STEREO RECEIVER
KR-6200
INSTRUCTION MANUAL

KENWOOD

To the New KR-6200 Receiver Owner:

Because Kenwood Electronics, Inc., takes great pride in the long tradition of quality components the name Kenwood represents, your purchase of a Kenwood receiver places you in a distinguished family of connoisseurs of superb high-fidelity sound reproduction.

The purpose of this manual is to acquaint you with the operating features of your new receiver. You will notice that in every detail of planning, engineering, styling, operating convenience, and adaptability, we have sought to anticipate your needs and desires.

We suggest that you read this manual carefully. Knowing how to set up your receiver, to the best advantage, will enhance your listening pleasure right from the start. You will also become aware of the ease with which you can adjust your receiver to meet your special requirements.

Turn the pages and become aquainted with the exciting features of your new receiver; features that will remain new for endless hours of listening pleasure.

WARRANTY REGISTRATION

IMPORTANT: Fill out your warranty registration and mail it at once.

CONTENTS

KR-6200 FEATURES

1. Frequency-Linear Variable Capacitor
   The dial scale has linear graduations (arranged at the same intervals) to make tuning easier.

2. Front End with 2 FET Circuits
   The front end contains FET circuits together with one dual gate element. These circuits assure high sensitivity, worthy of the name KENWOOD.

3. 1-IC and 3-Element Mechanical Filter
   The 3-element mechanical filter is employed in the IF stage. It improves the characteristics of capture ratio and selectivity.

4. Independent AM and FM circuits for the IF Stage
   The FM circuit for the IF stage is separated from the AM circuit. Such a scheme is effective in the reduction of mutual interference.

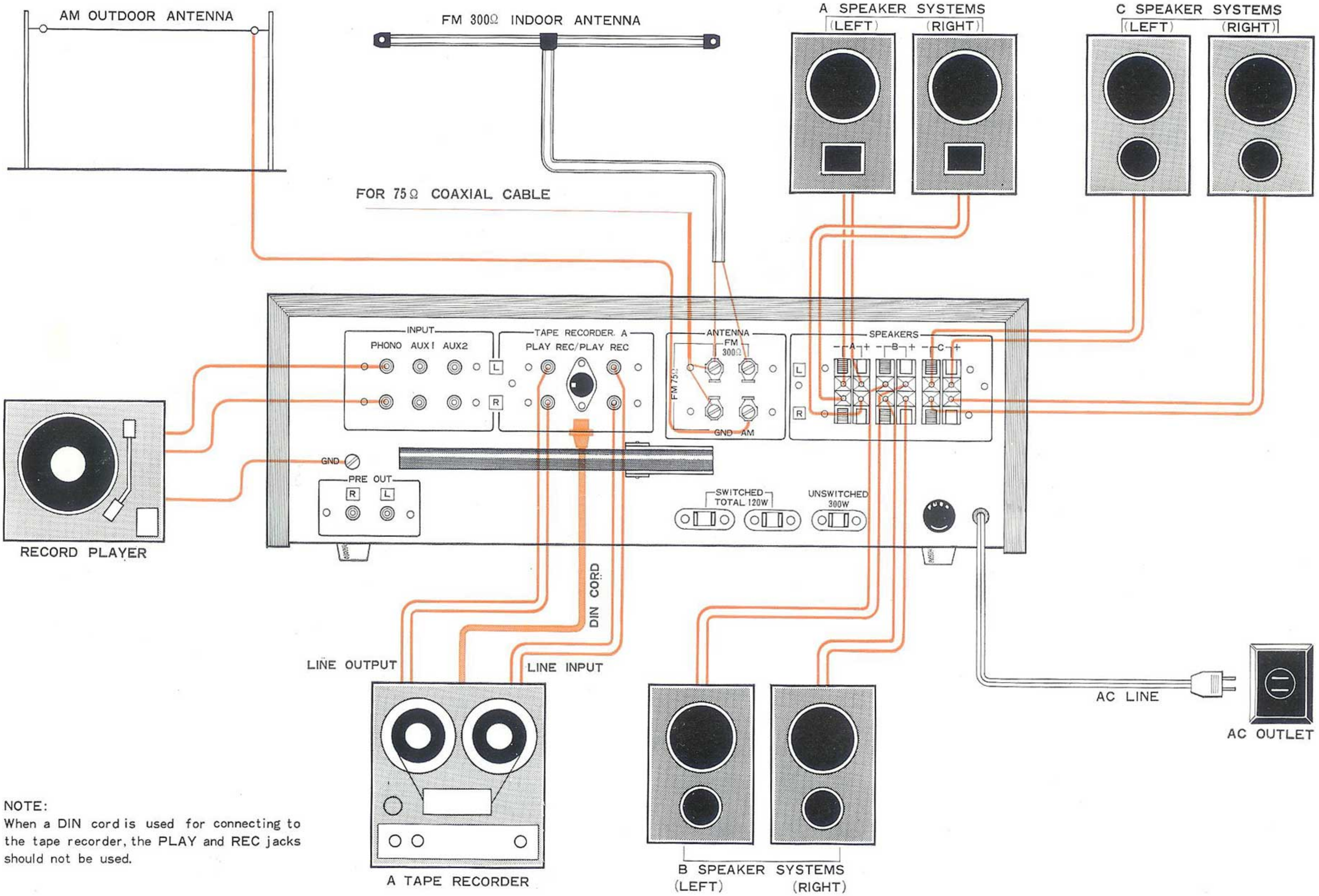
5. Newly Developed DSD Circuit and MPX Circuit
   The double switching system and the carrier leak block filter have been adopted. They are a great aid in improving the de-emphasis frequency characteristic and especially, improvement of stereo separation.

6. Large Meters with Built-in Lighting Mechanisms
   The KR-6200 has two large-scale meters for tuning convenience.

7. Protected Semi-Complementary Direct-Coupled Power Amplifier
   The power amplifier is a protected semi-complementary direct-coupled type which assures stabilized high performance.

8. Equalizer Circuit with PNP Can-Type Transistor
   This circuit employs a PNP can type transistor for the improvement of S/N ratio and circuit reliability.

INTERCONNECTING DIAGRAM



NOTE:
When a DIN cord is used for connecting to the tape recorder, the PLAY and REC jacks should not be used.

CONNECTING YOUR KR-6200

SPEAKER CONNECTIONS

CONNECTING ONE PAIR OF SPEAKERS

To connect only one pair of speakers, connect the speaker leads to the "A" SPEAKERS terminals as follows.

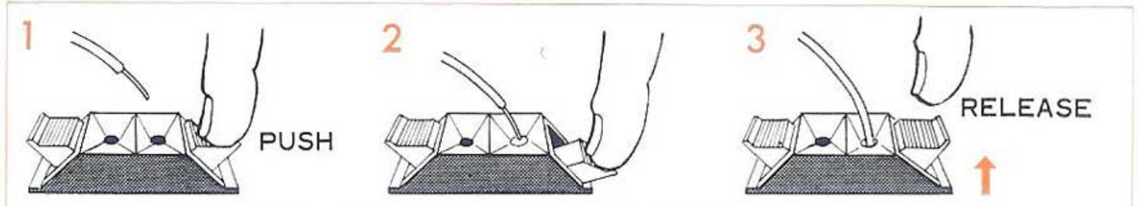
The (−) side lead from the left speaker should be connected to the L (−) terminal of "A" SPEAKERS, and the (+) side lead to the L (+) terminal. Similarly, connect the right speaker leads to the R terminals of "A" SPEAKERS.

CONNECTING ADDITIONAL SPEAKER SYSTEMS

When you connect additional speaker systems to the KR-6200, connections to the B SPEAKERS and/or C SPEAKERS terminals should be made as described above. Observe polarity at all times when making speaker connections.

NOTES:

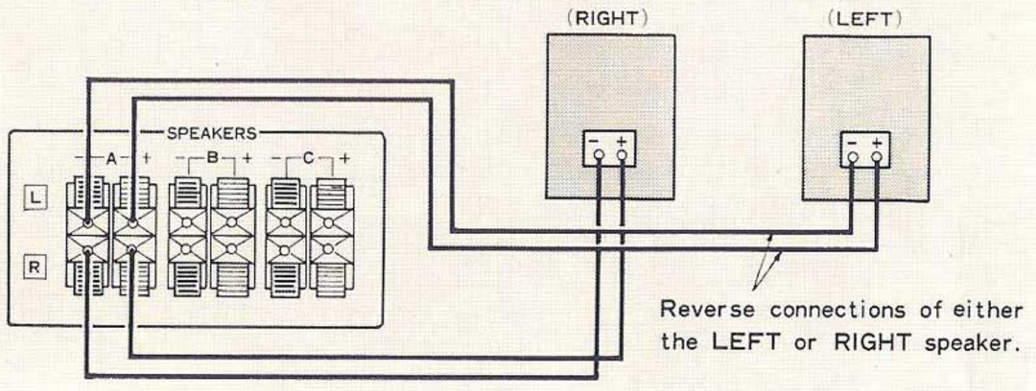
1. When only one pair of speaker systems is used with connections made either to the "A" SPEAKERS terminals or "B" SPEAKERS terminals, sound cannot be heard when the SPEAKERS switch on the front panel is set to the A + B position. Likewise when only one pair of speaker systems is used with connections made either to the A or C SPEAKERS terminals, sound cannot be heard when the SPEAKERS switch is set to the A + C position.
2. Any speaker with a impedance of 4, 8, or 16 ohms can be used.
3. When connecting the speaker leads to the SPEAKERS terminals, make sure that the bare wire strands at the ends of the speaker leads do not touch each other or adjacent terminals.



CONNECTION TO SPEAKER TERMINALS

PHASING OF THE SPEAKERS

Speaker phasing can be determined in the following manner:
1. Set the SELECTOR switch to FM.
2. Set the MODE switch to MIX.
3. Tune in the desired station with the TUNING knob.
4. If the sound is coming directly from the front, the speakers are in phase. If the sound comes from both sides and there is a noticeable loss in low frequencies, the speakers are out of phase.
In this case reverse the leads on one speaker.



CONNECTING YOUR KR-6200

ANTENNA CONNECTIONS

FM ANTENNA

Since FM broadcast signals travel along a straight, direct-line path, they become rather weak behind hills and buildings even in the vicinity of a broadcasting station. FM signals also become weak in areas distant from a station even though there may not be any obstruction to the direct line path of the signal. Therefore, a good FM antenna should be installed in the most effective manner for best possible FM reception.

In areas near the FM station where signals are strong, stretch the T-type indoor antenna that is supplied to its maximum, and connect it to the FM 300 Ω ANTENNA terminals on the rear panel. This antenna should be carefully hung in the direction that provides best reception with minimal undesirable reflection.

An outdoor FM antenna will become necessary if interference is encountered as a result of weak FM signals with an indoor antenna. If a 300 Ω feeder line is employed, it should be connected to the FM 300 Ω ANTENNA terminals.

For a 75 ohm coaxial cable, connection should be made to the FM 75 Ω ANTENNA terminals.

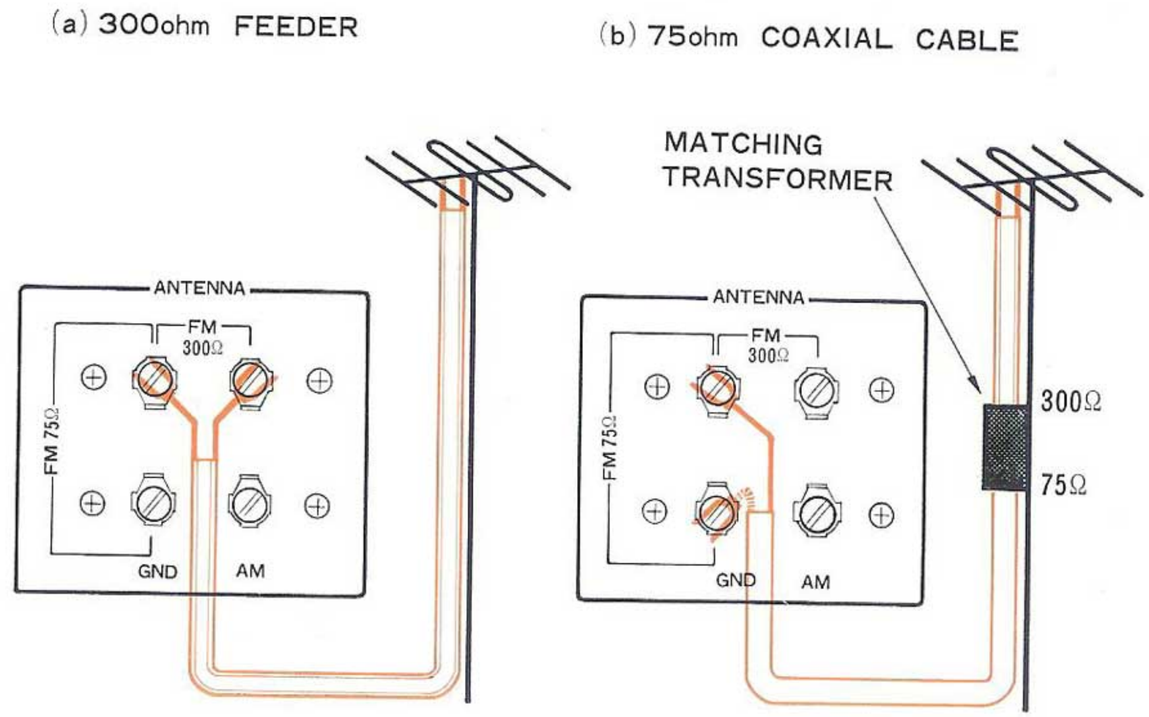
AM ANTENNA

The ferrite stick antenna incorporated in your KR-6200 assures satisfactory reception from all local AM stations. Since the ferrite stick antenna has directional properties, you should adjust the antenna to the position at which the strongest signal is received.

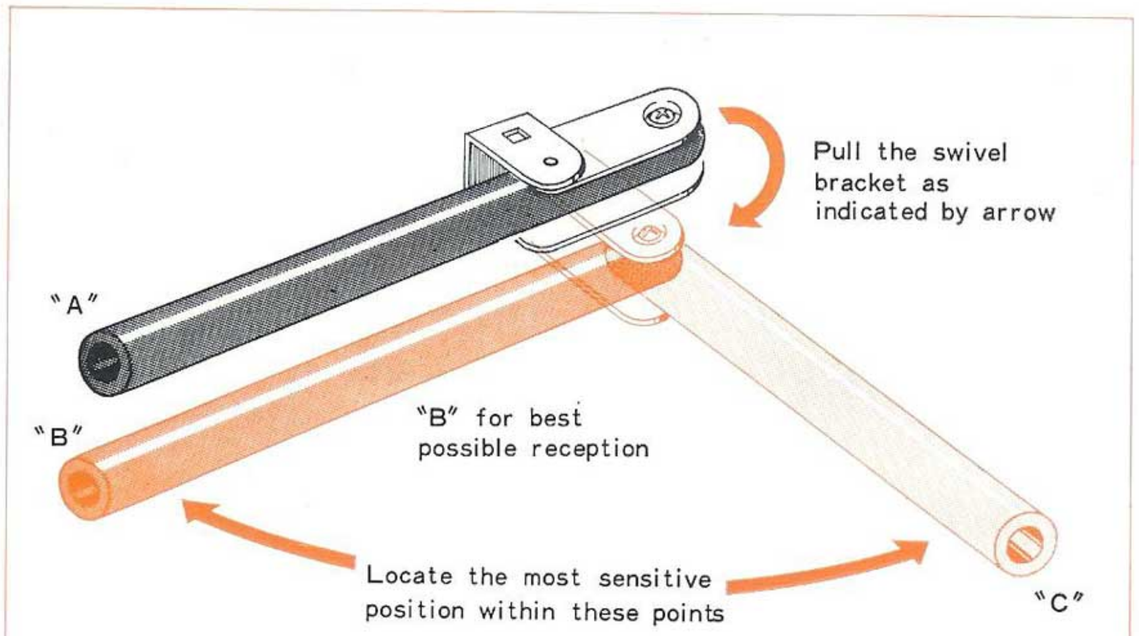
In fringe areas where satisfactory reception cannot be obtained with the ferrite stick antenna, an AM outdoor antenna should be connected to the AM terminal.

NOTE:

AC cords, speaker leads, etc. adjacent to antenna leads may interfere with reception. Keep them away as far as possible from the ferrite stick antenna.



FM ANTENNA CONNECTION



AM ANTENNA SETTING

CONNECTING YOUR KR-6200

CONNECTIONS FOR TAPE RECORDER

RECORDING

A tape recorder can be connected as follows for recording.
Left channel input of the tape recorder to A TAPE "L" REC jack.
Right channel input of the tape recorder to A TAPE "R" REC jack.

PLAYBACK

A tape recorder can be connected as follows for playback.
Left channel output of the tape recorder to A TAPE "L" PLAY jack.
Right channel output of the tape recorder to A TAPE "R" PLAY jack.

DIN CONNECTOR (REC/PLAY CONNECTOR)

If your tape recorder is equipped with a DIN connector, connect it to the REC/PLAY connector with a DIN connecting cord. A DIN connector enables recording and playback with this single cord.

NOTE:

When a DIN cord is used for connecting to the tape recorder, the PLAY and REC jacks should not be used.

For highest fidelity recording and playback sound, however, it is recommended that the tape recorder be connected to the PLAY and REC jacks instead of the DIN connector.

RECORD PLAYER CONNECTIONS

Connect the left channel of the record player to the "L" PHONO input jack, and the right channel to the "R" PHONO input jack.

If the record player has a grounding terminal, connect it to this receiver's GND terminal to avoid hum.

AUX (AUXILIARY INPUTS)

When a tuner, tape recorder or other unit is connected here, it must have an output of at least 180 mV.

AC OUTLETS

The AC outlets on the rear panel of the receiver may be used to supply power to other components such as a record player, tape recorder, etc.

1. SWITCHED outlets
   These outlets are controlled by the POWER switch on the front panel. (The total capacity is 120 watts maximum.)

2. UNSWITCHED outlet
   This outlet is available at all times. (The capacity is 300 watts maximum.)

PRE OUT

The preamplifier output of the KR-6200 is obtainable here.

CONTROLS AND THEIR FUNCTIONS

SIGNAL meter

This meter indicates the intensity of the incoming FM or AM signal. Pinpoint tuning for any broadcast is indicated by a maximum deflection of this tuning meter. Simply tune to the highest meter reading with TUNING knob.

TUNING meter

This meter is used for precise tuning to the center of an FM channel. Turn the tuning knob until the meter pointer is in the center of the heavy black area on the meter scale. This provides maximum separation and minimal distortion.

POWER switch

Push the POWER switch to turn the receiver on. Push it again to turn the receiver off.

PHONES jack

Plug a stereo headphone into this jack for private listening. The speakers are silenced when the SPEAKERS switch is set to OFF position.

SPEAKERS switch

OFF – This position silences all speakers for private headphone listening.
A – Activates speakers connected to the A SPEAKERS terminals on the rear panel.
B – Activates speakers connected to the B SPEAKERS terminals on the rear panel.
C – Activates speakers connected to the C SPEAKERS terminals on the rear panel.
A+B – Activates simultaneously two sets of speaker systems connected to the A and B SPEAKERS terminals.
A+C – Activates simultaneously two sets of speaker systems connected to the A and C SPEAKERS terminals.

BASS control

Turning it clockwise increases bass tone and counterclockwise decreases it. Tone is flat at center (zero) position.

MID control

Turning it clockwise increases mid range tone and counterclockwise decreases it. Tone is flat at center (zero) position.

TREBLE control

Turning it clockwise increases treble tone and counterclockwise decreases it. Tone is flat at center (zero) position.

MODE switch

Switch positions and functions are as follows:
LEFT – The left channel is heard from both speakers.
RIGHT – The right channel is heard from both speakers.
STEREO – This provides stereophonic reproduction of any stereo program source. The left channel is heard from the left speaker, and the right channel is heard from the right speaker.
REV – This reverses positions of two speakers. The left channel is now heard from the right speaker, and the right channel from the left speaker.
MIX – The left and right channels are mixed together and are heard from both speakers.

SELECTOR switch

Switch positions and functions are as follows:
AM – For AM reception.
FM – For the reception of both FM monaural and stereo signals. Automatic switching operates between FM monaural and stereo sources. When an FM stereo broadcast is tuned in, the STEREO indicator lights up.
PHONO – In this position the record player is available if connected to the PHONO input jacks on the rear panel.
AUX 1 – Selects source connected to the AUX 1 jacks.
AUX 2 – Selects source connected to the AUX 2 jacks.
MIC – In this position the microphone is available if connected to MIC jack on the front panel.

MIC jack

This is a microphone jack for monophonic sound only.

CONTROLS AND THEIR FUNCTIONS

BALANCE control

This BALANCE adjusts unequal volume from any program source in right and left channels. The left channel is accentuated when this adjuster is turned from center "5" toward the left side, and conversely.

VOLUME control

The VOLUME control performs simultaneous adjustment of volumes in both channels (right and left). Set it to your own most satisfactory listening level.

TAPE MONITOR switches (A and B)

The TAPE MONITOR switches are used when operating a tape recorder for recording by monitoring or tape reproduction. With the button pushed in, sound recorded on the tape is heard. When the button is released, the source signal is heard.

If a tape recorder connected to the A TAPE jacks on the rear panel is used, the TAPE MONITOR A must be switched on. When the TAPE MONITOR B is pressed, the tape recorder connected to the B TAPE jacks on the front panel becomes available.

The TAPE MONITOR switches should be kept switched off (by button release) unless monitoring or tape reproduction is performed.

FM MUTING switch

This switch silences interstation noise on the FM band, but it may also eliminate the signal of a weak and distant station along with the interstation noise. Therefore, set this switch to OFF (by pressing button release) in the reception of a weak and distant station.

LOUDNESS control

The LOUDNESS control boosts bass and treble tones at low listening levels. Our ears have less sensitivity to low and high frequencies at low listening levels and the LOUDNESS control compensates for this deficiency. This control should be switched off when listening at normal and high levels.

B TAPE jacks

If an additional tape recorder is added in order to operate two tape recorders simultaneously, connect the input of the tape recorder to the B TAPE REC jack and connect the output to the B TAPE PLAY jack.

LOW and HIGH FILTER switches

LOW FILTER – Pressing this button switch reduces low frequency noise such as turntable rumble, hum, etc., on program materials. Generally, this filter should be used only when necessary.

HIGH FILTER – Pressing this button switch reduces high frequency noise such as tape hiss, record scratch, etc. Generally, this switch should be used only when necessary.

TUNING knob

The TUNING knob selects the desired AM or FM station signal. Adjust it for maximum deflection of the SIGNAL meter as you listen to the sound output from the speakers. For FM broadcasts also observe the TUNING meter to achieve accurate reception.

OPERATING INSTRUCTIONS

FM RECEPTION

1. Set the SELECTOR switch to FM position.
2. Set the MODE switch to STEREO and the TAPE MONITOR switches to off (by button release). To suppress interstation noise push the FM MUTING switch, however, this should be left off if the incoming signal is weak.
3. Tune in the desired station by turning the TUNING knob. The station has been properly tuned in when the pointer of the SIGNAL meter gives a maximum deflection and that of the TUNING meter settles in the center of the meter scale (dark area).
4. The STEREO lamp lights up automatically when an FM stereo station is tuned in. Set the MODE switch to MIX if the received FM stereo signal is weak in relation to the noise level.
5. Adjust the VOLUME to the desired listening level.
6. Adjust the balance of the left and right channels.
7. Use the BASS, MID, TREBLE, LOUDNESS and FILTER to adjust the sound to suit your own taste, as well as the acoustic conditions of the room.

AM RECEPTION

1. Set the SELECTOR switch to AM.
2. Set the MODE switch to STEREO and the TAPE MONITOR switches to off (by button release).
3. Tune in the desired station by turning the TUNING knob. Tuning is satisfactory when the pointer of the SIGNAL meter indicates a maximum deflection. (The TUNING meter does not operate during AM reception.)
4. Adjust the VOLUME to the desired listening level.
5. Use the BASS, MID, TREBLE, FILTER, and LOUDNESS controls to adjust the sound to your own taste and to the acoustic conditions of the room.

PHONO OPERATION

1. Set the SELECTOR switch to PHONO.
2. Set the MODE switch to STEREO and the TAPE MONITOR switches to off (by button release).
3. Adjust the VOLUME to the desired listening level.
4. Use the BASS, MID, TREBLE, FILTER and LOUDNESS controls to adjust the sound to your preference and the acoustic conditions of the room.

TAPE RECORDER OPERATION

TAPE MONITORING

If you wish to use the KR-6200 with 3-head type tape recorders, you can perform a sound quality check by momentarily comparing the recording source signal with the sound that has been recorded on the tape. If you push the TAPE MONITOR switch, the recorded sound is reproduced. If this switch is released, the source signal before recording can be reproduced.

WHEN USING ONLY ONE TAPE RECORDER

Connect the tape recorder to either the A TAPE jacks on the rear panel or B TAPE jacks on the front panel.

Recording

1. Set the SELECTOR switch to the desired program source.
2. For recording with tape recorder A, switch off TAPE MONITOR B (by button release). For recording with tape recorder B, TAPE MONITOR A should be switched off. To monitor the recording, push the corresponding TAPE MONITOR button.
3. Recording level should be adjusted with the volume control of your tape recorder.
4. Recording is not affected by the VOLUME, BASS, MID, TREBLE, FILTER, LOUDNESS, etc., controls of the receiver.

OPERATING INSTRUCTIONS

Playback

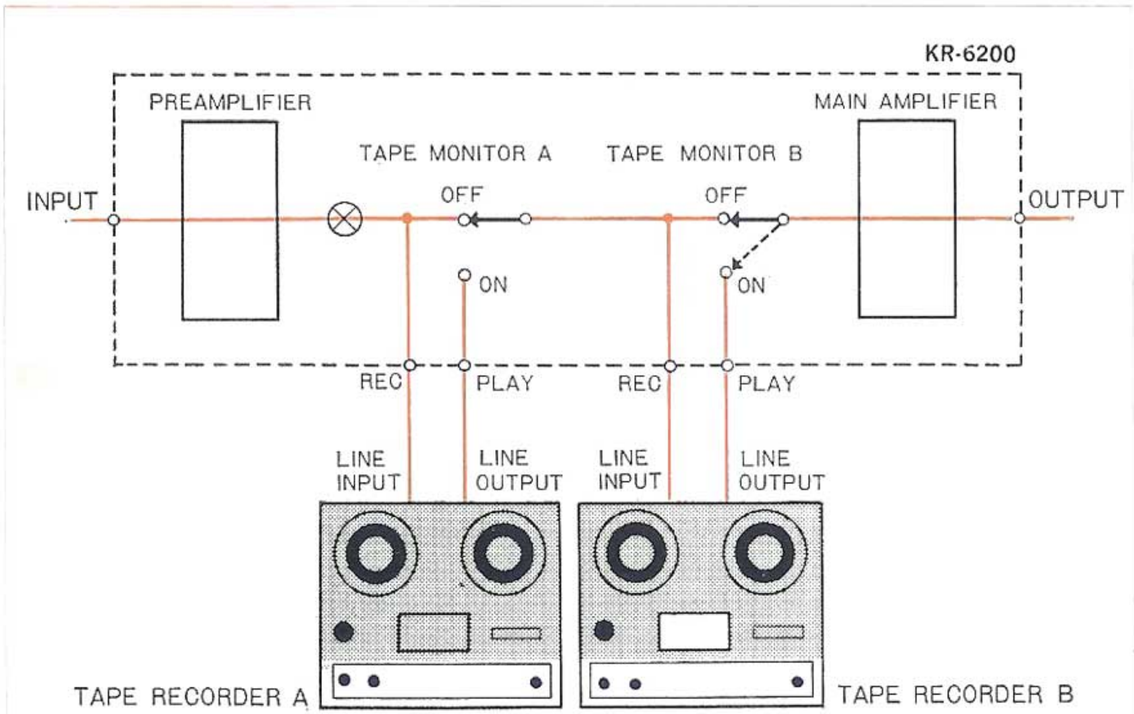
1. The SELECTOR switch can be at any position.
2. Push the corresponding TAPE MONITOR switch. Make sure the unused TAPE MONITOR switch has been switched off (by button release).
3. Set the MODE switch to STEREO.
4. Adjust the volume and tone quality.

WHEN USING TWO TAPE RECORDERS

Connect one tape recorder to A TAPE jacks on the rear panel and the other to B TAPE jacks on the front panel.

For Simultaneous Recording into Two Tape Recorders

1. Set the SELECTOR switch to the desired program source.
2. Switch off the A TAPE MONITOR (by button release).
   Recording can be made into the two tape recorders simultaneously. In this case tape recorder A cannot be monitored, but monitoring is possible for tape recorder B.
3. Recording levels should be adjusted exactly as described previously for single tape recorder operation.



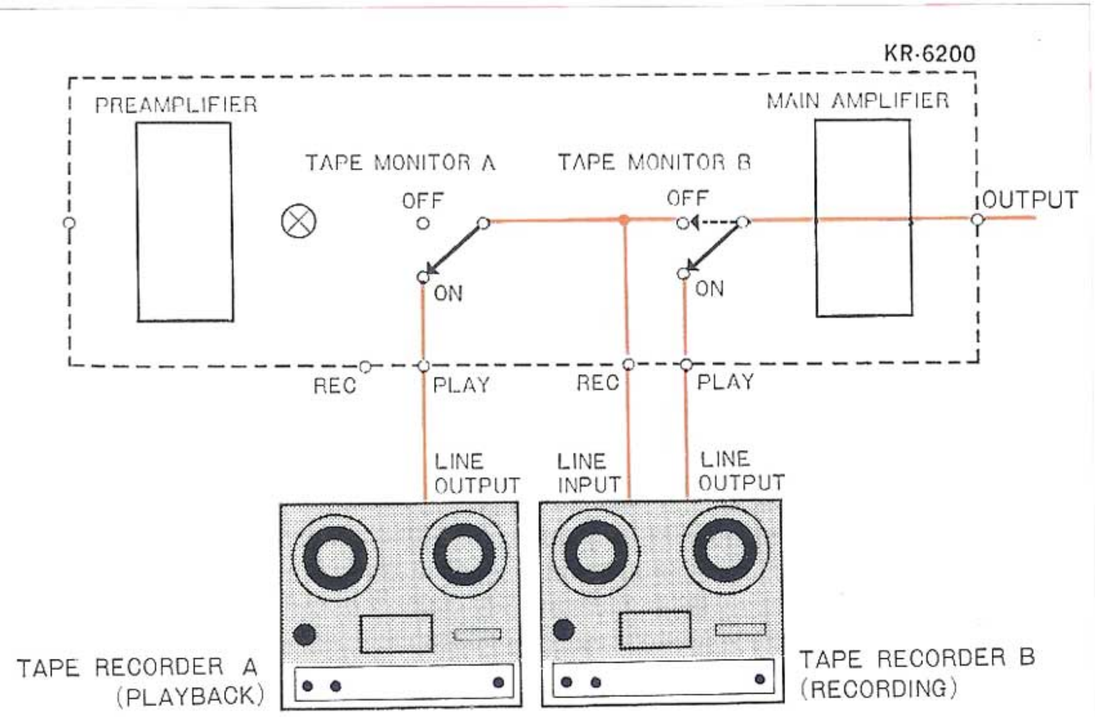
INTERCONNECTING DIAGRAM FOR SIMULTANEOUS RECORDING WITH TWO TAPE RECORDERS

For Recording from Tape Recorder A to B

1. Press the A TAPE MONITOR switch.
2. The SELECTOR switch can be at any position.
3. Set tape recorder A for reproduction and tape recorder B for recording. The playback from the tape recorder A can then be recorded on tape recorder B.
4. To monitor the recording condition, push the B TAPE MONITOR switch.

MIC

1. Plug a microphone into the MIC jack on the front panel.
2. Set the SELECTOR switch to MIC.
3. Set the MODE switch to STEREO.
4. Adjust the volume and tone quality.



INTERCONNECTING DIAGRAM FOR RECORDING FROM TAPE RECORDER A TO B.

MAINTENANCE

CONCERNING TRANSISTORS

Transistors differ fundamentally from radio vacuum tubes and require special attention to ensure their full performance capabilities. Given proper care, transistors will provide years of practically trouble-free performance.

(a) Avoid locations subject to direct sunlight.

(b) Avoid high or low temperature extremes.

(c) Keep the receiver away from heat radiating sources.

PROTECTION CIRCUIT

The newly developed protection circuit is completely effective and prevents damage which may be caused by short-circuiting at the speaker outputs or the electrical overloading point. When a short-circuit occurs, this protection circuit will function automatically to protect the power output transistors. The program sound will be heard off and on intermittently about every four seconds. If this occurs, there is no fear of damage to the power output transistors. Just switch off the supply line and check the speaker connections.

ACOUSTIC FEEDBACK

Occasionally a disturbing howling sound caused by acoustic feedback, may be heard. This is generally caused by the relative positions of the turntable and speaker enclosures. The sound pressure radiated from the speaker box surrounds and vibrates the turntable. This vibration is picked up by the cartridge, sent to the amplifier as an electrical signal, and returned to the speaker. This again causes the speakers to radiate vibration which induces sympathetic vibrations in the turntable and cartridge. Sympathetic vibrations are reinforced with each repeating cycle and result in an undesirable sound called oscillation or "howling". To prevent it, keep your turntable away from your speakers. Also mounting your turntable on shock-absorbing pads may help.

POWER FUSE

A shield 4 A fuse is used. If the power fuse fails, remove blown fuse and replace with the same type fuse of the same capacity. Any trouble in the power supply circuit will cause the fuse to blow again. In such a case, consult a qualified serviceman.

NOTE:

Always disconnect power supply before replacing a fuse.

KR-6200 SPECIFICATIONS

FM TUNER SECTION:

Antenna Impedance:	300/75 Ω.
Usable Sensitivity (IHF):	1.7 μV.
Harmonic Distortion:	
(at 400 Hz 100% Mod.):	
MONO:	0.5%.
STEREO:	0.6%.
Signal to Noise Ratio:	66 dB.
Capture Ratio:	1.5 dB.
Selectivity (Alt. CH.) (IHF):	65 dB.
Image Rejection:	80 dB.
IF Rejection:	100 dB.
Spurious Signal Rejection:	100 dB.
AM Suppression:	70 dB.
Stereo Separation (at 1 kHz):	40 dB.
(at 10 kHz):	25 dB.
Sub Carrier Suppression:	60 dB.
Muting Level:	10 μV.
Quieting Slope:	52 dB 5 μV.
	59 dB 10 μV.
	66 dB 50 μV.
Frequency Response:	20 ~ 15 kHz +0.5 dB, −2 dB.
Front End:	2 FETs (1 D G), 4 Gang.
IF Stage:	1 IC, 3 element mechanical filters.

AM TUNER SECTION:

Antenna:	Built in ferrite bar antenna and external antenna terminal.
Usable Sensitivity (IHF):	15 μV.
Signal to Noise Ratio:	45 dB.
Selectivity (IHF):	35 dB.
Image Rejection:	70 dB.
IF Rejection:	70 dB.
Front End:	3 Gang.
IF Stage:	2 stages.

AMPLIFIER SECTION:

Dynamic Power Output (IHF):	
Both CH. 4Ω 1 kHz:	240 watts.
Both CH. 8Ω 1 kHz:	190 watts.
Continuous Power Output:	
Each CH. 4Ω 1 kHz:	80/80 watts.
Each CH. 8Ω 1 kHz:	60/60 watts.
Both CH. 4Ω 1 kHz:	60/60 watts.
Both CH. 8Ω 1 kHz:	50/50 watts.
Both CH. 8Ω 20 ~ 20 kHz:	45/45 watts.
Harmonic Distortion (at rated):	0.5%.
(at −3 dB rated):	0.1%.
I. M. Distortion (at rated)	0.5%.
(at −3 dB rated):	0.2%.
Frequency Response:	
(High Level Input):	20 ~ 40 kHz ±2 dB.
Power Band Width (IHF):	13 ~ 30,000 Hz.
Input Sensitivity:	
PHONO:	2.5 mV, 50 KΩ.
MIC:	3 mV, 50 KΩ.
AUX 1:	180 mV, 50 KΩ.
AUX 2:	180 mV, 50 KΩ.
TAPE PLAY A:	180 mV, 50 KΩ.
TAPE PLAY B:	180 mV, 50 KΩ.
Recording Output:	
TAPE REC A:	180 mV.
TAPE REC B:	180 mV.
DIN:	36 mV.
Damping Factor (at 8 Ω):	50
Hum and Noise:	
PHONO:	65 dB.
MIC:	55 dB.
AUX 1:	75 dB.
AUX 2:	75 dB.
TAPE PLAY A:	75 dB.
TAPE PLAY B:	75 dB.
Speaker Impedance:	4 ~ 16 Ω.
Tone Control:	
BASS (at 100 Hz):	±12 dB.
MID (at 1 kHz):	±8 dB.
TREBLE (at 10 kHz):	±12 dB.
Filter:	
LOW: (at 100 Hz):	−7 dB.
HIGH (at 10 kHz):	−10 dB.
Loudness Control (−30 dB):	
at 100 Hz:	+10 dB.
at 10 kHz:	+5 dB.

GENERAL:

Switches:	
SPEAKERS:	OFF-A-B-C-A + B-A + C.
SELECTOR:	AM-FM-PHONO-AUX 1-AUX 2-MIC.
MODE:	LEFT-RIGHT-STEREO-REV-MIX.
OTHERS:	TAPE MONITOR A, TAPE MONITOR B, LOW-HIGH FILTER, FM MUTING, LOUDNESS, MIC jack.
AC Outlets:	
SWITCHED:	2.
UNSWITCHED:	1.
Semiconductors:	2 FETs, 1IC, 54 Transistors, 45 Diodes.
Power Consumption:	
at full power:	320 watts.
at no signal:	40 watts.
Dimensions:	17⅛" W, 5¾" H, 14" D.
Weight:	29.0 lbs.
Walnut Cabinet	
(included in price):	YES.

TROUBLE SHOOTING

INDICATIONS

In initially installing this receiver, improper connections may result in one of the following indications of trouble. Their possible causes and corrective measures are listed below to facilitate installation.

Occurs Only During AM Reception	Cause	Correction
Continuous low frequency buzz. Most noticeable at night on weak signal stations.	Interference from electrical appliances or atmospherics.	Erecting a 10 meter outdoor antenna and securing good ground conditions should reduce interference considerably. Complete elimination is difficult.
Continuous high frequency whine which increases at night.	TV interference. 10 kHz beat interference from adjacent AM station.	Turn TV off. (Neighboring TV set may also be cause.) Impossible to eliminate from receiver side. This is one disadvantage of the AM broadcast system. Use High Filter to cut off high frequency interference. amplifier side.
Intermittent buzzing or sharp crackling noise.	Lightning interference. Interference from fluorescent lamps. AC Plug Connection.	Usually unavoidable in certain areas. Occurs when lamps are on and cannot be not helped. Try reversing AC plug connections. Occurs only on certain stations due to high voltage power line and cannot be helped in many areas.
Interference from amateur stations.	Called BCI, this interference results from neighboring amateur stations. (Also occurs on FM)	Consult interfering station operator or authorities concerned.

Occurs Only During FM Reception	Cause	Correction
Continuous hiss or buzzing interference with broadcast. Becomes louder during stereo.	Incoming signal too weak at ANT terminal.	Erect outdoor FM antenna if only indoor T-type is used. A 5 or 7 element antenna is necessary if you are located at a considerable distance from the broadcasting station.
Occasional sharp buzzing or crackling noise.	Automobile ignition noise. More noticeable on weak signals.	Erect outdoor FM antenna as far away from roads as practicable.
Weak right channel response when listening to LEFT only test FM Stereo broadcast.	Called crosstalk, a very slight response is normal.	If leakage is less than one tenth, it is not a sign of trouble. It cannot be reduced to zero.
FM Automatic Circuit fails to respond to stereo broadcast.	Incoming signal is exceptionally weak.	Erect an FM outdoor antenna.

TROUBLE SHOOTING

INDICATIONS

During AM, FM or Record Playback	Cause	Correction
No pilot lamp indication, no sound although AC is switched ON.	Poor AC plug connection. Blown fuse.	Check plug contact. Replace fuse. If it blows again, trouble must be corrected.
No sound from LEFT and RIGHT.	SPEAKERS switch set to A + B or A + C position. Speaker cords disconnected. SPEAKERS switched to OFF. Volume Control at 0 (extreme left). TAPE MON switch at ON position (button push).	Both A-B or A-C groups of speakers are required in this case for response from both sides. Check connections from amp output to speakers. SPEAKERS switch should be switched to OFF only when using stereo headphones. Set to appropriate volume level. Always set to OFF except when using tape recorders.
Sound only from one side.	Poor speaker cord connections. BALANCE control set to one extreme or other.	Check amp. output and speakers connections. Adjust BALANCE control.
Noise when AC is switched ON or when volume is adjusted immediately after.	Insufficient circuit warmup.	Allow 5 - 6 second interval after switching AC ON, before manipulating volume control.
Unbalance results when volume is lowered.	LEFT RIGHT resistor values unbalanced.	Adjust BALANCE control.
Intermittent speaker response at 4 seconds intervals.	Protection Circuit indication of short circuit in the output.	Check speaker cord connections.
Difference in volume level of radio and phono.	Difference in received signal and phono output levels.	Set to appropriate volume level.
During Phono Record Playbacks Only	**Cause**	**Correction**
No sound from LEFT and RIGHT, or sound only from one side.	Player output disconnected.	See that player output cord is firmly plugged into amp. input.
Loud hum drowns out sound.	Poor player output cord prong connections.	See that player output cord is firmly plugged into amp. input.
Sound audible but background hum occurs.	Player output cord picking up hum from AC cord. Player not grounded.	Keep player output cord away from AC cords. Choose cord paths which keep hum at a minimum. Twist LEFT RIGHT player output cords together. Reverse player AC plug connections. Connect player ground wire to GND terminal.
Sound audible but continuous background buzz interferes.	TV signal picked up by Player output cord. Frequently occurs near TV transmitting antenna.	Route player cord so that hum is minimized.
Howling noise occurs when volume is raised or bass response is increased.	Speaker vibrations induce feedback in Pickup.	Increase distance between player and speakers. Choose speaker locations carefully. Remember, loose flooring induces howling.

KENWOOD ELECTRONICS, INC.

■ 15777 SOUTH BROADWAY, GARDENA, CALIFORNIA 90248

■ 72-02 51st AVENUE, WOODSIDE, N.Y. 11377

CANADIAN EXCLUSIVE DISTRIBUTOR

MAGNASONIC CANADA LTD.

■ 4980 BUCHAN ST. MONTREAL P. Q, CANADA

■ 14 BANIGAN DRIVE THORNCLIFFE PARK TORONTO CANADA

© 33810 PRINTED IN JAPAN 850-0831-00 ① (K.P) (R) (K)