

BRAUN

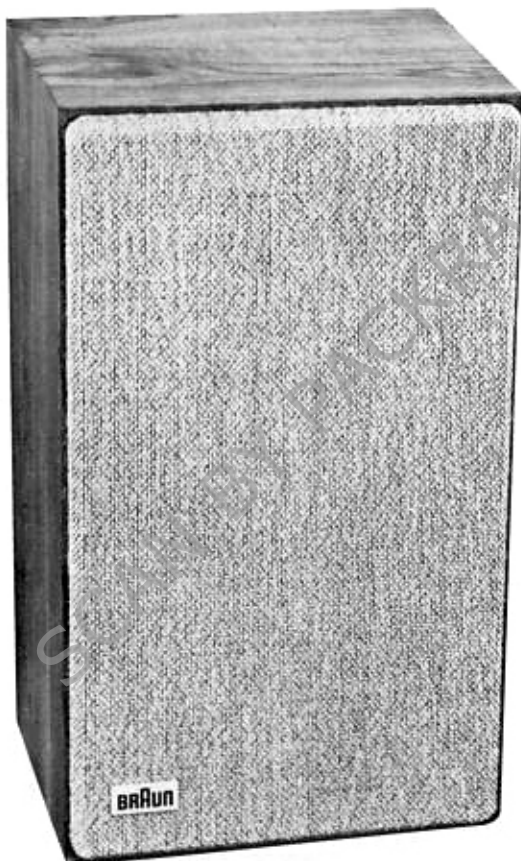
announces invisible sound

Transparent has been the word used by experts to describe the best in clear, distortion-free sound. But now there is something better.

Braun introduces a new dimension in sound. And a new word to describe it. The invisible sound of Braun loudspeakers is a giant step beyond transparency. Deep rich lows. Clean crisp highs. Powerful, perfectly natural sound — free of distortion and distraction. Invisible. Recorded music now has an authentic presence you've never experienced before.

And it's no surprise. Braun loudspeakers are perhaps the most highly regarded speakers in

Europe. There, they are the standard by which all others are judged. Now these incomparable performers are available in the United States, but not at "import" prices. Braun loudspeakers are currently being assembled in Cambridge, Massachusetts from imported German driver components. This has dramatically cut cost, but not performance. With Braun you have superb German engineering plus the highest quality speaker cabinets made in the United States with the same craftsmanship as those from the "old country".



MODEL L-500A



MODEL L-700A

BRAUN

Braun is European precision engineering

If the quality of BRAUNs had to be traced to a single source it would have to be the European precision engineering applied to the evolved concept of the acoustic suspension speaker. Not many companies design and produce their own drivers and crossovers. And that's where it starts.

The Woofer

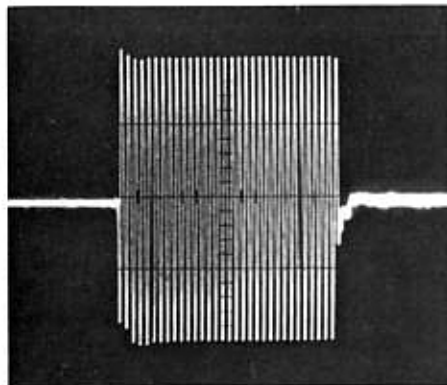
The L 500A and the L 700A are two-way acoustic suspension speakers. Truly good two-way systems are difficult to design since woofer and tweeter have to cover a rather wide range of frequencies. For instance, the BRAUN woofer does cover a large portion of the midrange frequencies, up to 1500 Hz. The human ear is extremely sensitive to coloration and distortion at these frequencies, therefore our engineers developed a unique woofer cone material, which is stiff so it moves like a piston at bass frequencies, yet is soft and self-damping at high frequencies to prevent cone break-up. In addition, this material had to be light so that musical transients would be quickly and cleanly handled. Our woofer cone has a soft suspension resulting in a low resonant frequency, and making it move with high efficiency and accuracy.

We believe it should not require a super-power amplifier to drive our speakers to high levels properly, so we built the efficiency into our drivers. We gave them unusually strong magnetic fields (9500 Gauss). In this way even a fairly low power receiver driving BRAUN speakers will give you concert hall realism. Efficiency is a particularly important consideration in four-channel installations, since quadrophonic receivers often offer less reserve power per channel than stereo receivers. Of course the BRAUN works well with high power amplifiers also.

The Tweeter

All BRAUN loudspeakers from the smallest to the mighty three-channel LV 1020 share one jewel: the unequalled 1" diameter soft-dome tweeter. This elegantly simple-looking device gives BRAUN speakers their unprecedented open clarity, superwide dispersion and silky smoothness in frequency response.

No other tweeter we know of moves so accurately and with so little distortion as our 1" soft-dome. This is accomplished by the strong magnetic field of 15,000 Gauss driving a dome that weighs a mere 0.2 grams, which is a great deal lighter than the usual tracking force required for a good turntable cartridge.



Tone burst response of Braun dome tweeter at 10 kHz

The distorting break-up so common with paper cone and dome tweeters is entirely prevented by suspending our tissue dome by its own sealed acoustic chamber, and by damping out resonances with a unique (sticky) damping fluid.

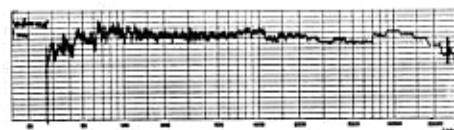
This design gives our tweeter the ability to handle transients and musical details so faithfully that it can be called "ear opening". In spite of its light weight the BRAUN dome can tolerate substantial amounts of power. The tiny voice coil stays cool by radiating all the heat through the very narrow coil gap of one one-thousandth of an inch right into the heavy one pound magnet.

The Crossover

No matter how good the drivers may be, only with a crossover of equal performance will a speaker perform at its best. BRAUN is so convinced of this that we use heavy eighteen ounce copper coils for perfect linearity and for minimum losses, as well as expensive metal film capacitors for long-term stability, low losses and for never changing frequency response of the speaker system.

The Speaker as a System

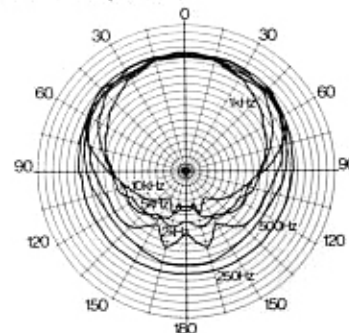
The ingredients of a speaker function as a system only if great care is taken in the matching of the individual components and dimensioning of the cabinet to match the crucial driver (woofer) parameters. With German engineering and ingenuity the L 500A and the L 700A accomplish in modest sized enclosures what other manufacturers often do less well in



Frequency response of L 500A

"battleship cabinets". You will be amazed by the clean, accurate bass performance of these speakers which employ very modest sized drivers (7" diameter for the L 700A and 8 1/4" diameter for the L 500A). It is not true that low frequency bass means large woofers, (our 7" woofers work very well at 25 Hz). But it is true that in two-way speakers, small sized woofers yield superior dispersion in the midrange. Also, the musically important transient response of a small woofer excels. That's why we choose small woofers for the benefit of open, transparent reproduction without compromising bass performance.

The L 500A and the L 700A are designed to reproduce the input signal as faithfully as possible. Both offer very smooth full-range frequency response from the lowest organ tone to well beyond audibility, superb dispersion and unsurpassed transient response.



Speaker dispersion at various frequencies

Specifications

Model: L 500A

Driver complement:

- One soft-dome tweeter 1" diameter
- One high compliance woofer 8" diameter

Speaker system:

- Frequency response: 25-25,000 Hz (DIN)
- Power handling: 30 Watts (RMS) (DIN)
- Efficiency: 87 db for 2 Watt input @ 10 feet
- Crossover frequency: 1,500 Hz/ 12 db per octave
- Impedance: 4 Ohms
- Weight: 26 lbs. net
- Size: 20"(H) x 11.5"(W) x 9.75"(D)
- Cabinet finish: Walnut
- Grille: Removable cloth grille

Model: L 700A

Driver complement:

- One soft-dome tweeter 1" diameter
- Two high compliance woofers 7" diameter

Speaker system:

- Frequency response: 25-25,000 Hz (DIN)
- Power handling: 35 Watts (RMS) (DIN)
- Efficiency: 88 db for 2 Watt input @ 10 feet
- Crossover frequency: 1,500 Hz/ 12 db per octave
- Impedance: 4 Ohms
- Weight: 32.5 lbs. net
- Size: 21 1/2"(H) x 12 1/4"(W) x 10 1/2"(D)
- Cabinet finish: White acrylic laquer on wood or walnut veneer
- Grille: Removable black double knit or beige cloth



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