MAGNEPLANAR MG - 1.4

Instruction Manual

MAGNEPAN
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MAGNEPLANAR MG-1.4

INSTRUCTION MANUAL

1. INTRODUCTION

Congratulations on your purchase. The Magneplanar MG-1.4 loudspeaker was conceived and designed for perfectionists. One of the most revealing loudspeakers made, it will provide outstanding music reproduction when used with high quality components. Due to the elegant simplicity and ruggedness of the design, the Magneplanar MG-1.4 loudspeaker will give many years of trouble-free service.

2. GENERAL DESCRIPTION

Your Magneplanar MG-1.4 loudspeaker system consists of one pair of oak-framed screens. Each screen contains one full-range planar driver. The driver element consists of a bass and a tweeter section on a common mylar diaphragm.

3. PACKAGING

Save all packaging. If you need to transport the speakers they can be shipped safely only in the original packaging. You may never have to return your loudspeakers, but should the occasion arise, they should not be shipped in any packaging but the original. Should you discard it, packaging is available.

4. ASSEMBLY AND HOOKUP

A. Remove panels and feet from carton.

B. Install feet on the back of the speakers and tighten the screws.

C. The MG-1.4 features new, high-current connectors which give an optimum contact area with speaker cables up to 10 gauge. Just strip ½" of insulation from the end of the cable. Insert the cable in the connector and tighten the set-screw with the Allen wrench provided. Banana plug connectors can be used, and locked in place with the set-screw. To insure proper phasing of speakers make sure that the plus (red) is to plus and the

minus (black) is to minus.

D. Since the Magneplanar MG-1.4 is a 5 ohm loudspeaker, some power losses are possible when wire of too small a diameter is used for a given length. For instance, 20 feet of two-conductor #22 gauge speaker wire will yield only 75-85 watts from a 100 watt amplifier (150-170 watts from a 200 watt amplifier). This can result in as much as a 25% power loss! We recommend a Minimum of #14 gauge wire (the smaller the number, the larger the wire) for runs up to 20 feet. #12 gauge or larger is recommended for wire length of 20 feet or longer.

5. **CAUTION--CAUTION--CAUTION**

A. The speakers are shipped with 2 amp normal blow fuses in line with the tweeters. (The bass section does not require fusing protection.) This fuse value should never be increased or bypassed. Do not use slow-blow fuses. If these precautions are taken, our destruct tests show that it is impossible to burn out these drivers. **BURNED OUT TWEETERS ARE NOT COVERED UNDER THE WARRANTY.**

B. Do not exert pressure against top end of panel while standing on the feet.

C. When moving or carrying speaker, take care not to drop on a corner or the edge of the feet.

D. For owners with cats, we recommend cat repellant around the base of the speakers.

6. **SPEAKER PLACEMENT**

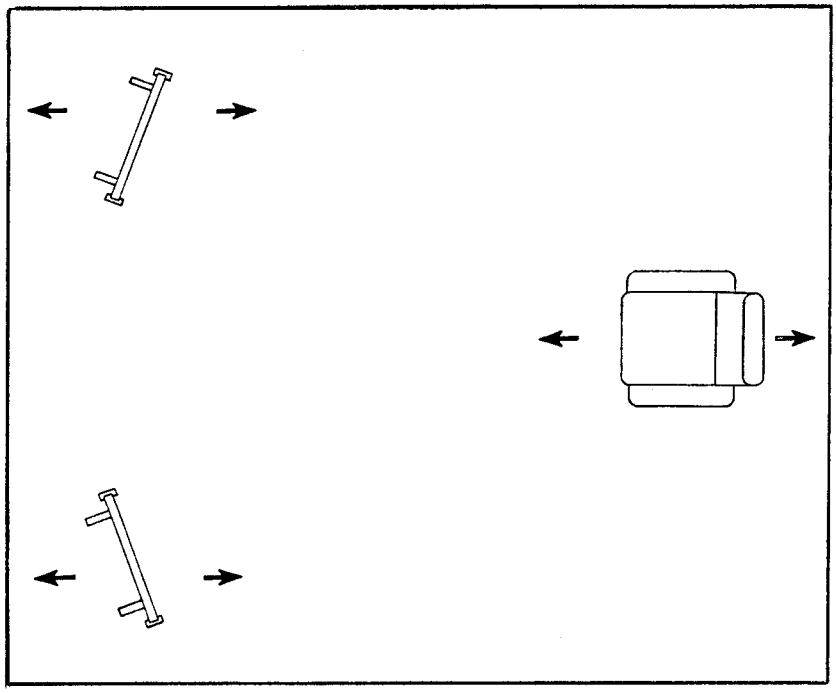
Proper speaker placement and room acoustics can have more effect on a music system than upgrading one of the components in the system. Unfortunately, there is no definitive guideline which will cover all possible listening rooms. Some experimentation is required for locating the optimum position. The following are a few general guidelines:

A. BASS RESPONSE If you do not have access to a spectrum analyzer, play a record with a repetitive bass line (preferrably an acoustical bass instrument). Try the speakers in several parts of the room. Start experimenting with the speakers about 3 feet from the back wall. Try moving the speakers forward or backward by increments of 6 to 12 inches at a time. One part of the room should be noticeably better than the rest, as should one distance from the rear wall. See Figure 1.

B. STEREO WIDTH AND IMAGING--Once you have located the best position for the speakers and your chair for bass performance, separate the speakers by 50% of the distance from your chair to the speakers. (For example, if your chair is 10 feet from the speakers, move the speakers 5 feet apart.) Now, move the speakers apart in increments of 3 or 4 inches at a time, listening carefully at each position. At some point you will start to hear two separate speakers instead of a "stage effect" (or continuous image). If you have a hole-in-the-middle effect, your speakers are too far apart: begin moving the speakers back in small increments until you notice a point at which you achieve one cohesive "sound stage."

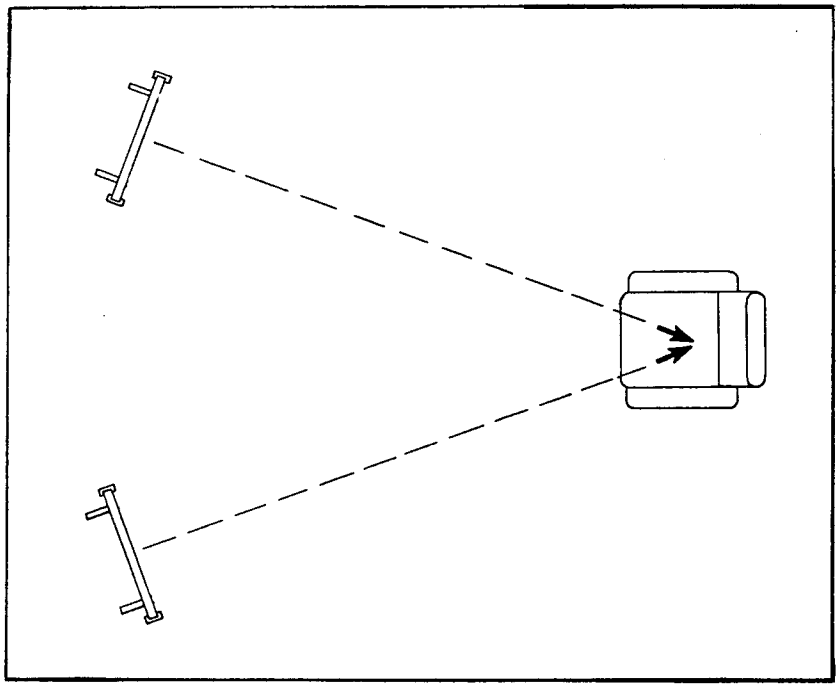
C. PHASING--To fine tune the phasing between the tweeter and mid-range, place the tweeters on axis with the listening position as shown in Figure 2.

The MG-1.4's are matched pairs and mirror-imaged. The serial number for each speaker in the pair is the same, except for a "1" or "2" following each serial number. As you face the front of the speaker pair, the speaker with the "1" after its serial number has the tweeter near the left edge, and the speaker with the "2" has the tweeter near the right edge.



ADJUSTING FOR BASS

FIGURE 1



PHASING

FIGURE 2

Depending on room acoustics and your own personal tastes, you may prefer the sound with the tweeters on the inside. In most rooms this will increase the central focus of the sound and may improve imaging. With either arrangement the smoothest frequency response is obtained by listening with the tweeters directly on axis as shown in Figure 2.

NOTE: Once you have located the ideal speaker position you should mark it. A small tack or piece of tape can be placed on the carpet so that your ideal listening spot can be easily relocated when the speakers (or chair) are moved for cleaning, etc. In the event that your ideal listening spot is inconvenient from the standpoint of the room layout and decor, simply slide the speakers wherever they look best. Experience has shown that the speakers can be placed close to a wall, and it will make little difference for FM or background listening.

The entire placement procedure may seem like a great deal of work, but is necessary in the set-up of any high quality system. The time and effort expended should only be necessary once, and will repay the owner with countless hours of musical enjoyment.

7. MAINTENANCE

A. The hardwood frames can be cleaned with a slightly damp dust cloth.

B. Light vacuuming of the grille cloth is possible.

C. In the event the speaker's fabric is soiled, use light, repeated applications of K2R Cleaner, allowing it to dry thoroughly. Brush lightly and blow the residual powder from the fabric.

8. **SPECIFICATIONS**

SYSTEM DESCRIPTION: Two-way full range dipole radiator

BASS RADIATING AREA: 428 Sq. In.

TWEETER RADIATING AREA: 68 Sq. In.

*FREQUENCY RESPONSE: ± 3dB from **40Hz to 18,000Hz

NORMAL POWER REQUIREMENTS: 100 Watts RMS

MAXIMUM RECOMMENDED POWER: Can be safely used with amplifiers up to 200 watts RMS per channel when fused per instructions

SENSITIVITY: 1 watt, 500Hz, one meter -87dB

IMPEDANCE: Purely resistive, 5 ohms at any frequency

CROSSOVER SYSTEM: 12dB/Octave @1000Hz

DIMENSIONS: 22" X 60" X 2"

WEIGHT: 35 lbs. each panel

FINISH: Panels covered with off-white, black or brown fabric, with oak trim

WARRANTY: LIMITED. 3 years to original owner

SHIPPING WEIGHT: 85 lbs.

*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 specifications are minimum average performance levels that may reasonably be expected in normal installations.

**New Magneplanar MG-1.4 speakers will not display their full bass potential. After a month or two of use the bass response will lower a few cycles. At this point the response will stabilize and the speakers rated performance (or better) can be realized. While this 5Hz or more of lower bass response is important, the most important factors in obtaining good bass response from the MG-1.4 speakers are room size and geometry, wall material, and speaker placement.