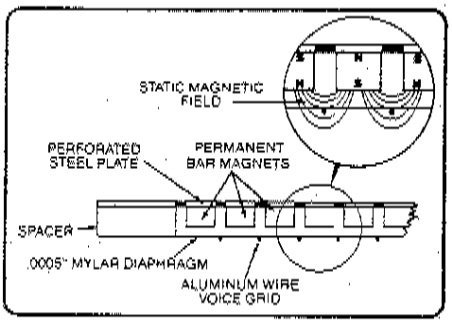
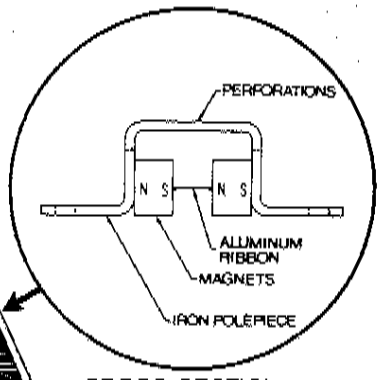
Two Unique Technologies

Planar-Magnetic Driver

- ☐ **Low Mass** .0005 inch diaphragm
- ☐ **Bi-Polar Design**—No cabinet to color sound
- ☐ **Direct Coupled**—No transformer is necessary. Subtle detailing is maintained with no dynamic compression
- ☐ **Mirror-Imaged** for stable stereo image
- ☐ **Linear Power Response**—No compression of dynamic range
- ☐ **Superb Power Response**
- ☐ **High Power** handling
- ☐ **Flat Impedance** for ideal amplifier loading
- ☐ **Accurate Phase** response



CROSS SECTION MIDRANGE-BASS



CROSS-SECTION RIBBON TWEETER

Line-Source Ribbon Driver

- ☐ **Lowest Mass** ribbon tweeter on the market
- ☐ **Direct Coupled**—No transformer is necessary. Subtle detailing is maintained with no dynamic compression
- ☐ **Bi-Polar Design** does not close off the ribbon, which allows the rear wave to radiate freely
- ☐ **Nearly Perfect 360°** horizontal dispersion at 20 kHz
- ☐ **Superb Power Response**
- ☐ **Line Radiator Design** allows excellent phasing with Magneplanar's line-source midrange
- ☐ **Flat Impedance** due to "straight wire" design
- ☐ **Wideband Operation** (2-40 kHz)

U.S. PAT. NOS. 4,319,096 & 3,674,946

SPECIFICATIONS

	SMGa	MG-Ic	MG-IIc	MG-IIIa
Description:	2-Way, Full-Range, Planar/ Magnetic Speaker System	2-Way, Full-Range, Planar/ Magnetic Speaker System	2-Way, Full-Range, Planar/ Magnetic Speaker System	3-Way, Combination Planar/ Magnetic and True Ribbon Tweeter
Frequency Response:	50 Hz to 18 kHz ± 3dB	45 Hz to 18 kHz ± 3dB	40 Hz to 18 kHz ± 3dB	32 Hz to 40 kHz ± 3dB
Recommended Power:	40 to 150 Watts RMS, 8 Ohms	50 to 200 Watts RMS, 8 Ohms	50 to 200 Watts RMS, 8 Ohms	75 to 200 Watts RMS, 8 Ohms
Sensitivity, 1 Watt/1 Meter:	90dB	85dB	84dB	85dB
Impedance:	4 Ohms, Resistive	5 Ohms, Resistive	5 Ohms, Resistive	4 Ohms, Resistive

MAGNEPAN

1645 Ninth Street, White Bear Lake, MN 55110

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MAGNEPLANAR MG-IIc

INSTRUCTION MANUAL

1. INTRODUCTION

Congratulations on your purchase. The Magneplanar MG-IIc 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-IIc loudspeaker will give many years of trouble-free service.

2. GENERAL DESCRIPTION

Your Magneplanar MG-IIc loudspeaker system consists of one pair of oak-framed screens. Each screen contains one full-range planar driver. The element consists of a bass/mid-section and a tweeter section on a common mylar diaphragm. Although the MG-IIc system is set up for conventional amplification, the loudspeaker inputs provide bi-amplification as an option.

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, factory packaging is available.

4. SPEAKER ASSEMBLY

The four support feet for the MG-IIc speakers are shipped in the separate accessory carton along with the eight mounting bolts. Two feet must be fastened to the backside of each of the panels. The nuts are already installed in the panels.

SUPPORT FEET INSTALLATION

A. Stand speakers upright as shown in Figure 1.

We suggest that you have a second person hold the speakers during installation to ensure they do not fall.

B. Locate the four holes in the fabric along lower backside of the panel.

C. Carefully slide a foot from the backside under the panel so the holes in the foot align with the holes in the panel. Insert bolts through the foot and into the panel until they engage nuts in the panel. Tighten with a Phillips #2 screwdriver. Care should be taken so that the bolts are not cross-threaded.

D. Repeat Step C for remaining feet.

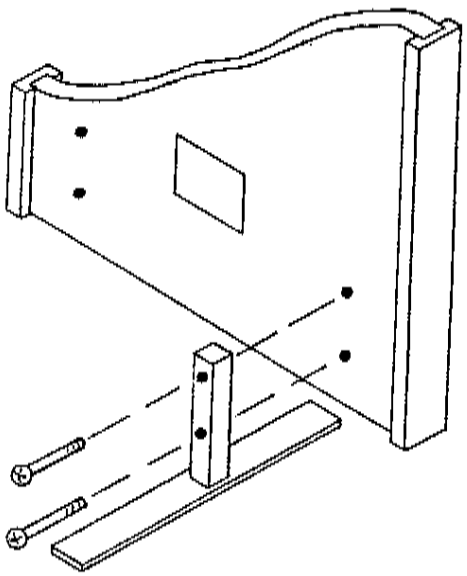


FIGURE 1

5. HOOKUP

A. This section covers set-up with a single amplifier. For instructions on bi-amplification refer to Section 9.
The MG-IIc 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. To insure proper phasing of speakers make sure that the plus (red) is to plus and the minus (black) is to minus.

B. Since the Magneplanar MG-IIc 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 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 of up to 20 feet. #12 gauge or larger is recommended for wire length of 20 feet or longer.

6. CAUTION--CAUTION--CAUTION

A. The speakers are shipped with 1½ 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.

*Fuses remain in effect when bi-amplifying.

D. For the month or so, the adhesive on the speaker diaphragm may have enough tack to cause the fabric to stick to the diaphra if the fabric is pressed against the back of the speaker. This will not damage the speaker and the fabric may be gently pulled free.

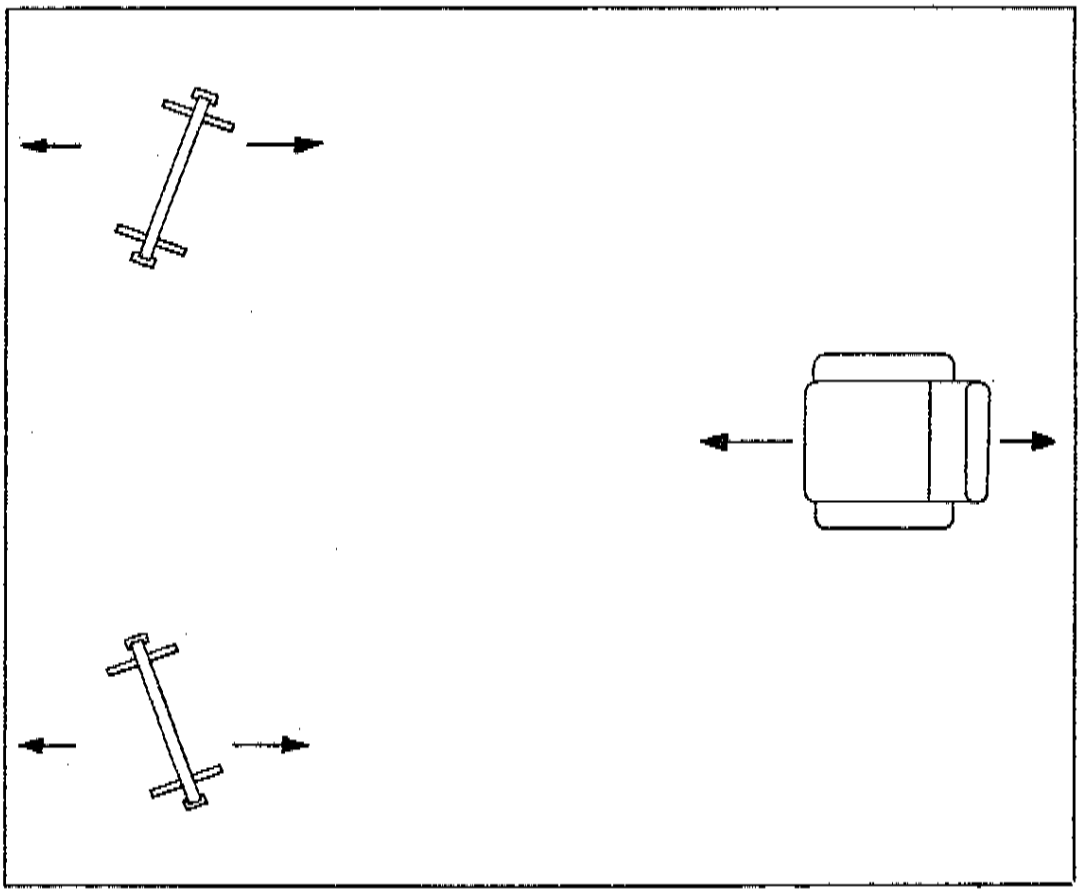
E. For owners with cats, we recommend cat repellant around the base of the speakers!

7. 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 2.

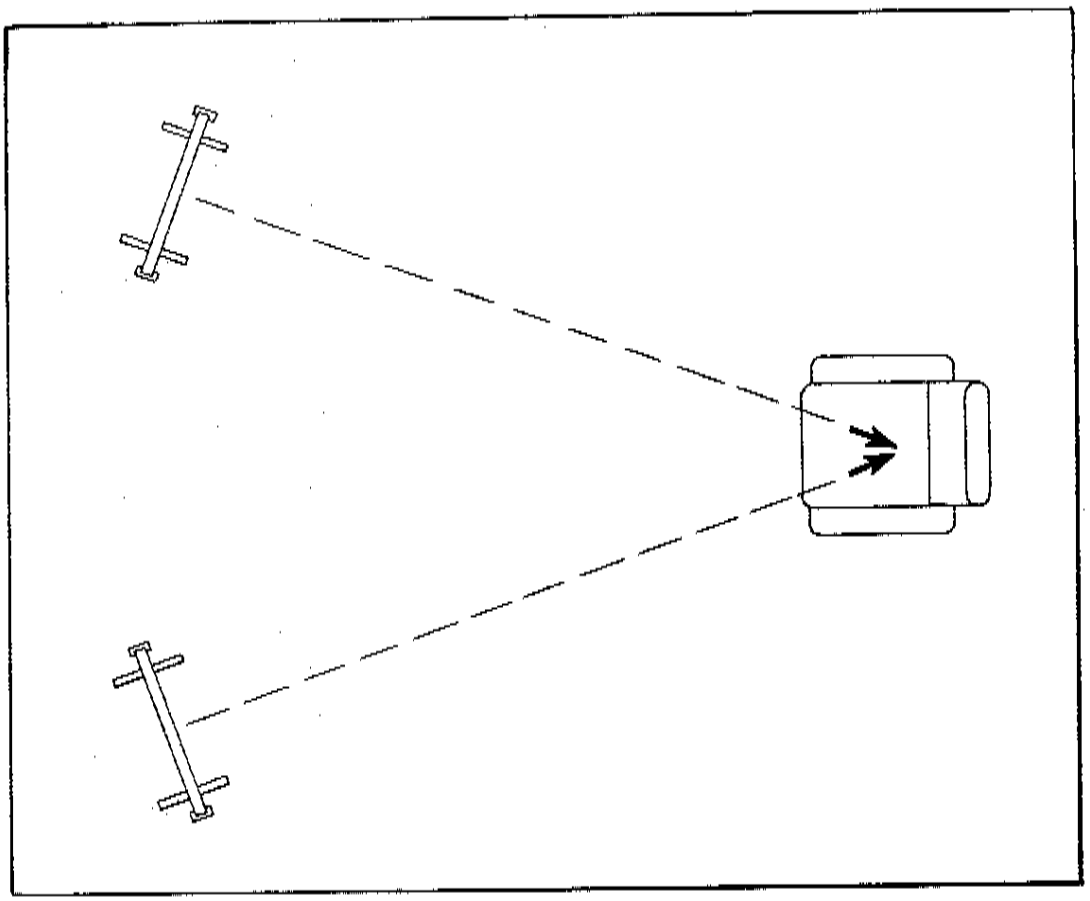
B. STEREO WIDTH AND IMAGING--Once you have located the best position for the speakers and your chair for bass performance, separate the speakers by 50% of the distance from your chair



ADJUSTING FOR BASS

Figure 2

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, you 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."



PHASING

Figure 3

C. PHASING--To fine tune the phasing between the tweeter and mid-range, place the tweeter on axis with the listening position as shown in Figure 3. Depending on room acoustics and your own personal tastes, you may prefer the sound with the speakers reversed (left on right, and right on left). In many rooms this will increase the central focus of the sound and improve imaging. With either arrangement, the smoothest frequency response is obtained by listening with the tweeters directly on axis.

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.

8. BI-AMPLIFICATION

The MG-IIc is arranged conveniently for bi-amplification. By adding an additional stereo emplifier and a crossover you can enjoy the benefits of increased dynamic range and lower distortion.

Owners of receivers and integrated amplifiers are not excluded from the benefits of bi-amplification, if they can use the preamp and amplifier sections independently from each other. Tests indicate that many receivers and integrated amplifiers have power amplifier sections which make good tweeter amplifiers when they are freed from the high power demands of bass reproduction.

A. BI-AMPLIFICATION WITH MAGNEPLANAR XO-1--You can obtain from your Magneplanar dealer an XO-1 passive crossover, which utilizes a simple, high-quality capacitor network for the midrange/tweeter section, and is used in conjunction with the low-pass portion of the crossover which is built into the MG-IIc. This allows the least amount of signal processing, giving the purest possible reproduction of all frequencies. The XO-1 includes controls to balance the bass amp to the mid/treble amp.

SEE THE XO-1 MANUAL FOR SPECIFIC INSTRUCTIONS AND PRECAUTIONS.

9. MAINTENANCE

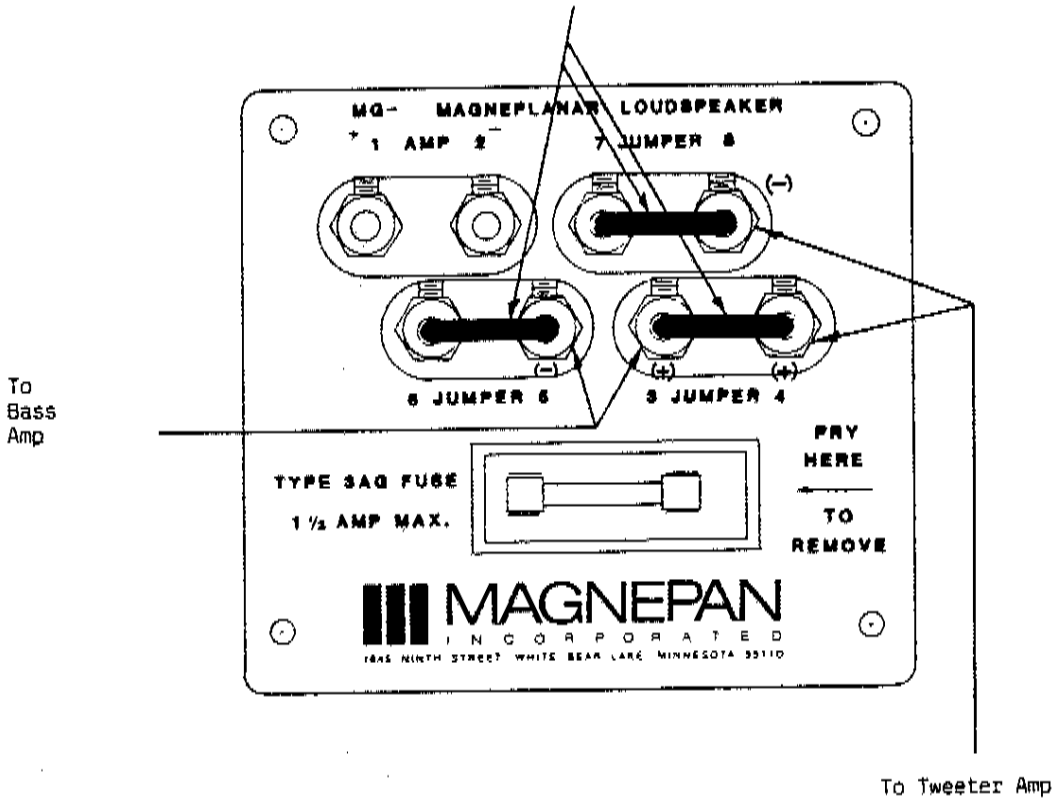
A. The wood frames can be cleaned and polished with standard furniture wax.

B. Light vacuuming of the grille cloth is possible.

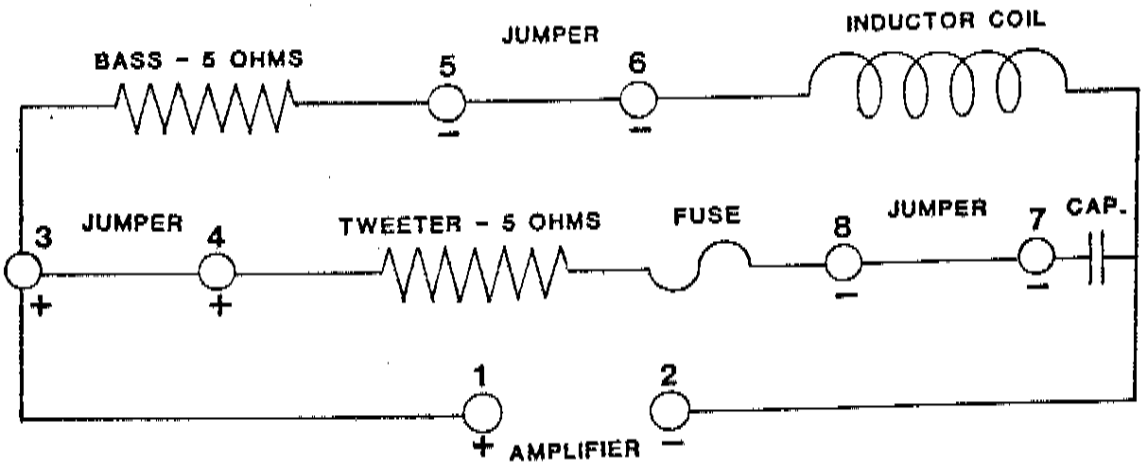
C. In the event the speaker's fabric is soiled, use light, repeated applications of K2R Cleaner, allowing the cleaner to dry thoroughly. Brush lightly and blow the residual powder from the fabric.

BI-AMPLIFICATION WITH ELECTRONIC CROSSOVER

Remove Jumpers



ELECTRICAL DIAGRAM



10. SPECIFICATIONS

SYSTEM DESCRIPTION: Two-way full-range dipole radiator

MIDRANGE/BASS RADIATING AREA: 500 Sq. In.

TWEETER RADIATING AREA: 68 Sq. In.

*FREQUENCY RESPONSE: ± 4dB from **40Hz to 18,000Hz

MINIMUM POWER REQUIREMENT: 50 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 84dB

IMPEDANCE: Purely resistive, 5 ohms at any frequency

CROSSOVER SYSTEM: 6dB/Octave Low-pass--400Hz. High-pass--1600Hz

DIMENSIONS: 22" X 71" X 2"

WEIGHT: 45 lbs. each

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

WARRANTY: Limited. 3 years to original owner

SHIPPING WEIGHT: 100 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 curves are minimum average performance levels that may reasonably be expected in normal installations.

**New Magneplanar MG-IIc speakers will not display their full bass potential. After a month or two of use the bass response will lower 5Hz or more. 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-IIc speakers are room size and geometry, wall material, and speaker placement.