



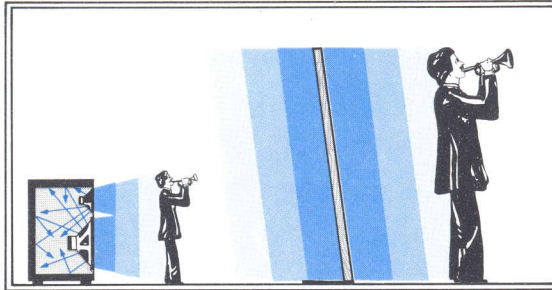
MAGNEPLANAR: The box-less sound.

# 5 Good Reasons Why Over 35,000 Music Lovers Purchased Magneplanars®

**1. IMAGE SIZE**—Instruments projected from small boxes sitting on the floor *sound like* they are coming out of boxes on the floor. This problem can be partially corrected by putting the box speakers on tall speaker stands. However, the sound still seems to be coming out of a box, because that's precisely what it is doing.

The Small Magneplanar® (SMG) eliminates these problems by a fundamentally different approach to sound propagation. The 4 foot high Magneplanar® projects sound from top to bottom, giving the sound *height* as well as stereo width and depth.

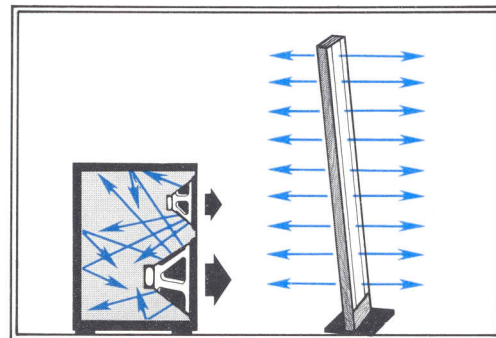
In the concert hall instruments project in all directions. Instead of projecting sound out of a box, Magneplanars® project in all directions, which closely duplicates the original performance. With your eyes closed the Magneplanar® will allow you to "see" the original performance suspended in space. The full height, width, and depth of the concert hall can be heard.



**2. LOADING**—Theoretically, loudspeakers should use massless drivers suspended in space with no box, magnet structure, or framework around the driver.

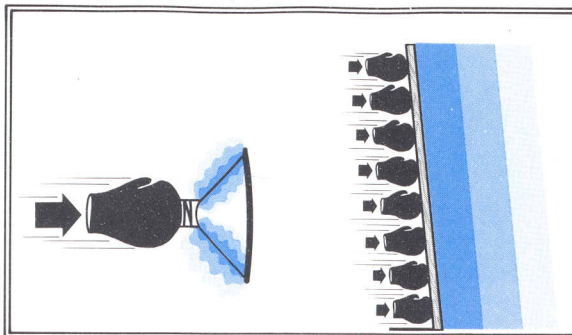
Most conventional box speakers are far from this ideal. The mass of the driver is high and the rear wave is contained within the box or magnet structure. While the frequency response can be smoothed out in a box speaker, the character of the sound is inevitably affected. The music sounds like it is coming out of a box—constricted and unnatural.

The Magneplanar® diaphragm comes closer to the ideal driver. The mass is low and the diaphragm is not contained. The sound is permitted to radiate freely into space. With the box removed, Magneplanars® sound more like you are there.



**3. UNIFORM DRIVE**—The power from the amplifier causes the conventional cone speaker to react as if it had received a sharp blow at the voice coil. Since the outer portions of the cone cannot respond instantly, the cone will flex. The resulting cone breakup gives music a "fuzzy", "blurred" quality.

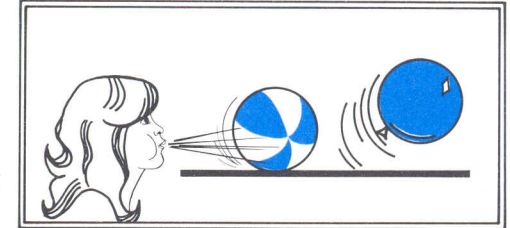
The Small Magneplanar® eliminates cone breakup by driving the Magneplanar® diaphragm over its entire area. The force from the amplifier is distributed over the entire diaphragm so that it all moves at the same time. Cone or diaphragm breakup is dramatically reduced and the integrity of the musical signal is preserved.



**4. MASS**—The effect of mass on a loudspeaker can be illustrated by the comparison of a balloon and a beach ball. In the case of the balloon a nominal force such as a puff of air will cause the balloon to accelerate quickly. When the force ceases, the balloon decelerates quickly. The same force will move the beach ball, but the ball is slower to start and slower to stop.

High mass is one of the main causes of sonic degradation in a conventional box speaker. Expecting a heavy cone woofer to move 1000 cycles per second in perfect synchronization with the electrical signal is expecting the impossible. The music is "blurred". The details and texture of the music is lost—the bass is "boomy" or "muddy"; mids and highs sound "nasal" or "raspy".

The Small Magneplanar® has less mass than the conventional box speaker; consequently, the Magneplanar® diaphragm is more in step with the electrical signal. The detail and texture of the music is maintained.



**5. VERSATILITY**—Serious listeners know that for best results, box speakers should be placed on speaker stands positioned away from walls. Unfortunately, this usually conflicts with the decor of the room.

The Small Magneplanar® (SMG) fits into the smallest of rooms (room in photo is 11 ft. x 12 ft.), yet is easily moved if the speakers cannot be left in the most accurate musical position. Interior decorators find Magneplanars® to be the answer to "where do we hide those boxes?" The elegant Magneplanar® screen acts as a beautiful backdrop for plants or pieces of art.

## OTHER PERFORMANCE CHARACTERISTICS OF MAGNEPLANARS

- ◆ Purely resistive impedance for ideal amplifier loading.
- ◆ Accurate phase response is provided by woofer-tweeter diaphragm and voice grids all on the same plane.
- ◆ Linear power response—no compression of dynamic range.
- ◆ Mirror-imaged pair for stable stereo image.

## SMG SPECIFICATIONS:

**System Description**—two-way full range Magneplanar® loudspeaker.

**Midrange/Bass Radiating Area**—370 sq. in.

**Tweeter Radiating Area**—58 sq. in.

**Frequency Response\***—±4 db from 50 Hz to 16,000 Hz.

**Normal Power Requirements**—20-50 watt amplifier (rated at 8 ohms).

**Maximum Recommended Power**—100 watt amplifier (rated at 8 ohms).

**Sensitivity**—1 watt RMS—500 Hz—90 db—@ 3 feet. 1 watt RMS, 20-20,000 Hz, pink noise input will produce 85 db SPL at 3 feet.

**Impedance**—purely resistive, 4 ohms at any frequency.

**Crossover System**—6 db per octave at 2400 Hz (high quality capacitor and air core inductor).

**Dimensions**—24¼" x 48<sup>9</sup>/<sub>16</sub>" x 1¾".

**Weight**—28 pounds each.

**Finish**—Solid hardwood side moldings. Panel covered with brown fabric.

**Warranty**—5 years (limited).

**Shipping Weight**—70 pounds.

\*Because there are no universally accepted methods for loudspeaker measurements, frequency response specifications may be stated by most manufacturers without reference to measurement techniques and/or specific locations in rooms. MAGNEPLANAR loudspeaker frequency response curves are minimum average performance levels that may be reasonably expected in normal installations. Because there are no specific limitations on how they may be stated, we recommend careful listening comparisons to determine which loudspeaker sounds the most natural.

**MAGNEPAN**  
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# MAGNEPLANAR® MG SERIES LOUDSPEAKERS

## SMG

For the past decade, Magneplanar has given the public a revolutionary type loudspeaker. With the passage of time, improvements in design and manufacturing techniques have permitted the reduction of price and size while actually improving performance. The SMG (or Smaller Magneplanar) fills the needs of the budget-minded enthusiast by providing, at low cost, the unique sonic qualities of the critically acclaimed, original MG-I: high definition, overall smoothness, plus realistic "sound stage." In fact, the SMG is more efficient, has improved low frequency impact, and can be driven properly by the smaller, quality-built receivers.

Built to be as reliable as its predecessors below, the SMG provides the only serious alternative to the discerning consumer with a system budget of around \$1000.



## MG-I (Improved)

As the name implies, the MG-I (improved) is a refined version of our highly successful MG-I, acclaimed by the press as a "best value" loudspeaker, and proudly owned by thousands of audiophiles.

The major performance advantages of the MG-I over the SMG and older MG-I stem from the use of a refined magnet polepiece. The metal between adjacent strip magnets has been decreased by 60%, thereby reducing acoustical loading significantly. Sound waves pass through the polepiece with less metal to bounce off of or bend around. This "opens up" the high end and results in more and deeper low end dynamics.

The new polepiece also allowed the lowering of the tweeter crossover point from 2400 Hz to 1600 Hz, resulting in several important improvements:

- Improved imaging. The tweeter now handles more of the middle frequencies; and being a narrower driver it provides better horizontal dispersion.
- Transient response has been improved because lower frequencies are being produced by the lighter, more responsive tweeter.
- Because of the large diaphragm area, modulation distortion has never been a problem. What little there was, has been further minimized by the use of the new, more open polepiece as middle frequencies are now produced at the edge of the driver rather than in the center, where excursion of the diaphragm is greatest.

A loudspeaker able to be both delicate and dynamic while producing a lifelike image with depth and breadth, without resorting to sheer volume, is indeed a marvel at any price. The MG-I (improved) is such a loudspeaker, ideally suited for systems from \$1500 and up.



## MG-IIB

The improvements in the MG-I, realized by the use of the new magnet polepiece, carry over to the MG-IIB with even greater significance.

This tallest member of our MG Series utilizes more diaphragm area for deeper bass response; is taller for increased vertical dispersion; has flatter tonal balance than the MG-I, and provides even higher definition in the mid-frequencies due to lower diaphragm/voice-grid mass per unit area. The MG-IIB has a lower crossover point than the MG-I, lending wider bandwidth to the tweeter/midrange driver. For added versatility, the perfectionist may extract ultimate performance by utilizing the easily engaged bi-amplification capability built into the MG-IIB.

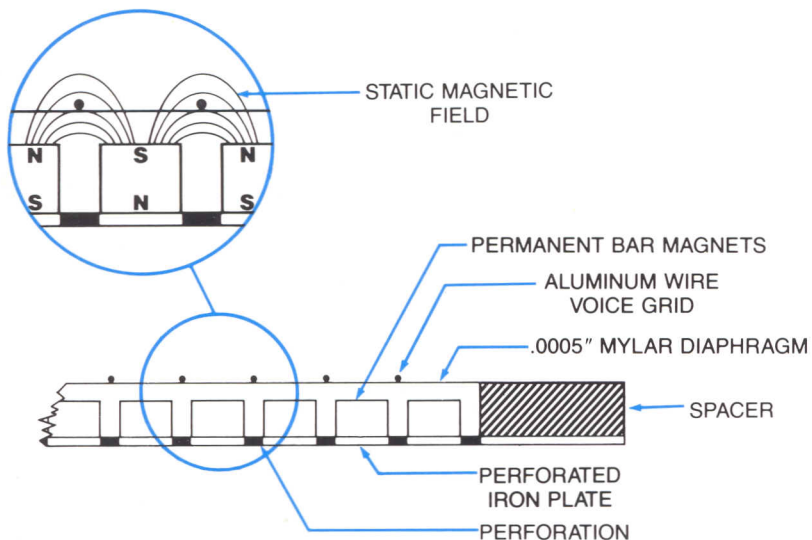
In terms of listening ease, overall dynamics, and reproduction of fine detail, the MG-IIB represents a redefinition of state-of-the-art in a compact panel design. It gives the listener a new standard for electronics evaluation and a fresh look at stereo reproduction as a simile of a musical event.

This loudspeaker is to be best appreciated in systems ranging from \$2000 to \$10,000.



## THE MAGNEPLANAR® DRIVER

### DRIVER CROSS-SECTION



### CHARACTERISTICS

- Exceptionally low distortion levels because of uniform control of diaphragm.
- Excellent transient response throughout entire audio range due to low mass of diaphragm.
- No cavity or cabinet wall resonance to color sound.
- Purely resistive impedance for ideal amplifier loading.
- Projects sound front and back (bipolar radiation). Bipolar radiation of MAGNEPLANARS provides a means of optimizing stereophonic imaging and depth.
- Large radiating area provides width, height, and depth of sound normally exceeded only by live performances.
- Matched, mirror-imaged pairs for a precise stereo image.
- Linear power response - no compression of dynamic range.

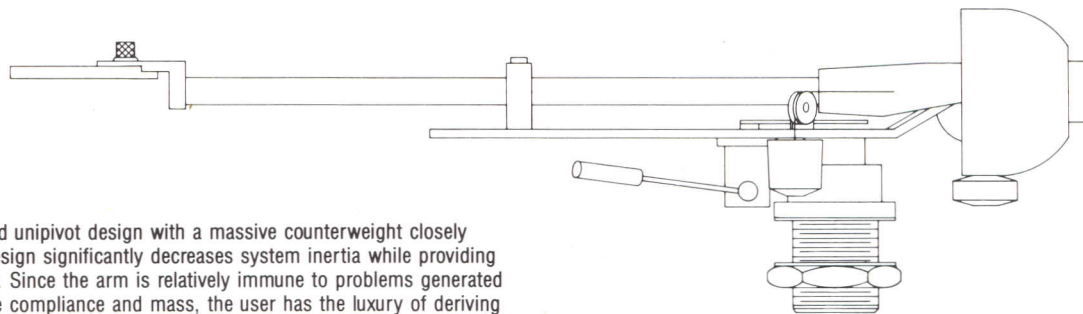
### SPECIFICATIONS

	SMG	MG-I (IMP.)	MG-IIB
Response	± 4dB - 50Hz-16 kHz	± 4dB - 45Hz-18 kHz	± 3dB - 40Hz-18 kHz
Sensitivity	1W-500Hz-90dB @3 ft.	1W-500Hz-87dB @3 ft.	1W-500Hz-84dB @3 ft.
Impedance	4 ohms Purely Resistive	5 ohms Purely Resistive	5 ohms Purely Resistive
Power Requirements	20W RMS Min., 100W RMS Max.	40W RMS Min., 200W RMS Max.	75W RMS Min., 200W RMS Max.
Crossover System	6dB/oct. @2400Hz	6dB/oct. @1600Hz	6dB/oct. @400-1600Hz
Finish	Oak Side Moldings, Brown Fabric	Oak Moldings, Off-white Fabric	Oak Moldings, Off-white Fabric
Dimensions	24 1/4" x 48 9/16" x 1 3/4"	22" x 60" x 2"	22" x 71" x 2"
Weight/Per Unit	28 lbs. each	35 lbs. each	45 lbs. each
Shipping Weight	70 lbs.	85 lbs.	100 lbs.

**NOTE:** Specifications seldom reflect the true performance qualities of high fidelity components.

### PHONO TRACKING ARM

- Undamped unipivot
- Carbon fiber headshell
- Correct geometry
- Carbon fiber arm tube
- Gold plated connectors
- Low capacitance phone cable
- This tracking arm features continuously adjustable vertical tracking angle while playing.



The Unitrac I is an undamped unipivot design with a massive counterweight closely coupled to the pivot. This design significantly decreases system inertia while providing extreme rigidity and stability. Since the arm is relatively immune to problems generated by wide variance in cartridge compliance and mass, the user has the luxury of deriving optimum performance from a wide variety of cartridges.

Other important features are: precision cartridge alignment capability including VTA adjustment while playing a record; an isolated audio cable assembly which is required when using spring suspended tables; an inexpensive means for cartridge interchange; and a system utilizing a test record for adjusting optimum tracking force and antiskate.

In order to fully enjoy all the performance your expensive cartridges and records are capable of, this arm is a must—and at a reasonable price.

## UNITRAC® I

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