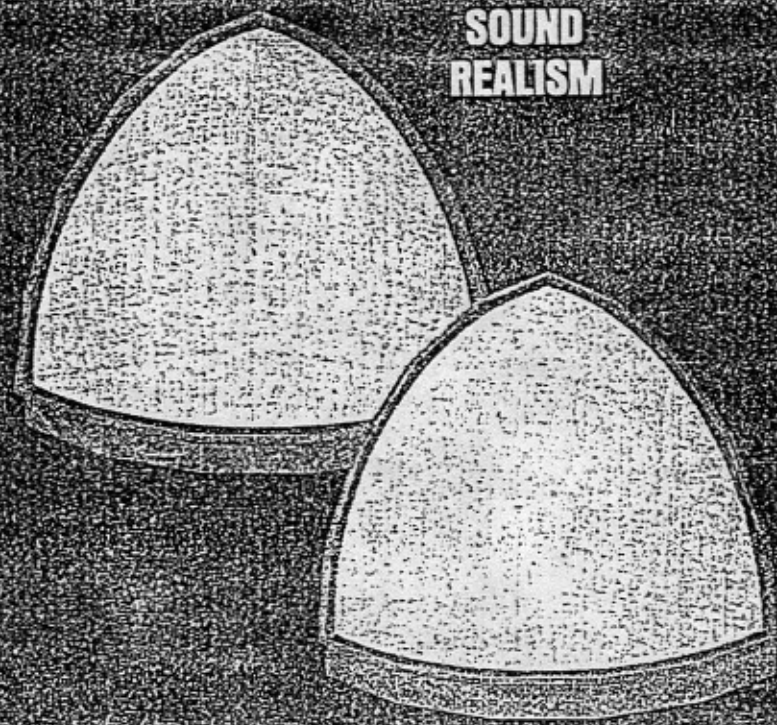


A NEW
CONCEPT
IN
SOUND
REALISM



The **BOSE** 2201

a spherical shape

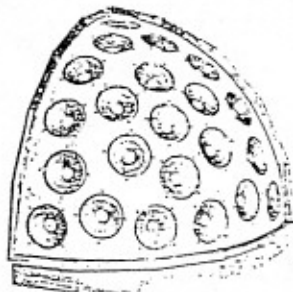
The unique spherical shape of the Bose "2201" resulted from engineering efforts to build the finest sound reproduction system possible. A well known theoretical ideal in acoustical engineering is the "Pulsating Sphere", a spherical acoustical transducer possessing ideal sound radiation characteristics. In a listening room, the performance of a full sphere is achieved from one eighth of a sphere placed in a corner. Here the walls and floor act toward sound as mirrors act toward light, creating the image of a room eight times as large with a full sphere in its center.

The Bose "2201" was designed as a practical realization of the theoretical "Ideal Pulsating Sphere." The advantages to the listener are twofold: First, omnidirectional radiation of sound at all frequencies eliminates the familiar "off axis" tonal unbalance found with conventional loudspeakers. Second, when two "2201's" are used for stereo, the dispersion characteristics eliminate the familiar "single position" stereo constraint permitting full stereo performance enjoyment from a wide range of positions.

an array of speakers

The Bose "2201" replaces the traditional "Woofer/Tweeter" concept with an array of twenty-two specially designed loudspeakers mounted on a spherical surface. This concept serves several purposes. First, it provides the desired geometrical approximation to the "Ideal Pulsating Sphere" and second, it permits the effective elimination of loudspeaker system resonances.

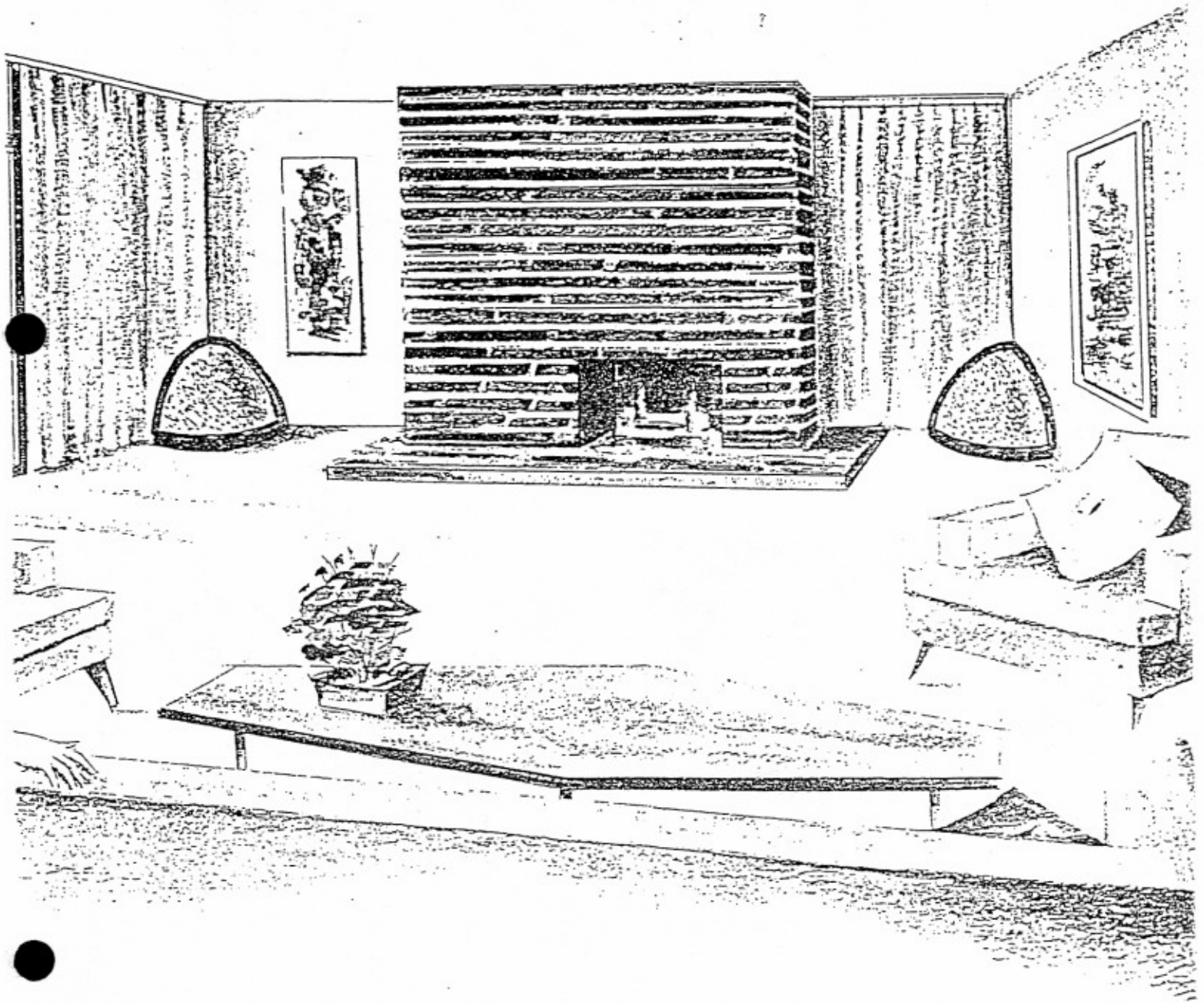
Every loudspeaker has resonances, which cause audible peaks and dips in its radiated energy at various frequencies. With a single speaker, these audible resonances cannot be eliminated. However, with the twenty-two loudspeakers in the Bose System, the resonances are randomly distributed such that the effect of the resonances of any one speaker is negligible compared with the total sound output.



The resulting overall frequency spectrum of the 22 small loudspeakers is shaped by a PATENTED spectral matching unit to produce sound subjectively equal to that of an "Ideal Pulsating Sphere."

The special design of the 22 small loudspeakers in the "2201" permits exceptionally realistic bass response since, at low frequencies, the 22 speakers are equivalent to a single loudspeaker having a diameter of over 20 inches. The small cone movement required insures very low distortion. To those who believe small speakers cannot reproduce bass . . . LISTEN TO THE BOSE "2201."

red and size through...

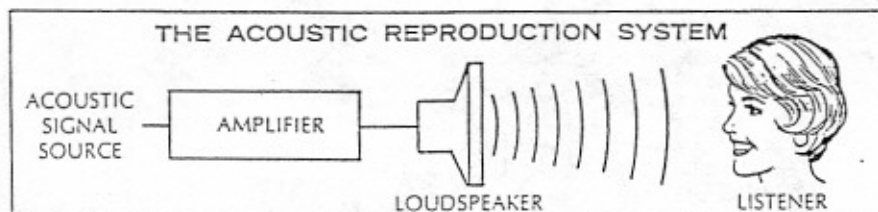


for the discriminating music listener, realism in

a new systems concept

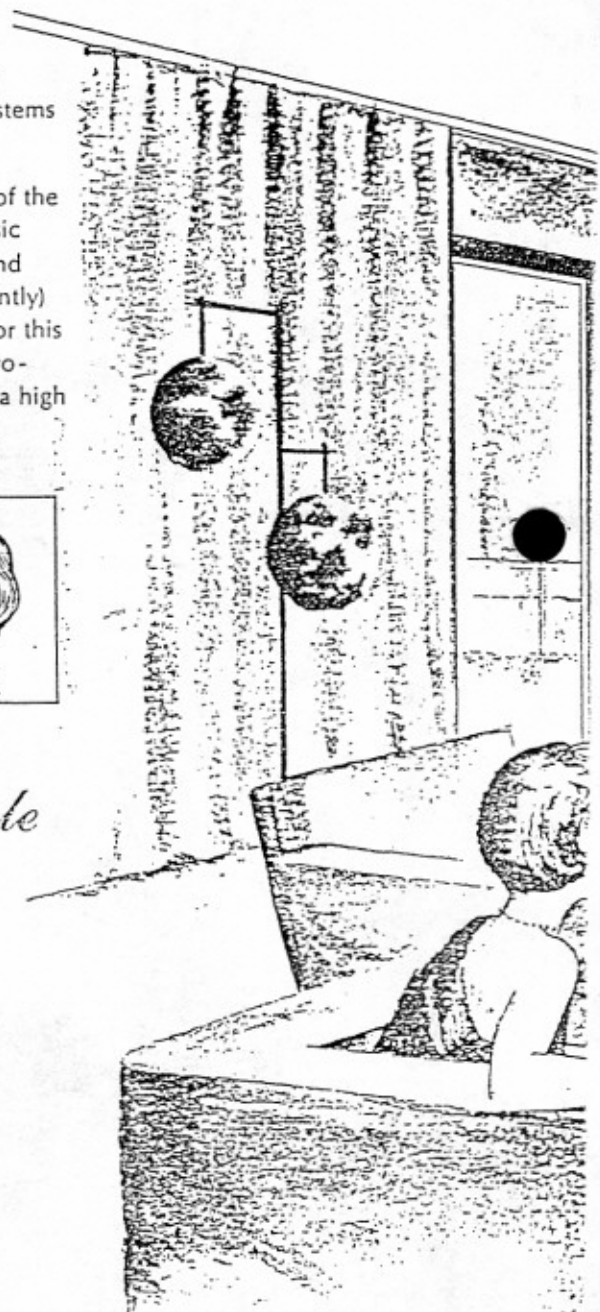
The Bose Corporation is proud to present its "2201" Acoustical Transducer System, a new Hi Fidelity Loudspeaker System, based on an Engineering Systems approach to the problem of realistic sound reproduction.

Research into the capabilities, limitations and effects associated with each of the acoustic elements shown in the diagram below has indicated that some basic limitations on reproduction of realistic sound heretofore present in all sound reproduction systems (where each of the elements is optimized independently) may be eliminated through engineering design of the system as a whole. For this reason, the Bose "2201" employs internal matching of electronic and electro-mechanical devices (the loudspeakers). The total matched system includes a high power transistorized amplifier, a spectral matching unit and an array of 22 specially designed loudspeakers.



a new engineering design principle

The Bose Acoustical Transducer System was invented by Dr. A. G. Bose. Dr. Bose's ten years of research into the problems of sound reproduction have resulted in a totally new objective evaluation and design criterion to replace the conventionally used frequency response criterion found to be inadequate for determination of loudspeaker quality. Digital computer simulation of an ideal speaker (the ideal pulsating sphere of acoustics) enabled for the first time, a direct subjective comparison of sound heard from an ideal loudspeaker with that of an actual loudspeaker under identical environmental conditions. The computer study further provided the design parameters for matching of system components in the Bose acoustical transducer system such that, in normal home listening environments, the sound from the Bose "2201" is subjectively indistinguishable from that which would be produced by the "Ideal Pulsating Sphere."



A new standard for reproduction realism

The sound from the Bose "2201" as heard in a normal listening environment has been demonstrated to be subjectively equivalent to that of an ideal acoustical source. The Bose Acoustical Transducer System is the first and only loudspeaker system to meet this exacting criterion. As such, the Bose "2201" may be used as a calibrated standard for the subjective comparison and evaluation of other high fidelity components including loudspeakers, record players, preamplifiers, etc.

When you listen to a "2201" you are listening to the ultimate in high fidelity reproducers. Compare its sound to that produced by any other loudspeaker. Listen for the clarity and presence of each instrument or voice you hear, listen for the lack of boominess or false bass coloration, and then listen to music containing the very low bass and highest of treble. When your tests are completed, you'll know why the Bose "2201" is *The Standard for Reproduction Realism.*

Specifications

Number of Individual Loudspeakers:	22
Max. Impedance of Preamplifier or other signal source to the system	5000 ohms
Min. Preamplifier or other signal source output voltage capability:	0.5v RMS
AC Power Requirements:	110-125v, 60 cps, 100 watts
Dimensions: (Model "2201")	
Overall Height:	25 inches
Max. Base Radius:	23½ inches
Weight:	55 pounds
Cabinet Finish:	Oiled Walnut (Other finishes available on special order)
Cabinet Base:	Imported Indian hand carvings of "Sheeshamwood." (Plain base optional)
Frontal Covering:	Decorator Fashion Fabric
Included Accessories:	35 ft. lengths of power cable and audio cable to connect to your control console or other audio source.

TWO BOSE "2201's" REQUIRED FOR STEREO

The **BOSE** Corp.

17 ERIE DRIVE, NATICK, MASSACHUSETTS

Solid-state amplifier with spectral matching unit

Contained within the cabinet of the Bose "2201" are the other elements of this unique system, a 50 watt RMS transistorized power amplifier with built-in spectral matching unit. This combination provides both a level of sound sufficient to fill an auditorium and uniform realistic reproduction of the sound source material. The amplifier will accept signal inputs from any high quality preamplifier or tuner. Proven solid state circuitry in the amplifier and spectral matching unit provide low heat dissipation and guaranteed system reliability.

The Bose 2201 features . . .

INDIVIDUAL TESTING AND CALIBRATION

Each of the system components, including the 22 individual speakers, are separately tested to ensure their meeting exacting specifications prior to system assembly. The completed system is then operated for a period of 100 hours, after which final tests are made to ensure that the performance of each and every Bose 2201 matches that of the laboratory calibrated standard.

A FASHIONABLE FRONTAL COVERING:

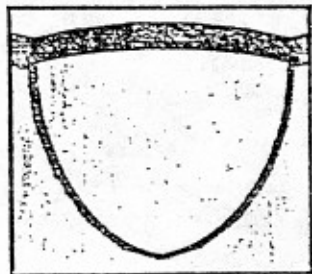
Conventional loudspeaker units are limited to the use of "grille cloth" as a frontal covering since special fibre and porosity is required to obtain the desired frequency response. The Bose "2201" features a fashion fabric covering. The totally new design concept of a matched system makes this possible since the spectral matching unit can correct variations in the frequency spectrum caused by the covering material.

HAND FINISHED CABINETS:

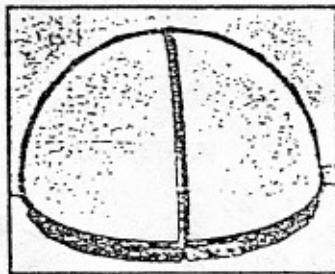
The standard "2201" is produced with an oiled walnut cabinet having a base decorated with Indian hand carvings of Sheesham-wood. Other cabinet finishes and decorator models of unfinished plywood are available on special factory order. A plain walnut base is optional.

POSITIONING VERSATILITY:

The Bose "2201's" size and weight are only a fraction of that of other high quality loudspeakers and thus it may be easily moved as required. The wide dispersion characteristics of the Bose "2201" permit placement of furniture close to or even in front of it without serious degradation of the sound. While normally the units are placed on the floor in room corners, they may also be mounted in ceiling corners, or placed side by side along a wall.



CEILING MOUNT



SIDE WALL POSITIONING