

The Harman-Kardon

330A

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AM/FM/Stereo FM  
Solid State Receiver

**harman/kardon**

THE MUSIC COMPANY

**Instruction Manual**

## INTRODUCTION

Congratulations, You have just purchased one of the finest stereophonic music centers available. Your receiver represents the successful culmination of many years of intensive research in solid-state technology—a product literally born of space-age development. Before you lies the magnificent sound of recorded music as you have never heard it before.

We know how anxious you are to install and listen to your new receiver. However, a few moments spent in reading this instruction booklet will pay vast dividends in the ultimate enjoyment of your music system.

Please retain this booklet for it contains valuable information.

## WARRANTY and SERVICE POLICY

### POLICY

We warrant each unit to be free from defects in material and workmanship under normal use and service, and in accordance with the conditions set forth below. Should a defect occur within the period specified, and provided that the unit is returned to either HARMAN-KARDON or an authorized HARMAN-KARDON warranty station, transportation prepaid, and which our examination shall disclose to our satisfaction to be defective, we will, for a period of two (2) years from date of purchase, either replace or repair and install any defective parts of the stereo receiver free of charge.

### EXCEPTIONS

This warranty does not include any obligation as to:

- a) repair or replacement of the accessory wooden enclosure due to damage incurred after initial delivery.
- b) transportation charges to and from the factory or an authorized warranty station.

### REGISTRATION:

To obtain service under the terms of this policy, it is necessary for you to retain your ORIGINAL BILL of SALE. The enclosed registration card will NOT be considered proof of purchase.

In the event your equipment requires service during the warranty period, only presentation of your original bill of sale to either a factory-authorized repair agency or the factory, itself, will insure your rights under the policy, as outlined in this manual.

This warranty is not applicable to any instrument which shall have been repaired or altered in any way so as, in our judgment, to affect its stability or reliability or has been subject to neglect, misuse, abuse, negligence, or accident; or which has had the serial number altered, effaced or removed. Neither shall this warranty apply to any instrument which has been connected other than in accordance with instructions furnished by us.

### SERVICE

HARMAN-KARDON has a special customer service division to answer all questions pertinent to the installation and operation of your unit. Please feel free to write to us at any time and we shall endeavor to offer prompt and complete advice.

If your problem cannot be resolved through our combined efforts, we may wish to refer you to a local authorized repair agency or we may prefer to authorize the return of your unit to the factory. In the event it must be returned, an authorization form and proper packing instructions will be forwarded to you. This authorization form MUST BE RETURNED with your unit.

**UNDER NO CIRCUMSTANCES SHOULD YOUR UNIT BE SHIPPED TO THE FACTORY WITHOUT PRIOR AUTHORIZATION.**

This warranty is in lieu of all other warranties, expressed or implied, and of all other obligations or liabilities on our part, and we neither assume nor authorize any representative or other person to assume for us any other liability in connection with the sale of this instrument.

# INSTALLATION PROCEDURE

## VENTILATION

Although your new Receiver rarely develops high heat, it is still recommended that you leave the back of the cabinet open. If this is not possible, provide several large holes or slots as low down and as high up in the cabinet back as possible. As an alternative, holes may be provided in the sides, bottom or top of the cabinet. Remember that really effective ventilation requires provision for cool air to enter at the bottom and hot air to leave at the top. A minimum clearance of two (2) inches should be allowed on each side and in the rear, between the chassis and the cabinet, and three (3) inches are required above it.

Isolate any accessories which might interfere with ventilation. For example, do not drape plastic or rubber covered interconnecting cable over the equipment.

The rear panel surface of your receiver has been designed as a heat dissipating device for the output transistors. This area will become warm under normal use and should not be cause for concern.

## POWER REQUIREMENTS

Connect the AC line cord to any outlet furnishing 117 volts, 60 cycle AC current. The voltage may vary between 105 and 125 volts. An auxiliary AC power outlet is provided on the rear panel of your receiver. Any accessory equipment (tape recorder, phonograph record player, etc.) may be connected to this receptacle and will be controlled by the POWER switch on the front panel.

## SPEAKER PHASING

When more than one speaker is used in a music reproducing system, the speakers must be connected in a manner which will allow them to work together. Both left and right speakers must operate in perfect unison, moving back and forth together. If the speakers are moving in opposite directions, the result will be diminished bass response and decreased realism of sound. When this occurs, the speakers are said to be out of phase. Checking for proper phase and correcting, if required, is quite simple.

1. After connecting your speakers, place the stereo receiver in the A + B or monophonic mode of operation.
2. Play a record tape, or FM broadcast which has a single speaking or singing voice, or a solo instrument.
3. The voice or instrument should appear to be coming from an area directly between the two speakers. If the speakers are out of phase, the sound will appear to be coming from the two individual speakers.
4. If you determine that the speakers are out of phase, simply disconnect the leads from only one of the speakers and reverse them. The system will then be in phase.

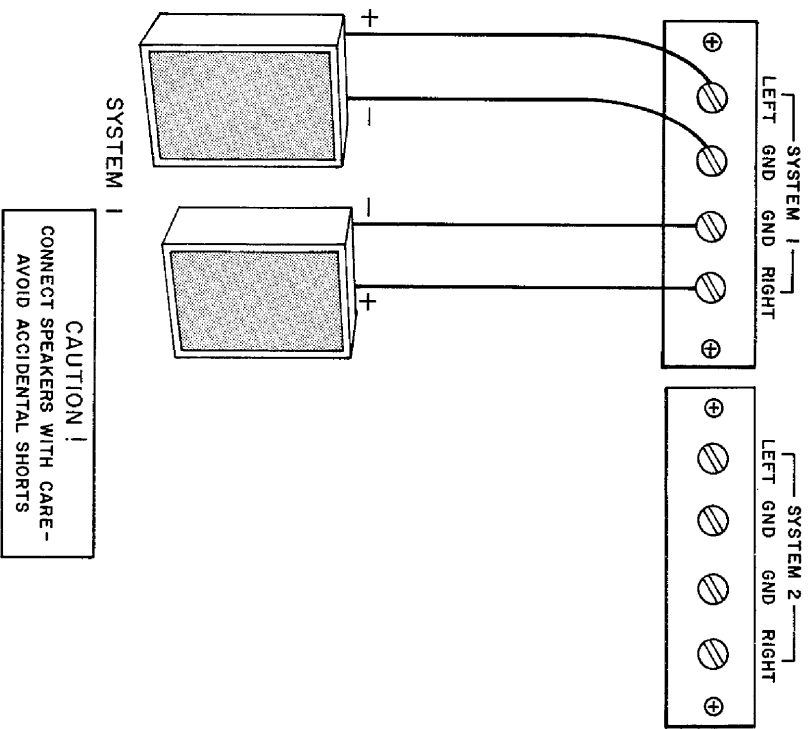
This completes your speaker connections. Your receiver is a solid state device which does not contain audio output transformers. It is therefore not necessary to match the impedance of your speakers to the receiver. Your unit will perform perfectly with any speaker which has an impedance of 4, 8 or 16 ohms.

## CONNECTING THE SPEAKERS FOR STEREO OPERATION (1 SYSTEM)

Your two speakers should be identical, if possible, to obtain optimum results. Experts agree that a perfectly matched system offers the best stereophonic reproduction. The speakers should be placed along the same wall approximately 8 to 10 feet apart depending upon room size and furniture placement. It may be necessary to experiment with speaker placement until best results are obtained.

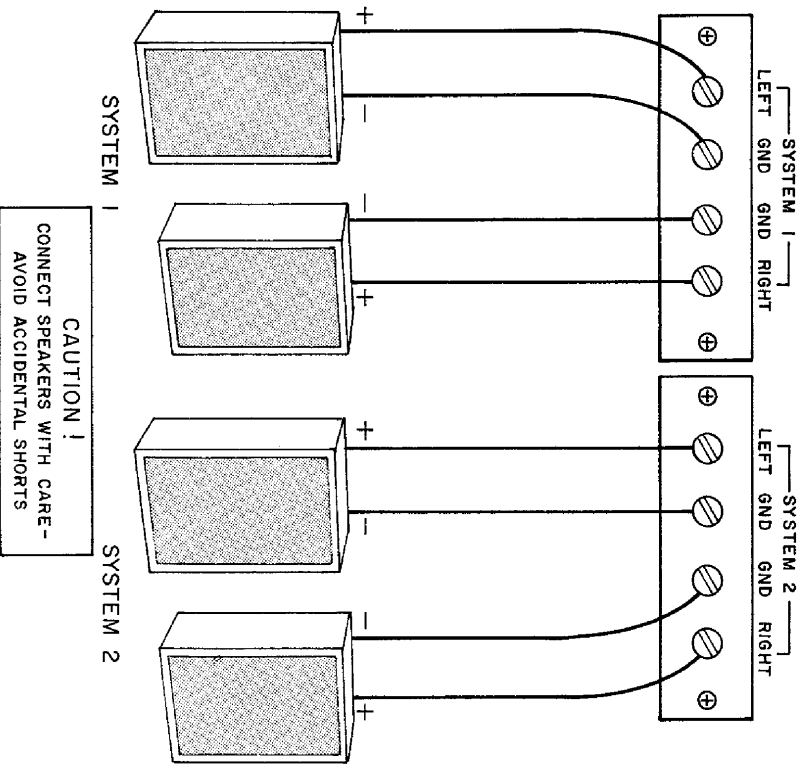
Use any type of wire to connect your speakers to your receiver. Lamp cord "zip cord" is excellent and may be easily dressed around the molding for an inconspicuous and neat installation. Do not drive the staples or tacks through the center of the wire for this may short out the two sections and will decrease the overall volume or short out the speakers entirely. It is permissible to use approximately 50 feet of speaker connecting wire for each speaker without loss of volume. **CONNECT SPEAKERS WITH CARE. AVOID SHORTS — THE RECEIVER HAS BEEN DESIGNED TO PREVENT DAMAGE FROM ACCIDENTAL SHORTING; HOWEVER, REPETITIVE SHORTING CAN DAMAGE TRANSISTORS.**

1. Connect one length of lamp cord to the left speaker. This is the speaker on your left as you face the speakers.
2. Attach the other end of the lamp cord to the terminals marked **SYSTEM 1 LEFT** located on the rear of the receiver.
3. Similarly connect another length of lamp cord to your right speaker.
4. Attach the other end of the lamp cord to the terminals marked **SYSTEM 1 RIGHT**.
5. Your receiver is now connected for one-system stereo operation and is operative when the **SPKR-1** switch on the front panel is in the on position.



## CONNECTING THE SPEAKERS FOR STEREO OPERATION (2 SYSTEMS)

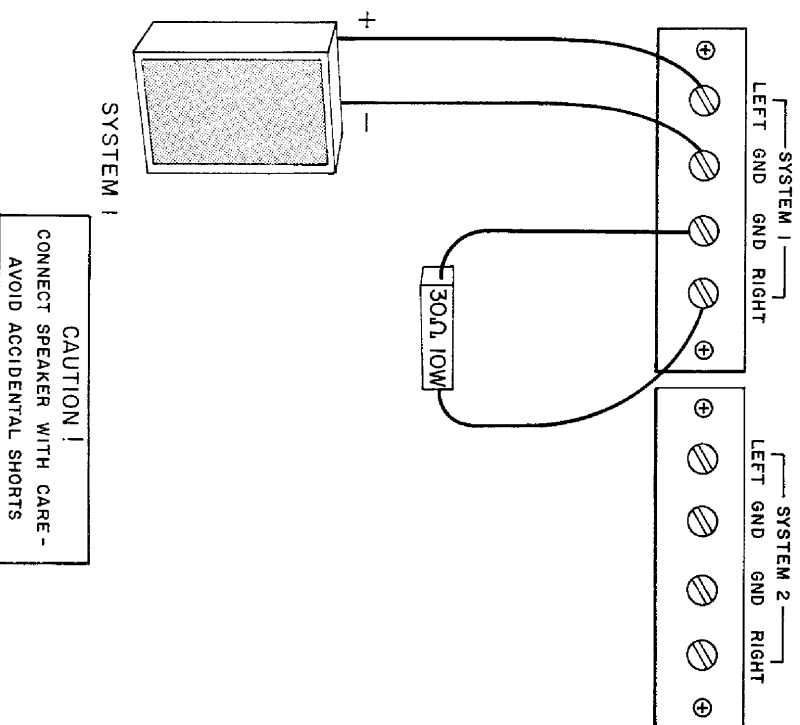
1. Connect all four speakers for two system operation as shown in Diagram B.
2. You may now select either system 1, or system 2 by the use of the speaker selector switches located on the left side of the front panel of your Nocturne receiver.



## CONNECTING THE SPEAKERS FOR MONOPHONIC OPERATION (1 SYSTEM)

If your receiver is to be used monophonically and stereo is to be added at a later date, it is essential that both speaker output terminals are terminated into a proper load to prevent damage to the output stage of the receiver. Refer to Diagram C for proper installation of the loading resistor.

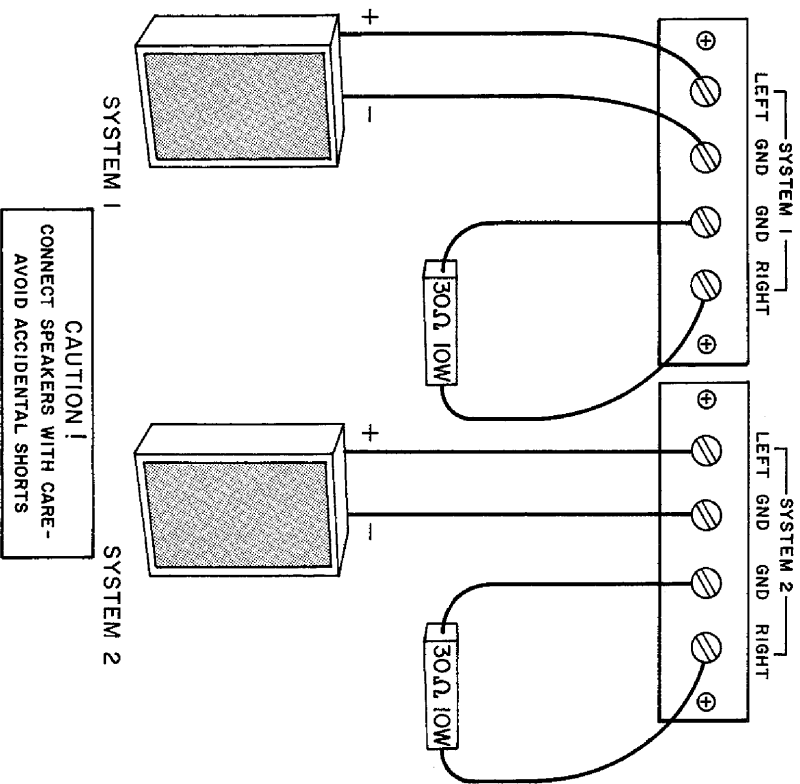
At no time should the output terminals be paralleled for monophonic operation!



## CONNECTING THE SPEAKERS FOR MONOPHONIC OPERATION (2 SYSTEMS)

If your receiver is to be used monophonically and stereo is to be added at a later date, it is essential that both speaker output terminals are terminated into a proper load to prevent damage to the output stage of the receiver. Refer to Diagram D for proper installation of the loading resistors.

At no time should the output terminals be paralleled for monophonic operation!



## CONNECTING THE SPEAKER FOR STEREOPHONIC OPERATION (SYSTEM 1) AND MONOPHONIC OPERATION (SYSTEM 2)

