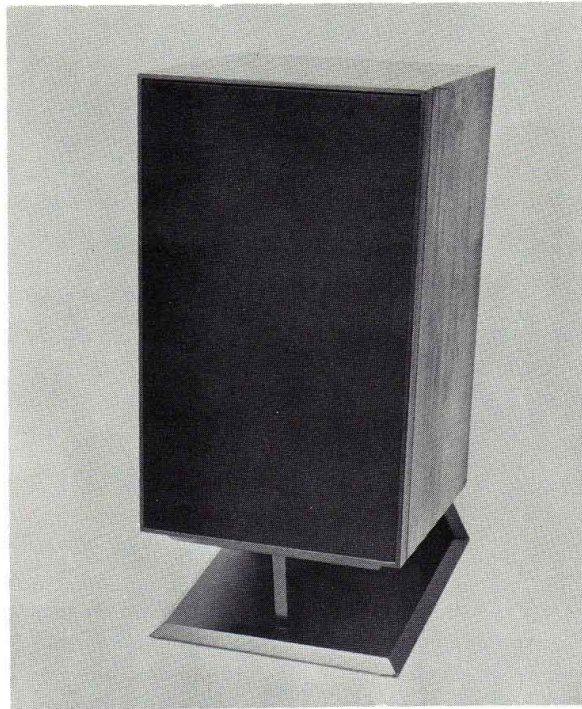


RECTILINEAR 5

Contemporary Laboratory Series



INSTRUCTIONS FOR THE USE OF THE RECTILINEAR 5 BOOKSHELF/FLOOR SPEAKER SYSTEM.

1. CONNECTION FROM AMPLIFIER TO SPEAKERS:

The Rectilinear 5 is a medium efficiency system, designed for use with amplifiers of at least 30 watts RMS per channel. Wiring between amplifier and speakers should be heavy gauge, (18 gauge minimum), insulated lamp cord wherever possible. Small gauge "speaker wire" is absolutely *not* recommended for use with this system as it will cause a loss of power output and increased distortion from your amplifier.

When connecting the Rectilinear 5's to your amplifier, be sure they are wired in-phase. This means that the black binding post of each speaker system should be connected to the terminal marked either common ground or (-) of your amplifier. The red binding post of the speaker should be connected to the terminal of the amplifier marked "8 ohms" or (+). Connect the left speaker system to the left output terminals of the amplifier and the right speaker system to the right amplifier terminals, (SEE figure 1). Wiring the loudspeakers in-phase assures that no cancellation of sound will occur due to the left and right speakers' cones moving in opposite directions. A dual plug is enclosed with each system for ease of installation. No soldering is required to connect wires to these plugs. To install, strip about 1/2" of insulation from the end of each wire. Loosen the screws visible in the interior of the plug. Insert the stripped end of the wire into the hole of the plug, then tighten the screw firmly to grip the wire. If you wish, you may connect directly to the speaker binding posts by turning the plastic sleeve counterclockwise to open, inserting the wire in the hole of the post, and re-tightening the sleeve down.

2. PHASING YOUR RECTILINEAR 5 SYSTEMS:

The simplest way to be certain that you have wired your speakers in-phase is as follows:

You will notice that the dual plugs supplied have a small raised rib on one side marked GND. One lead of wire should be connected to this side of the plug; the other end of which should go to the ground or minus (-) of your amplifier. The other lead from the other side of the plug goes to the (+) of your amplifier or 8 ohms (if you are using a tube amplifier). Now insert the plugs into the dual binding posts; the GND side into the black plug and the other side into the red plug. Place the two speakers close to each other facing you, and play a *monophonic* speaking voice either from a record, tape, or FM broadcast. Now stand directly in front of the space between the two speakers and move slowly from side to side IE: from the front of one speaker to the front of the other one. The voice should be heard in the space directly between the speakers. If you hear the voice as more pronounced as you get closer to the front of the left and then the right speaker; then the speakers are out of phase. Simply remove the plug from one speaker *only* and reverse it. They should now be in-phase. If you wish, you may correct the wiring of that plug and reverse it back to it's original position. Now whenever you decide to move the speakers for any reason, you can simply remove the plugs and re-connect them following the GND to black orientation without checking for phase.

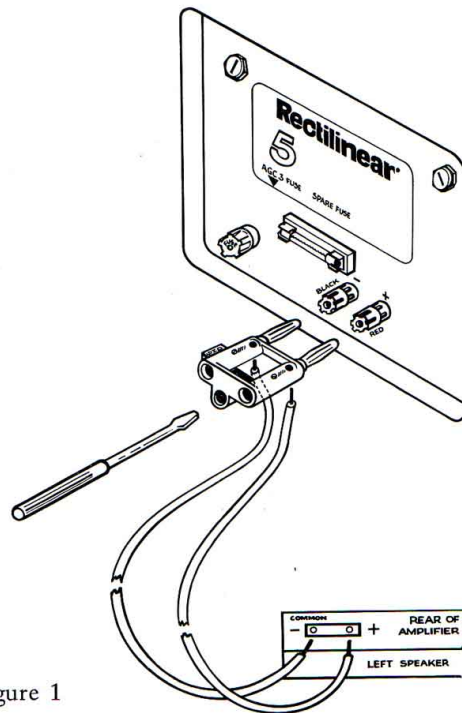


Figure 1

3. SPEAKER PLACEMENT:

The placement of a loudspeaker in a room very strongly influences the tonal balance of the reproduced sound. Room size, ceiling height, wall materials, carpeting and drapes all affect the sound reproduction. You should experiment somewhat with the speaker placement before making a permanent installation. Generally speaking, if possible, the Rectilinear 5's should be placed 8 to 12 feet apart along the same wall. However, closer or wider spacing may give better reproduction in some rooms. Some increase in bass response may be expected if the systems are placed in the corners of a large room. The Rectilinear 5 is not suitable for use directly on the floor. Though installation on shelves is O.K., we are aware that only very sturdy shelves can accommodate a speaker that weighs 56 pounds. The RECTILINEAR DISPERSION BASE* was designed as an optional, asymmetrical pedestal, to overcome problems with speakers mounted close to the floor, namely undesirable mid-bass lift and parallel standing waves. If it is not convenient or desirable to

* Patent Pending

use the RECTILINEAR DISPERSION BASE we recommend that the speaker be mounted at least 12" from the floor and not more than 5' from the floor. If the speaker must be mounted close to a ceiling, then a reverse procedure should be followed IE: the speaker should be tilted downward at a slight angle either by use of brackets or hanging.

4. FACTORY PRE-SET CONTROLS:

In the upper corners of the filter network you will notice two controls sealed with red lacquer. These controls are the final adjustments made by our quality assurance department, as the system is being tested, prior to packing and shipment. The controls are internally locked and then sealed with red lacquer. *Under no condition should you attempt to break the seal and re-adjust the controls. The control will physically break internally and it will be impossible to return it to the pre-set condition. Any unit that indicates control tampering will automatically void your warranty.*

5. REQUIRED AMPLIFIER POWER:

The Rectilinear 5 is a medium efficiency speaker system requiring substantial amplifier power for a high sound level. It is therefore strongly suggested that an amplifier of at least 30 watts "RMS" power per channel be used with the Rectilinear 5. The use of 50 to 250 watt "RMS" amplifiers for large rooms and high sound levels is not unreasonable.

6. POWER HANDLING AND FUSING:

The Rectilinear 5 is capable of enormous music input. During the fuse value determination tests, it was fed a continuous average of 35 to 45 volts, IE: 320 to 412 watts! An orchestral climax of 57 volts (731 watts), blew a fuse in one channel. There are modern amplifiers being used which can attain instantaneous peaks of close to 1000 watts. Rectilinear engineering felt it would be more practical to fuse the Rectilinear 5 than risk burnout and replacement cost of damaged drivers. The value of the fuse is: AGC 3. The filter network contains a fuse holder as well as a spare fuse block.

7. TECHNICAL ASSISTANCE:

If you require any additional help in setting up your sound system, please write to our engineering department stating as fully as possible what problems or symptoms you are experiencing. Address inquiries to:

Rectilinear Research Corp.
107 Bruckner Boulevard
Bronx, New York 10454
Attn: Engineering Dept.

8. GRILL BAFFLE:

The grill baffle is attached to the enclosure by means of a group of velcro closures. If for any reason the grill baffle *must* be removed, care should be taken to avoid damage to the inside edge of the front lip of the enclosure. The tip of a thin butter knife or equivalent should be inserted between the edge of the grill and the inside lip of the enclosure. Do not use a pointed knife or screwdriver. Then pry the grill forward and remove with a strong, but *slow peeling motion*. The grill baffle can be replaced on the enclosure but care must be taken that the correct orientation of the two openings be made. The large round hole should be placed over the 12" woofer.

9. SPECIFICATIONS:

Frequency response	32 to 20,000 HZ +- 2DB
Impedance	6 ohms Nominal
Power handling	For reproduction of music, the Rectilinear 5 may be used safely with amplifiers rated up to 250 watts RMS per channel. For information regarding sine wave testing, please contact our engineering dept.
Fuse	AGC 3 (Standard Fast Blow)
Dimensions	25" x 15" x 14½"
Shipping Weight	72 lbs.

IMPORTANT NOTICE:

THIS IS NO LONGER APPLICABLE

~~Diffuser tape on Grill of midrange should not be removed. Midrange dispersion will be affected if this tape is removed.~~

IF THIS UNIT WAS DEFECTIVE WHEN PICKED UP FROM YOUR LOCAL DEALER:

Notify the dealer immediately. He, in turn should notify the transportation company who delivered it to him, request an inspection, and file a claim. Hold the merchandise and its carton for inspection.

Military and International Inquiries to:

Rectilinear International
107 Bruckner Blvd.
Bronx, N.Y. 10454
TELEX # 235 383 NEAR UR
CABLE # RECRECO NEWYORK



RECTILINEAR RESEARCH CORP. • 107 Bruckner Boulevard, Bronx, N. Y. 10454, 212 585-9400



Rectilinear®
FIVE YEAR CUSTOMER WARRANTY

WARRANTY
REGISTRATION CARD

MUST BE MAILED WITHIN 10 DAYS OF PURCHASE

NAME (Please Print) _____

ADDRESS _____ ZIP _____

DEALER _____

ADDRESS _____ ZIP _____

DATE PURCHASED _____

RECTILINEAR

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Contemporary Laboratory Series

SERIAL NO. **Nº 4074**

RECTILINEAR

5

SERIAL NO. **Nº 4074**

FIVE YEAR CUSTOMER WARRANTY

Contemporary Laboratory Series

Rectilinear Research Corp. warrants this speaker system to be free of defective material and faulty workmanship for a period of FIVE YEARS from date of purchase. Rectilinear Research Corp., at its own option, will repair this product at NO CHARGE FOR PARTS AND LABOR if, in our opinion, the complaint is caused by defective parts or faulty workmanship.

If you should encounter any difficulty with this speaker system, write to us stating the problem. List the make and Model Numbers of all components being used within the system and the name of the Dealer from whom purchased. If, in our opinion, the product must be returned to the factory, we will send you authorization for return. NO RETURNS WILL BE ACCEPTED WITHOUT OUR AUTHORIZATION. Freight must be prepaid and insured. After repairs unit will be returned to you, freight prepaid and insured within the continental limits of the United States. Out of warranty repairs will be charged for parts and labor and shipped insured, freight charges collect.

This Guarantee is void if the serial number is removed, the product has been tampered with, abused or opened without our written permission or if warranty card is not mailed in within 10 days of purchase.

No person, company or corporation is authorized to issue any warranty(s) in lieu of this warranty and RECTILINEAR RESEARCH CORP. shall not accept any responsibility for any such warranty(s) written or implied.

RECTILINEAR RESEARCH CORPORATION 107 Bruckner Boulevard • Bronx, New York 10454

STAMP
HERE

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107 Bruckner Boulevard

Bronx, New York 10454

U.S.A.

WARRANTY REGISTRATION CARD

IMPORTANT NOTICE

Any high fidelity loudspeaker system can be severely damaged by high power overloads.

Keep your Volume Control Setting Low. Most speaker damages are caused by tuning the FM or AM band at High Volume Settings; dropping the tone arm or running it across the grooves of a record; using the speaker as a guitar reproducer, or in a public address system with live musical instruments; or switching from one mode to another on your preamplifier.

Any of these usages can produce enormous and destructive power content from even a modest amplifier.

PROTECT YOUR WARRANTY

If you value your speaker systems, whether they are Rectilinear's or not, do not subject them to this abuse. There are public address speaker systems designed for large power handling, Not High Fidelity, that are available for such applications. Charges for repairs will be made, if, in our judgement, speakers returned with burned out or shifted voice coils are caused by such abuse.

RECTILINEAR RESEARCH CORP.

107 BRUCKNER BLVD., BRONX, N.Y. 10454 (212) 585-9400