

OWNER'S MANUAL

Compact Stereo Music System
Model SC1510
Model SC1810



Congratulations!

Once again, HARMAN-KARDON has taken a creative leap forward, providing engineering leadership in solid-state design. This new compact Stereo Music System combines superb styling and component-quality performance.

Your HARMAN-KARDON Stereo Music System represents the best in electronic circuitry, employing advanced integrated "micro-circuits" to assure maximum reliability and unsurpassed performance. To insure a more perfect music system, we have carefully selected one of the finest automatic turntables and magnetic cartridges available.

The HARMAN-KARDON Model SC1510 Stereophonic Music System is equipped with a pre-amplifier and a powerful dual-channel amplifier.

A superb FM and FM Stereo Tuner is combined in the model SC1810 to give crystal-clear reception of radio broadcasts. A high gain transistor front end has been incorporated in your unit to provide undistorted FM reception over great distances without noise or fading.

Your Stereo Music System, utilizing cool-operating output transistors, may be placed virtually anywhere without the need for special installation precautions.

We urge you to spend just a few moments to read this manual. We have outlined the proper installation instructions, simply and clearly, which, if followed, will assure you many rewarding years of listening pleasure.

WARRANTY POLICY

We urge you to fill in your warranty card and mail it to the factory without delay to protect your rights under warranty. The HARMAN-KARDON warranty is not valid unless we have your card on file.

BILL OF SALE

Your Bill of Sale will insure your rights for the duration of the policy. Please retain it.

WARRANTY

We warrant each unit to be free from defects in material and workmanship under normal use and service, and in accordance with the conditions herein below set forth, for a period of ninety (90) days for the automatic record changer and for a period of two (2) years for the remainder of your Stereophonic control center, from the date of delivery to the original purchaser.

Should a defect occur within the said two (2) years, and provided that the unit is returned to us with transportation prepaid and which our examination shall disclose to our satisfaction to have been thus defective, we will:

1. During the first ninety (90) days from date of sale at our option, either replace or repair and install any defective parts, free of charge.

2. After ninety (90) days, at our option, either replace or repair all defective parts of the automatic record changer, charging for both parts and labor.

3. Neither items 1 or 2 of this warranty includes any obligation as to replacement of the stylus or adjustments of tracking force, tone arm height or dropping position of the automatic record changer.

4. After ninety (90) days and for the balance of the two (2) years, at our option, either replace or repair all defective parts of the Stereo Control Center, charging only for labor.

This warranty is not applicable to any instrument which shall have been repaired or altered in any way so as in our judgement to affect its stability or reliability nor which has been subject to neglect, misuse, abuse, negligence or accident nor which has had the serial number altered, effaced or removed. Neither shall this warranty apply to any instrument which has been connected otherwise than in accordance with instructions furnished by us.

This warranty is in lieu of all other warranties, expressed or implied, and of all other obligations or liability 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.

SERVICE POLICY

Harman-Kardon has established a special consumer division to answer all questions pertinent to the installation and operation of your unit. Please feel free to write us at any time and we will endeavor to offer prompt and complete advice.

If your problem cannot be resolved through our combined efforts we may wish to refer you to one of our authorized warranty stations. The unit must be shipped via Railway Express, Prepaid to the station designated, accompanied by a brief note describing the exact nature of the difficulty. *Under no circumstances should the set be shipped directly to the factory without prior authorization!*

INSTALLATION PROCEDURE

Complete instructions for the operation and maintenance of this automatic turntable will be found in the enclosed record changer operation sheet.

CARTRIDGE

The cartridge supplied with your automatic turntable has been chosen to give the highest quality performance when operating with your Stereo Music System.

Under normal conditions the stylus used in this cartridge will last for a number of years before it has to be replaced. Abnormal use, however, may damage the stylus. It is therefore recommended that you have the stylus checked annually at your dealer or whenever you suspect it may have been damaged.

The replacement stylus for this cartridge is available at your dealer.

POWER REQUIREMENTS

Connect the AC line cord into any outlet furnishing 117 volts, 50 or 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, TV set, etc.) may be connected to this receptacle and will be controlled by the Power switch on the front panel of your system.

VENTILATION

The ultimate in solid state technology has been devoted to creating your Harman-Kardon music system. Coupled with the latest in transistor engineering techniques are years of experience that Harman-Kardon maintains as the leader in solid state.

Careful design enables the all transistor Stereo Music System to operate at a very low temperature even under taxing operating conditions. Because of this feature special ventilation requirements are not necessary.

SPEAKER CONNECTIONS

IMPORTANT: Only FOUR speakers (two stereo systems) may be connected to this unit.

We have provided RCA plug-type connectors for your convenience in connecting speakers to your music system. To connect your Harman-Kardon speakers, simply plug them into the speaker system 1 phono plugs, located on the rear panel of your unit.

Two speaker cables are supplied with your Harman-Kardon system with a phono plug connector at each end for this easy plug-in connection to your unit. (Please refer to the rear panel diagrams associated with your unit indicating the location of these speaker connection jacks.)

SPEAKER SYSTEM SELECTOR SWITCHES

Your music system has been provided with 2 independent speaker selector switches.

If your stereo music system is connected with 1 set of speakers (1 system), the system 1 speaker selector switch must be in the "ON" position. If you have 2 sets of speakers (2 systems), the system 1 and system 2 speaker selector switches must both be in the "ON" position for both systems to operate.

Should you desire to listen to stereo-headphone alone, the speakers (either one or both systems) can be turned off at your discretion.

STEREO-MONO SELECTOR SWITCH

This unique switch, which is located on the rear panel of your Music System, selects SPEAKER SYSTEM 2 output for stereo or monaural operation. If you desire to use SPEAKER SYSTEM 2 to operate monaurally in one or two alternate locations (one speaker for each location) place this switch in the MONO position. When operating SPEAKER SYSTEM 2 stereophonically the STEREO-MONO output switch must be placed in the STEREO position. It should be noted that the STEREO-MONO switch does not affect the normal stereophonic output of speaker system 1.

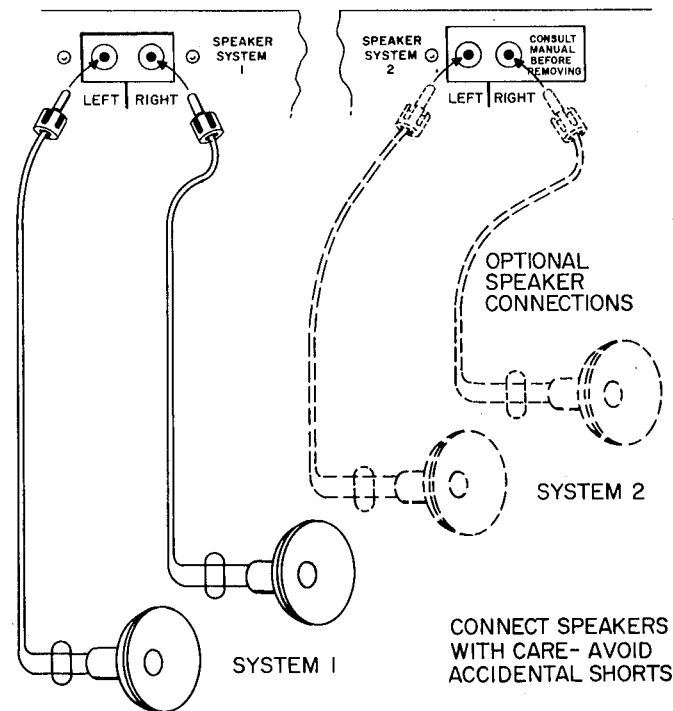
CONNECTING THE SPEAKERS FOR STEREO OPERATION (1 SYSTEM)

The cables supplied 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.

1. Plug one end of the speaker cable into the receptacle on the rear of your left speaker (this is the speaker on the left as you face the speakers.)
2. Plug the other end of the speaker cable into the LEFT speaker receptacle on the rear of the system.
3. Similarly connect the other speaker cable to your right speaker.
4. Attach the other end of the speaker cable to the receptacle marked RIGHT on the rear of the system.
5. Your music system is now connected for 1 system stereo operation and is operative when the speaker selector switch on the front panel is in the speaker System 1 "ON" position.

CONNECTING THE SPEAKERS FOR STEREO OPERATION (2 SYSTEMS)

1. Connect all 4 speakers for your two system operation as shown in the diagram below.
2. To operate speaker system 2 stereophonically the STEREO-MONO output switch located on the rear panel *must* be placed in the STEREO position. For further information regarding the operation features of this switch see the paragraph STEREO-MONO SELECTOR SWITCH.
3. You may now select either system 1, system 1 and 2, or system 2 by the use of the speaker selector switches located on the front panel of your Stereo Music System.



STEREO HEADPHONE RECEPTACLE

The stereo headphone receptacle located on the front panel will accept any headphone with any impedance rating. The headphone receptacle is "ON" at all times. If you wish to listen to the headphones alone, see the paragraph "Speaker System Selector Switches".

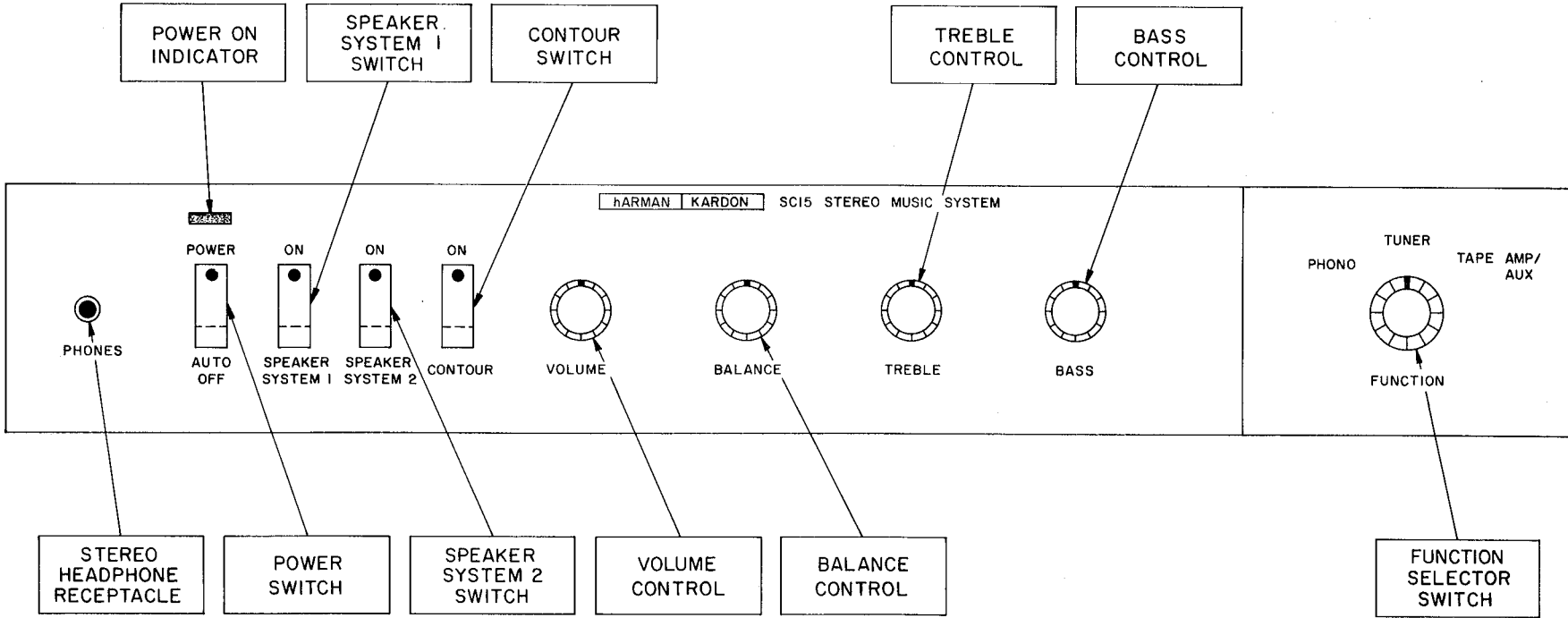
CONNECTING THE FM ANTENNA MODEL SC1810

Due to the exceptionally high sensitivity of your system, the 48" wire supplied is sufficient for all but the most difficult locations. The balanced antenna input is designed to accept a 300 Ω antenna, indoor or outdoor type. When using the antenna supplied connect one end of the 48" wire to either of the FM antenna terminals. Horizontal placement of the antenna will yield optimum reception. The antenna may be tacked to the back of the molding behind the equipment or to the shelf you use.

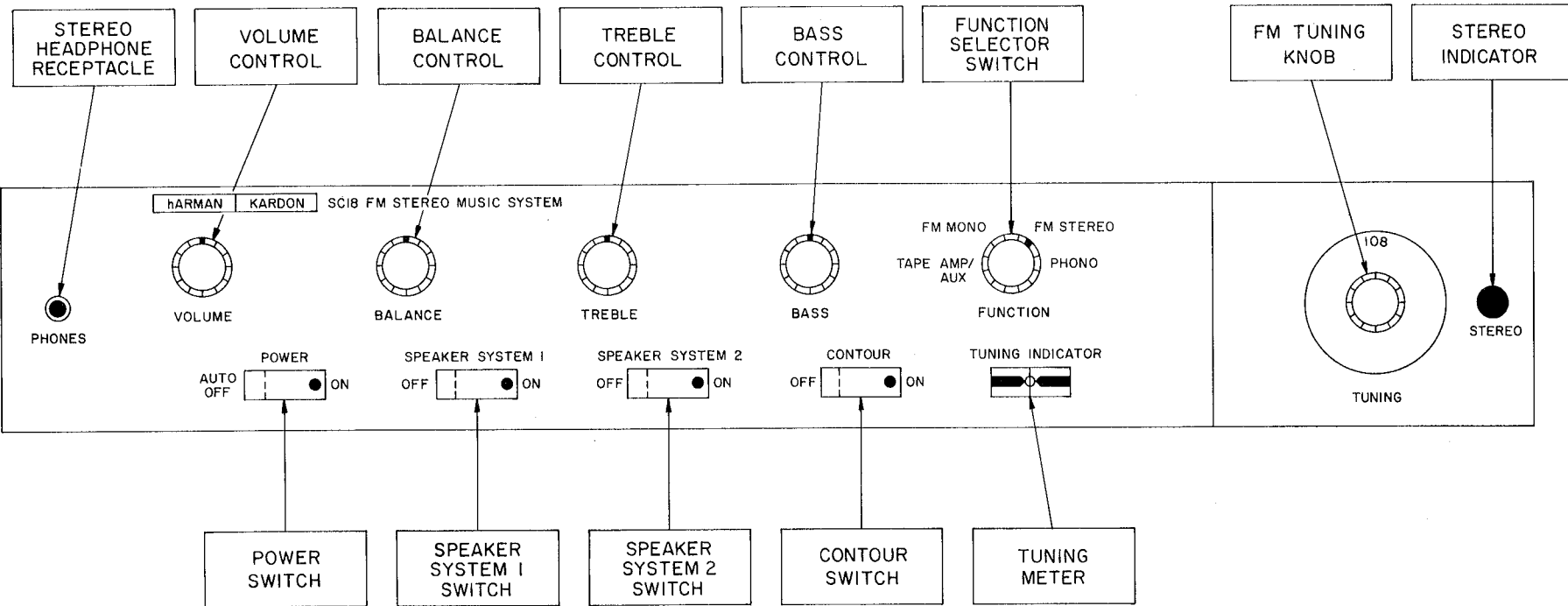
As FM signals are in the same broadcast frequency range as TV signals, they are affected by the same external conditions. Just as TV reception is improved, you can improve your FM reception with an external antenna. When using an external antenna connect both leads of the antenna wire to the two FM antenna terminal posts on the rear of your receiver.

In more remote locations, an outside Yagi, folded di-pole or omni-directional antenna is recommended. For the greatest gain, an 8 to 14 element Yagi designed for the FM band is suggested. A Yagi however, is very directional and it may be desirable to use an antenna rotor if a full 360° coverage is required. For reception in the suburbs, an outside folded di-pole or omni-directional di-pole is recommended.

FRONT PANEL SC1510



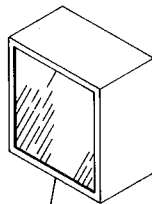
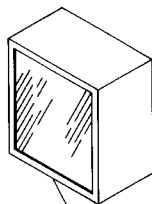
FRONT PANEL SC1810



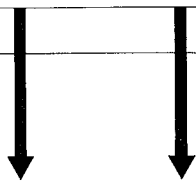
REAR PANEL SC1510

LEFT SPEAKER

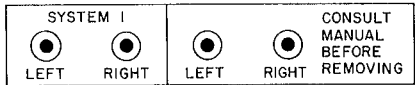
RIGHT SPEAKER



FOR ATTACHING SPEAKERS REFER TO THE PORTION OF YOUR OWNERS MANUAL "SPEAKER CONNECTIONS"

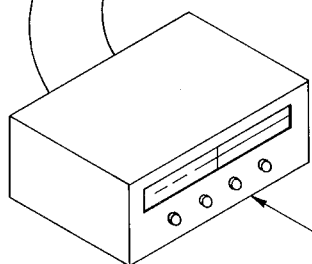
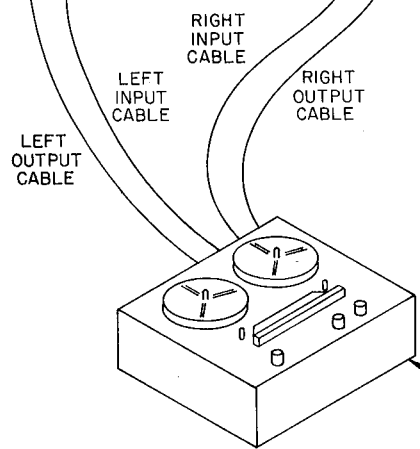
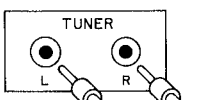
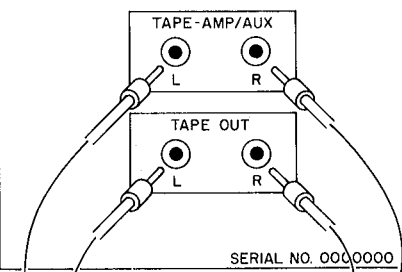


HARMAN - KARDON
INCORPORATED
PLAINVIEW, N.Y.
MODEL SC15
MADE IN USA

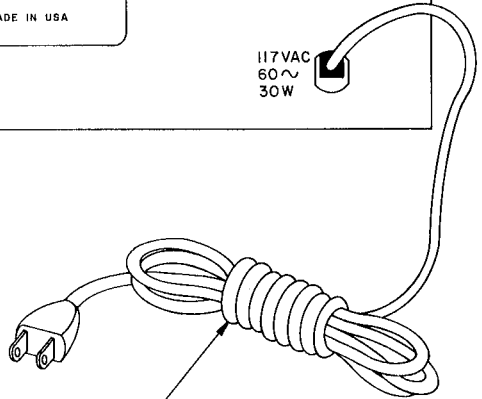


FOR SYSTEM 2 ONLY
REFER TO INSTRUCTION
MANUAL

117VAC
60~
30W



STEREO MONO
OUTPUT
SWITCH



STEREO
TAPE
RECORDER

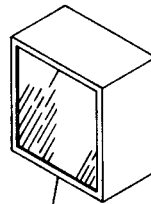
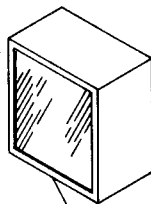
STEREO
TUNER

LINE
CORD

REAR PANEL SC1810

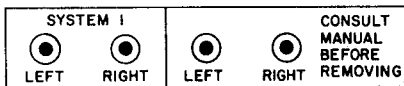
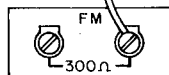
LEFT SPEAKER

RIGHT SPEAKER



FOR ATTACHING SPEAKERS REFER TO THE PORTION OF YOUR OWNERS MANUAL "SPEAKER CONNECTIONS"

FM ANTENNA WIRE



HARMAN - KARDON
INCORPORATED
PLAINVIEW, N.Y.
MODEL SC18
MADE IN USA

STEREO MONO

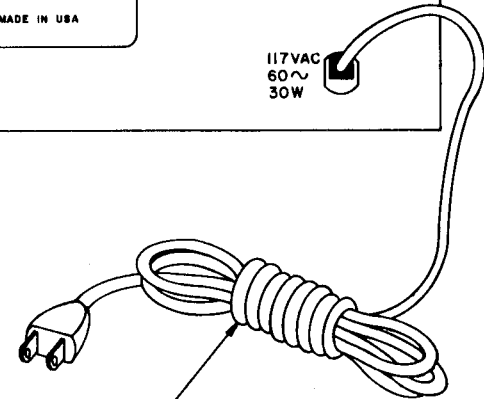
FOR SYSTEM 2 ONLY REFER TO INSTRUCTION MANUAL

117VAC
60~
30W

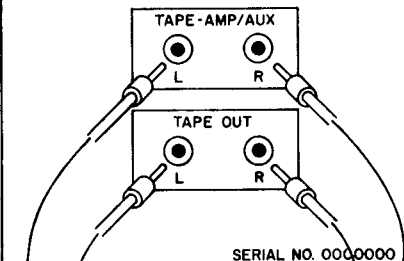
SERIAL NO. 0000000

FM ANTENNA TERMINAL STRIP

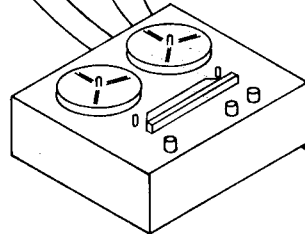
STEREO MONO OUTPUT SWITCH



LINE CORD



LEFT INPUT CABLE
RIGHT INPUT CABLE
LEFT OUTPUT CABLE
RIGHT OUTPUT CABLE



STEREO TAPE RECORDER

CONNECTING A STEREO TAPE RECORDER

Connect the two tape recorder output cables to the LEFT and RIGHT TAPE AMP/AUX input receptacles on the rear of your unit. With the Function Switch in the TAPE AMP/AUX position you will now be able to play your stereo tapes.

In order to make a recording connect the inputs of your tape recorder to the TAPE OUT receptacles on the rear of the unit. This will allow you to make a stereophonic recording while simultaneously listening to the program material through your speaker system.

CONNECTING A STEREO TUNER (MODEL SC1510 ONLY)

Connect the two tuner output cables to the LEFT and RIGHT Tuner Input Receptacles located on the rear panel of your music system. With the function selector placed in the TUNER position you will be able to play your Stereo Tuner through your system.

OPERATION PROCEDURE

Every control on this stereo system serves a specific useful function and is important for its proper operation.

We recommend that you read the following section carefully so you may take full advantage of the performance capabilities of your system.

BALANCE CONTROL

The balance control is used to adjust the sound level of each channel with relation to each other.

The nature of stereophonic reproduction is such that it requires two identical channels to obtain the optimum stereo effect. As there may be slight differences between the location of the two speakers, tape heads, cartridges, etc., the balance control is provided to permit re-balancing of the overall system even in extreme cases where unbalance exists.

It should be noted that the Balance Control may be set anywhere within its range of adjustment to attain system balance.

VOLUME CONTROL

The Volume Control is used to adjust the volume level of any program material fed into the stereo system. The control varies both channels simultaneously therefore eliminating the necessity of balancing your system each time you change the volume level.

BASS AND TREBLE CONTROLS

The BASS and TREBLE tone controls on your receiver provide the full range of tonal adjustment necessary for stereo high fidelity listening. The tone control range is considerable and can adequately adjust the low and high frequencies in accordance with your listening preference, speaker characteristics and room acoustics.

CONTOUR SWITCH

One of the limitations of human hearing is its tendency to lose sensitivity to the very low pitched sounds as the program sound level is reduced. It is this characteristic (known as the Fletcher-Munson effect) which causes one to play music programs at high listening levels in order to experience the full rich tone available from fine modern recordings.

The Contour switch compensates for this effect, thereby eliminating high listening levels as a requisite for full enjoyment of reproduced music.

POWER SWITCH

Your music system is equipped with a unique feature which shuts off the system after the last record has played. To accomplish this, place the power switch, located on the front panel of your music system, to the "Auto-Off" position. The Automatic shutoff feature is operative in the Phono Stereo position and in either the Manual or Automatic Mode. To defeat this feature or to operate your music system using any other function, place the power switch in the Power "ON" position.

SPEAKER SYSTEM SELECTOR SWITCHES

Refer to paragraph on speaker connections.

FUNCTION SELECTOR SWITCH

The Function Selector Switch selects the desired type of program source to be heard through your system.

FUNCTION SELECTOR SWITCH MODEL SC1510

1. PHONO: Selects your record player for stereophonic operation.
2. TUNER: This position selects either your monophonic or stereophonic tuner.
3. TAPE AMP/AUX: Selects any program source such as tape recorder, the output of your television set, or any other high level equipment connected to the tape amp/aux receptacles on the rear of your unit.

FUNCTION SELECTOR SWITCH MODEL SC1810

1. AUX: Selects any program source such as tape recorder, the output of your television set, or any other high level equipment connected to the tape amp/aux receptacles on the rear of your system.
2. FM MONO: Selects the FM section of your system. In this position you can listen to stereophonic broadcasts monophonically while monophonic broadcasts will appear unchanged.
3. FM STEREO: This is the normal listening position for all monophonic or stereophonic FM broadcasts. In this position the stereo indicator and automatic switching circuit built into your receiver are operative. For further details see the paragraphs on "Stereo Indicator" and "Selecting Monophonic or Stereo FM Broadcasts".
4. PHONO STEREO: Selects your record player for stereophonic operation.

TUNING METER (SC1810)

Your music system incorporates a D'Arsonval movement tuning meter for precise and accurate tuning. The meter is designed to operate on a null or "zero" center principal. Therefore, the meter pointer should always be at the center position of your meter dial for optimum listening performance. To accomplish this, rotate your tuning knob slowly, in one direction towards the station of your choice. As you tune through the station you will notice the pointer swinging from left or right past the zero center. THE CORRECT POINT for minimum distortion and optimum FM reception is when the pointer is resting at the "zero" center position.

TUNING (SC1810)

The tuning knob (MODEL SC1810) is located on the right side front panel of your music system. This knob is used to select the desired station when your function selector switch is placed in the FM Stereo position.

SELECTING MONOPHONIC OR FM STEREO BROADCASTS (SC1810)

Under normal use for all FM broadcasts, the Function Selector Switch should be placed in the FM STEREO position.

Your system is equipped with a stereo sensing circuit which can automatically determine if your unit is receiving monophonic or stereophonic broadcasts, and then automatically adjust the mode of operation.

If the station is transmitting stereo, your system will automatically switch in the multiplex section and you will hear the broadcast in full stereo. Should the station conclude broadcasting in stereo, your system will automatically switch back to monophonic reception.

Should you receive a weak stereo signal whose quality has been degraded by noise or poor signal conditions, and you wish to listen to this stereo broadcast, monophonically, place the function selector switch in the FM MONO position.

STEREO INDICATOR (SC1810)

A stereo indicator is located in the extreme right hand side of the front panel and operates in conjunction with the FM STEREO position of the Function Selector switch. The indicator visually shows the reproduction of FM stereo through your receiver.

To tune for FM stereo proceed as follows:

1. Place the Function Selector Switch in the FM STEREO position.
2. Tune to the station of your choice using your tuning meter for precise and accurate tuning. Your stereo indicator will now show if you are tuned to a stereo program. If the indicator is OFF, the program you are listening to is being broadcast monophonically.

DIAL SCALE (SC1810)

Vernier action tuning has been incorporated in your music system for precise and accurate tuning of FM stations. The Dial Scale on your SC1810 music system is marked with an FM frequency scale (88-108 mc). This scale appears illuminated on the front panel of your music system. To select a station, simply rotate the tuning knob until you see the number which corresponds with the station of your choice appear illuminated. The triangle directly over the illuminated number is to be used as your tuning indicator. For precise tuning, use this procedure in conjunction with your tuning meter.

HUM AND NOISE

In any high fidelity installation, hum may be caused by the interconnection of associated equipment. If hum is experienced with your receiver, disconnect everything but the speakers from the receiver. If hum persists, reverse the AC line cord. CAUTION: Hum may be also induced by defective connecting cables or by running these cables too close to a strong AC field.

OVERLOAD PROTECTION CIRCUIT

A power output monitoring relay circuit has been designed into your Stereo Music system. This circuit prevents failure of the output transistors. When your music system operates normally, the output relay circuit has no effect on signals going through the power amplifier. If however the power dissipation in the output transistors becomes excessive due to a speaker short circuit, or a very low impedance load, the monitoring relay circuit will activate and disconnect the output transistors from your system. The monitoring relay circuit will again activate and resume normal operation ONLY after the overload condition has been eliminated.

SERVICE

If this instrument should not perform properly during the first two (2) years after date of purchase, contact the factory for instruction. The factory has many authorized warranty service stations in the United States. To aid us in selecting a service station convenient to you, it would be helpful if you would indicate what major city is closest to your home. Please write our Customer Service Department, Harman-Kardon, Incorporated, Plainview, New York 11803. Be sure to include the model and serial number of the unit. A brief description of your other components is often of help in answering your questions. DO NOT return this instrument to Harman-Kardon without first receiving authorization.