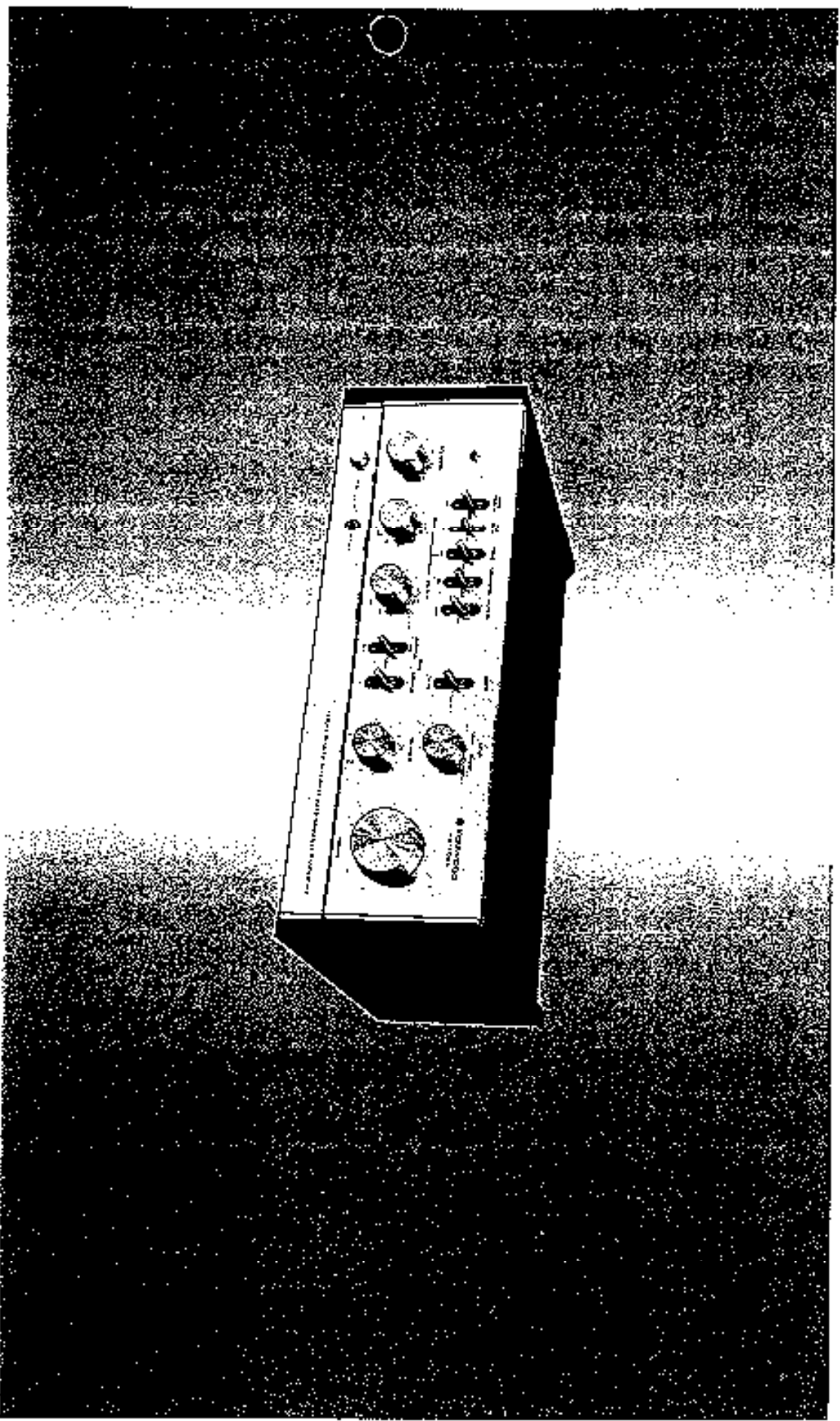


HERED INTEGRATED  
AMPLIFIER

# KA-4006

INSTRUCTION MANUAL



 *the sound approach to quality*  
**KENWOOD**

# INTRODUCTION

Because Kenwood Electronics, Inc., takes great pride in the long tradition of quality components the name Kenwood represents, your purchase of a Kenwood amplifier 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 amplifier. 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 amplifier, 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 amplifier to meet your special requirements.

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

KA-4006 FEATURES . . . . .	3	OPERATING INSTRUCTIONS . . . . .	10
INTERCONNECTING DIAGRAM . . . . .	4	MAINTENANCE . . . . .	12
CONNECTING YOUR KA-4006 . . . . .	5	KA-4006 SPECIFICATIONS . . . . .	13
CONTROLS AND THEIR FUNCTIONS . . . . .	8	TROUBLE SHOOTING . . . . .	14

## NOTES

\* Units shipped to the U.S.A. and CANADA are designed to be operated with 120 volts AC only. Units shipped to the Scandinavian countries are designed to be operated with 220 volts AC only. Therefore the above units are not equipped with an AC Voltage Selector Switch so all reference to such a switch throughout this manual should be disregarded.

\* Units shipped to all other countries are equipped with an AC Voltage Selector Switch on the rear panel that is preset at

the factory to the voltage generally available in the destination area.

**CAUTION:** It is very important however, to check the Voltage Selector Switch setting and make sure that it corresponds to your line voltage before connection the power cord into an AC outlet. If the Voltage Selector requires re-setting, follow the directions outlined on page 12.

## CONVENTIONAL PHONO RECORDS

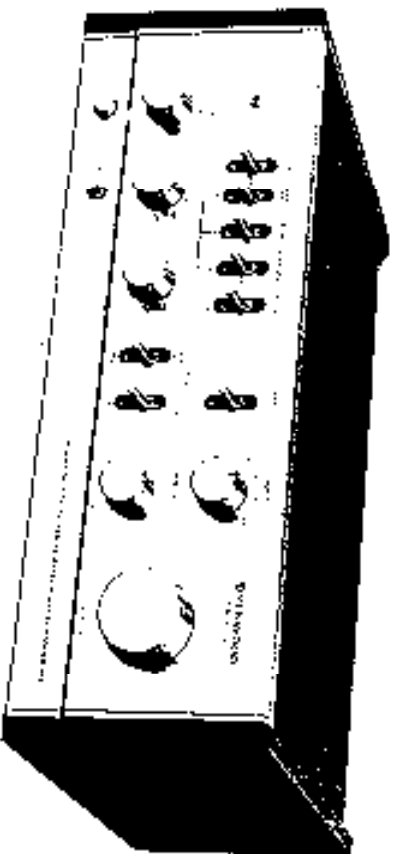
1. Direct coupled, pure complementary symmetry amplifier circuits are used in every stage to assure superior sound quality.
2. Complete protection of expensive power transistors is offered by a dependable ASO detector type limiter protection circuit.

### OPERATIONAL CHARACTERISTICS:

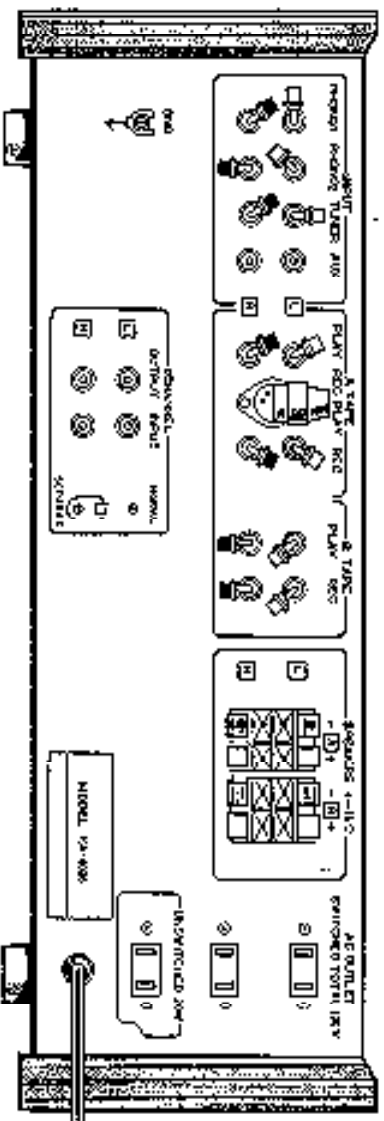
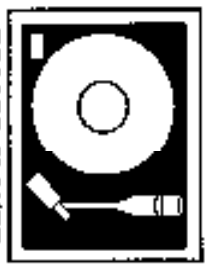
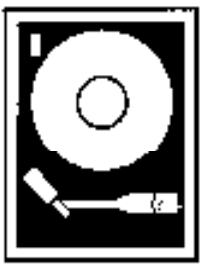
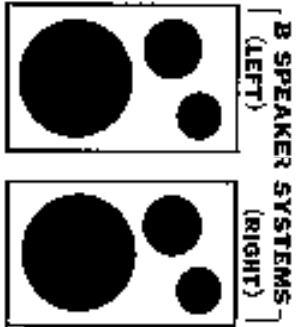
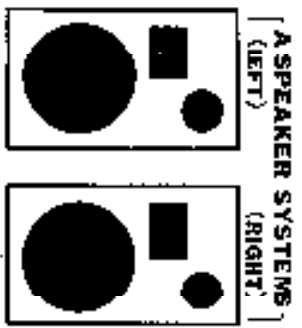
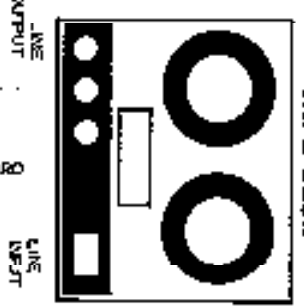
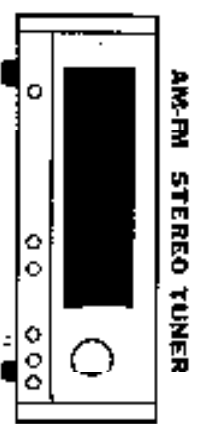
1. Can type, dual low-noise operational amplifier ensures low distortion and high stability characteristics that are truly outstanding.
2. A DEFEAT switch is provided in the tone control circuit which permits sound quality and acoustic compensation control, without which a truly flat response is difficult due to circuit element characteristics.
3. Convenient tape monitor and tape dubbing switches are provided. They enable listening to records or an FM broadcast while simultaneously dubbing a tape, and permit checking the recording, as well.
4. CHANNEL OUT-LET connectors are available. When desired an adaptor or a demodulator can be connected to them to transform this unit quickly into a Front or Rear Pre-main amplifier in a 4-channel system.

### FUNCTIONS AVAILABLE:

1. Both Low and High Cut Filters (6dB Octave) are available to prevent noise entry.
2. Inputs for practically any possible arrangement of program sources are available: 2 pairs of PHONO and TAPE PLAY, and inputs for TUNER, AUX and 4CH-IN
3. Two sets of Stereo Speaker Terminals and Front Panel Speaker Selector Switch permit operation of speakers in two separate rooms simultaneously or separately.
4. Lever-Type Muting Switch permits instantaneous silencing during telephone calls, etc.



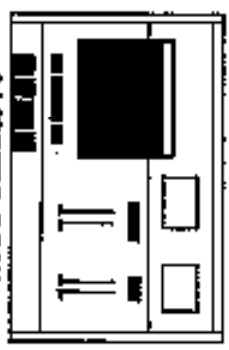
STEREO COMPONENTS



To SPEAKERS Terminals

To AC OUTLET

LINE OUTPUT  
LINE INPUT

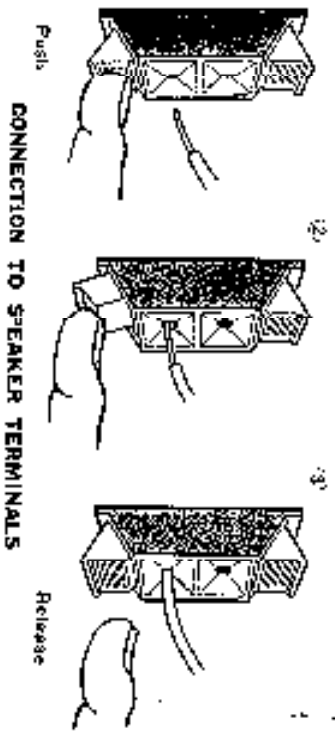


For details of "4-CHANNEL" refer to page 7.

In connecting only one set of speakers, connect the right speaker to right terminals and left speaker to left speaker terminals of "A" speaker terminals. Should plus or minus of either right or left channel be reversely connected, sounds at the center section will be adversely affected by lack of separation. To connect a second set of speakers, connect right speaker to right speaker terminals and left speaker to left speaker terminals of "B" speaker terminals.

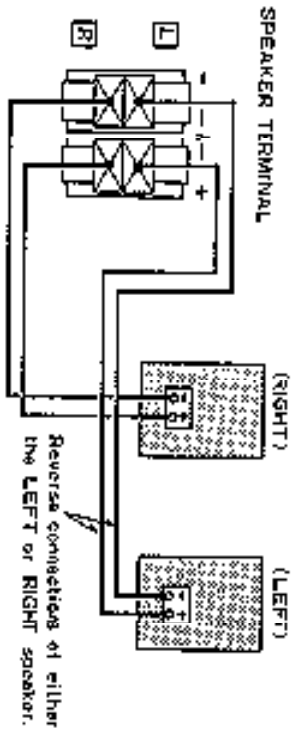
Sound cannot be heard when the SPEAKERS switch on the front panel is set to the A+B position, when only one pair of speaker system is used with connections made either to "A" SPEAKERS terminals or "B" SPEAKERS terminals. When connecting the speaker leads to the SPEAKER terminals, make sure that the bare wire strands at the ends of the speaker leads don't touch each other or adjacent terminal.

It is recommended that the tips of the speaker cord leads are soldered, or the strands of each individual lead twisted together to eliminate any possibility of short-circuits forming in the speaker connecting network.



**PHASING OF THE SPEAKERS**

- Speaker phasing can be determined in the following manner:
1. Set the MODE switch to MONO.
  2. Set the INPUT switch to PHONO 1 (PHONO 2) and adjust the VOLUME control to the desired listening level.
  3. Play a familiar record.
  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 KA-4006

## FM STEREO CONNECTION

Use the TUNER terminals for connection to an FM stereo or AM-FM stereo tuner.

Connect the left channel of the tuner to the "L" TUNER input jack, and the right channel of the tuner to the "R" TUNER input jack.

## RECORD PLAYER CONNECTIONS

Connect the left channel of the record player to the "L" PHONO 1 input jack, and the right channel to the "R" PHONO 1 input jack.

If an additional record player is used in order to operate two record players, connect the left channel to the "L" PHONO 2 input jack, and the right channel to the "R" PHONO 2 input jack.

If the record player has a grounding terminal connect it to this amplifier's GND terminal to prevent hum.

## COMBINATION HEAD 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 type 5pin connector, connect it to the REC/PLAY connector with a DIN connecting cord. A DIN connector enables recording and playback with this single cord.

When a DIN cord is used for connecting to the tape recorder, the PLAY and RECjacks 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.

## CONNECTION FOR ADDITIONAL TAPE RECORDER

If an additional tape recorder is used and two tape recorders are operated simultaneously, the same connections must be provided for B TAPE jacks.

## AC CAPACITY LIMITATIONS

When a tuner, tape recorder or other unit is connected here, it must have an output of at least 150 mV.

## AC OUTLETS

The AC outlets on the rear panel of the amplifier 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 100 watts maximum.)

### 2. UNSWITCHED outlet

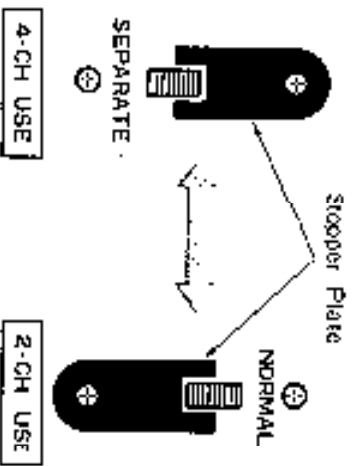
This outlet is available at all times. (The capacity is 200 watts maximum.)

# CONNECTING YOUR KA-4006

## 4-CHANNEL STEREO CONNECTIONS

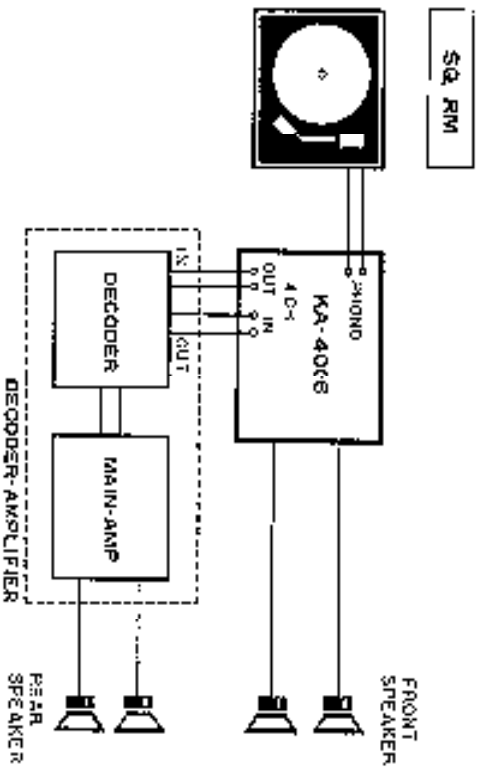
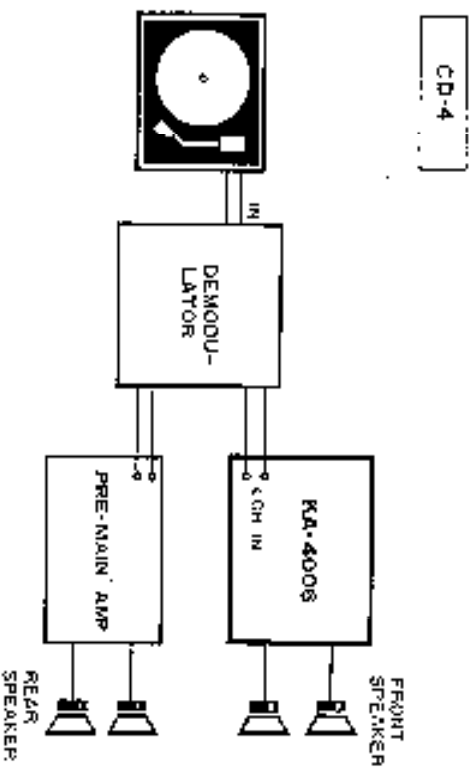
When it is desired to set up a 4-channel stereo system, connect another decoder-amplifier or demodulator to the 4CHANNEL OUTPUT INPUT jacks at the rear of this unit. It must be remembered, however, that a 4-channel program source is necessary for such operation. (See Fig.)

With a 4-channel stereo system thus set up and the NORMAL-SEPARATE switch of the KA-4006 set to SEPARATE position. (See Fig.)

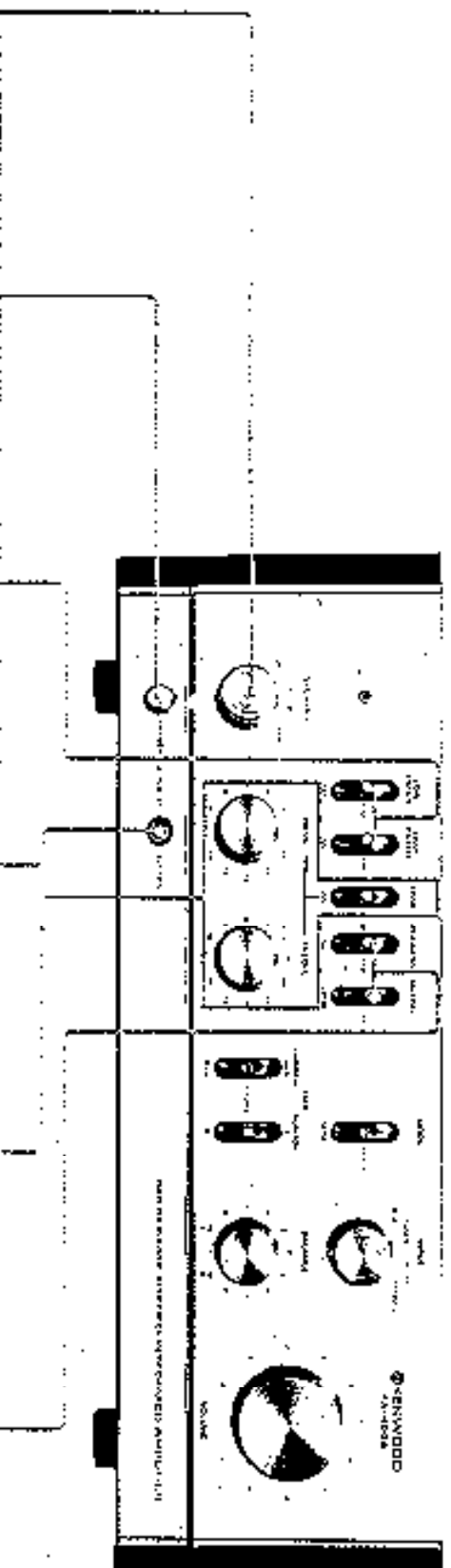


To change switch position, remove stopper plate. Switch the slide switch and reattach plate to the other side.

## How to Replace NORMAL-SEPARATE Switch



# CONTROLS AND THEIR FUNCTIONS



**SPEAKERS switch**  
**OFF** — This section silences all speakers for private head-  
 phone listening.  
**A** — Activates speaker's con-  
 nected to the A SPEAKERS  
 terminals on the rear panel.  
**B** — Activates speakers con-  
 nected to the B SPEAKERS  
 terminals on the rear panel.  
**A+B** — Activates simultane-  
 ously two sets of speaker sys-  
 tems connected to the A and  
 B SPEAKERS terminals.

**POWER switch**  
 Push the POWER switch to  
 turn the amplifier on.  
 Push it again to turn the  
 amplifier off.

**LOW and HIGH FILTER**  
 switches  
**LOW FILTER** — Setting these  
 switches to on reduces low  
 frequency noise such as tur-  
 ble rumble, hum, etc.,  
 which may interfere with  
 program material.  
**HIGH FILTER** — Setting this  
 switch to on reduces any high  
 frequency noise such as tap-  
 ping, record scratch, etc.  
 Generally, these switches  
 should be used only when  
 necessary.

**HEADPHONES Jack**  
 Plug stereo headphones into  
 this Jack for private listening.  
 The speakers are silenced  
 when the SPEAKERS switch  
 is set to OFF position.

**TONE switch**  
 This switch provides flat fre-  
 quency response with tone  
 control circuit deactivated.  
**BASS** and **TREBLE** controls  
 do not operate when this  
 switch is set to DEFLECT.

**BASS control**  
 Turning it clockwise increases  
 bass tone and counterclock-  
 wise decreases it. Tone is flat  
 at center zero position.

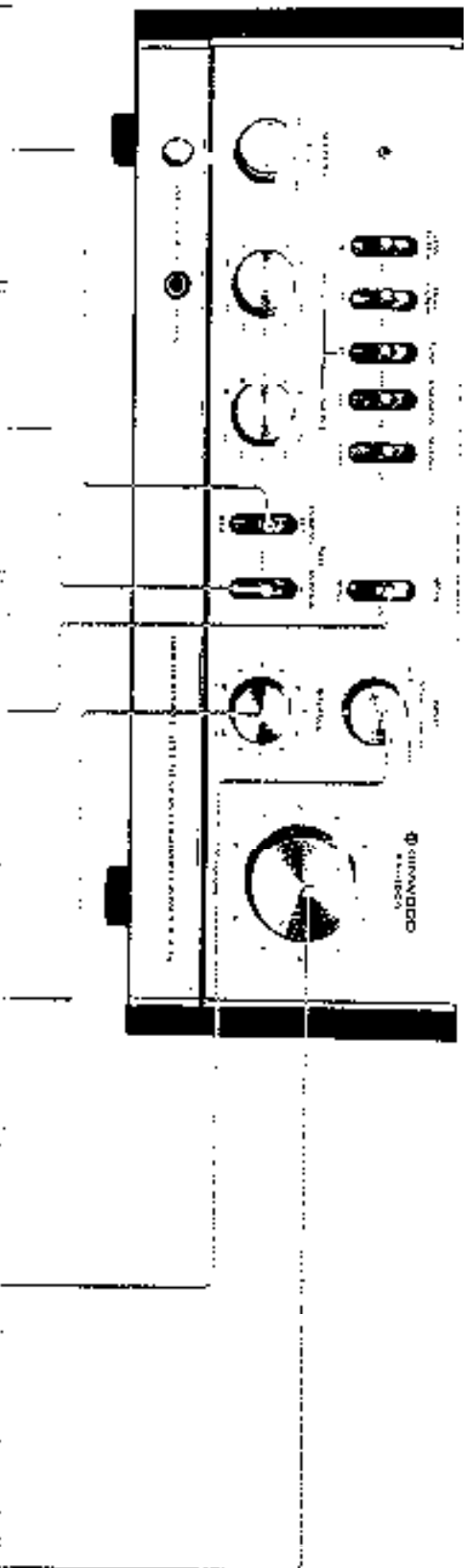
**TREBLE control**  
 Turning treblewise increases  
 treble tone and counterclock-  
 wise decreases it. Tone is flat  
 at center zero position.

**LOUDNESS control**  
 The **LOUDNESS** control  
 boosts bass and treble tones  
 at low listening levels. Our  
 ears hear less sensitivity to  
 low and high frequencies at  
 low listening levels and the  
**LOUDNESS** control compen-  
 sates for this deficiency.  
 This control should be switch-  
 ed off when listening at nor-  
 mal and high levels.

**MUTING switch**  
 This switch reduces volume  
 level momentarily as during  
 a telephone call, etc. Output  
 power is reduced 20 dB  
 without touching the VOL-  
 UME control. Setting this  
 switch to off returns volume  
 level to original level.



## CONTROLS AND THEIR FUNCTIONS



### TAPE switch (DUBBING)

**DUBBING (A+B)** — For dubbing from a tape recorder connected to the A TAPE jacks into a tape recorder connected to the B TAPE jacks.  
**DUBBING (B→A)** — For dubbing from a B tape recorder to A.  
 For further details refer to page 11.

### TAPE switch (MONITOR)

Switch positions and functions are as follows:  
**SOURCE** — The source signal is heard.  
**A** — For monitoring a recording or for playback on a tape recorder connected to the A TAPE jacks.  
**B** — For monitoring a recording or for playback on a tape recorder connected to the B TAPE jacks.  
 Sound recorded on the tape is heard.  
 For further details refer to page 11.

### MODE

This switch determines the manner in which program sources (previously selected by the INPUT switch) will go through the amplifier section.  
**STEREO** — This provides stereophonic reproduction of stereo program source.  
**MONO** — Mixes left and right channels.

### BALANCE control

This BALANCE adjust unequal volume from an program source in right and left channels. The left channel is accentuated when the slider is turned from center "0" toward the left side, and conversely.

### INPUT switch

Switch position and functions are as follows:  
**TUNER** — In this position the tuner is available if connected to the TUNER input jacks on the rear panel.  
**PHONO 1** — In this position the record player is available if connected to the PHONO 1 input jacks on the rear panel.  
**PHONO 2** — In this position the record player is available if connected to the PHONO 2 input jacks on the rear panel.  
**AUX** — Selects source connected to the AUX jacks on the rear panel.

### VOLUME control

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

# OPERATING INSTRUCTIONS

## OPERATING INSTRUCTIONS

1. Set the INPUT switch to TUNER.
2. Set the MODE switch to STEREO and the TAPE MONITOR switch to SOURCE.
3. Adjust the VOLUME control to the desired listening level.
4. Use the BASS, TREBLE, FILTERS and LOUDNESS controls to adjust sound as desired and to match the acoustic conditions of your room.

## PHONO CONNECTIONS

1. Two pairs of phono input jacks, PHONO 1 and PHONO 2, are provided to enable connections to two record players. To reproduce the output of the record player that is connected to PHONO 1 jacks set the INPUT switch to PHONO 1. To reproduce the output of the record player that is connected to PHONO 2 jacks, set the INPUT switch to PHONO 2.
2. Set the MODE switch to STEREO and the TAPE MONITOR switch to SOURCE.
3. Adjust the VOLUME to the desired listening level.
4. Use the BASS, TREBLE, FILTERS and LOUDNESS controls to adjust the sound to your preference and to the acoustic conditions of your room.

## TAPE MONITORING

If you use the KA-4006 with 3-head type tape recorders, you can check the sound quality of the recording that is being made by momentarily comparing the recorded signal with the source signal as follows. Set the TAPE MONITOR switch to A (or B) to monitor the recorded sound. Set the TAPE MONITOR switch to SOURCE to monitor the source signal before it is recorded.

## WHEN RECORDING WITH ONE TAPE RECORDER

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

1. Set the INPUT switch to the desired program source. Set the TAPE DUBBING switch to SOURCE. To monitor the recording, set the TAPE MONITOR switch to A or B, whichever side the tape recorder is connected.
2. Recording level should be adjusted with the volume control of your tape recorder.
3. Recording is not affected by the VOLUME, BASS, TREBLE, FILTERS, LOUDNESS, etc., controls of the amplifier.

## SIMULTANEOUS RECORDING WITH TWO RECORDERS

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

1. Set the INPUT switch to the desired program source.
2. Set the TAPE DUBBING switch to SOURCE.
3. Recording can now be made into both tape recorders simultaneously. To monitor these recordings, use the TAPE switch as follows. Set it to A to monitor the recording being made with the tape recorder connected to A TAPE jacks. Set it to B to monitor the recording being made in the tape recorder connected to B TAPE jacks.
4. Recording levels should be adjusted exactly as described previously for single tape recorder operation.

## OPERATING INSTRUCTIONS

1. The INPUT switch can be at any position.
2. Set the TAPE MONITOR switch to the corresponding position (A or B).
3. Adjust volume and tone quality.

### DUBBING:

Tape recordings may be easily duplicated from one tape recorder to another with minimal loss of quality by setting the TAPE switch to DUBBING (A → B) or DUBBING (B → A) as follows:

1. The INPUT switch can be at any position.
2. Set the TAPE switch to DUBBING (A → B) when it is desired to copy recorded material on the tape recorder A for re-recording on the tape recorder B.  
Set the TAPE switch to DUBBING (B → A) when it is desired to copy a recording on the tape recorder B for re-recording on the tape recorder A.  
The recording can be monitored.
3. Operate both tape recorders simultaneously.

Moreover, this unit permits listening to other program sources such as an FM broadcast or records while tape dubbing.

■ An FM broadcast can be tape recorded while simultaneously listening to records as follows:

1. Connect the Tuner to the "PLAY" jacks of the A TAPE group connector jacks on the rear panel of this unit and the Tape Deck to the B TAPE group connectors.
2. Connect the Turntable to either PHONO 1 or PHONO 2 and set the INPUT switch to whichever connector that is used.
3. An FM broadcast can be recorded when the TAPE DUBBING switch is then set to A → B and the Tape Deck operated in recording mode.
4. Disc record sound is reproduced when the TAPE MONITOR switch is set to SOURCE.
5. FM broadcasts are reproduced when the TAPE MONITOR switch is set to A. The recorded sound of FM broadcasts are reproduced

and can be monitored when the TAPE MONITOR switch is set to B.

■ Disc record sound sources can be tape recorded while simultaneously listening to an FM broadcast as follows:

1. Connect the Tuner to the "PLAY" jacks of the A TAPE group connector jacks on the rear panel of this unit and the Tape Deck to the B TAPE group connectors.
2. Connect the turntable to either PHONO 1 or PHONO 2, and set the INPUT switch to whichever connector that is used.
3. Set the TAPE MONITOR switch to A and tune in an FM broadcast.
4. Set the TAPE DUBBING Switch to SOURCE and the Tape Deck to recording mode. The sound from the disc record can then be recorded.
5. The FM broadcast is reproduced when the TAPE MONITOR switch is then set to A. When it is set to SOURCE the sound of the disc record will be reproduced. When it is set to B the tape recorded sound of the disc record can be monitored.

## WARRANTY SERVICE

SECTION 1. AC VOLTAGE SELECTOR SWITCH

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 occasions subject to direct sunlight.
- (b) Avoid high or low temperature extremes.
- (c) Keep the amplifier away from heat radiating sources.

### PROTECTION CIRCUITS

The newly developed protection circuit is completely effective and prevents damage which may be caused by short-circuiting at the speaker terminals or the power output circuit of the amplifier. When a short-circuit occurs, this protection circuit will function automatically to protect the power output transistors and the speakers. If the power output transistor fails, this protection circuit will function automatically to protect the speaker.

### AVOIDING DISTURBING SOUNDS

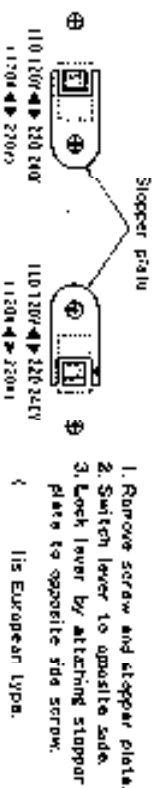
Occasionally a disturbing howling sound caused by acoustic feedback, may be heard. This is generally caused by the relative positions of the turntable and speaker enclosures. The sound pressure radiated from the speaker box surrounds and vibrates the turntable. This vibration is picked up by the cartridge, 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.

The KA-4106 operates on 110-120 volt AC or 220 - 240 volt AC. The AC Voltage Selector Switch on the rear panel is set to the voltage that prevails in the area to which the amplifiers are shipped. Before operating this amplifier, make sure that the position of the AC Voltage Selector Switch matches your line voltage. If not, it must be changed to the proper setting.

To change, first disconnect the AC line cord. Then remove the stopper plate and slide the AC Voltage Switch to the opposite side. Then reattach the stopper plate to the other side.

### NOTE:

Our warranty does not cover damage caused by excessive line voltage due to improper setting of the AC Voltage Selector Switch.



AC VOLTAGE SELECTOR SWITCH

**RMS Power Output**

Both channel driven

34 x 2 watts into 8 ohms at 20 Hz-20,000 Hz  
35 x 2 watts into 8 ohms at 1,000 Hz  
48 x 2 watts into 8 ohms at 1,000 Hz  
40 x 2 watts into 8 ohms at 1,000 Hz  
56 x 2 watts into 8 ohms at 1,000 Hz  
95 watts into 8 ohms

**Dynamic Power Output**

145 watts into 8 ohms  
0.5% n.i. rated power into 8 ohms  
0.05% at 5% rated power into 8 ohms at 1,000 Hz  
0.5% at rated power into 8 ohms  
0.05% at 5% rated power into 8 ohms  
8 Hz - 45 kHz  
110 ms

**Total Harmonic Distortion**

Inter Modulation Distortion  
(64 Hz : 7 kHz x 4 : 1)  
Power Bandwidth  
Signal-to-Noise Ratio  
Damping Factor  
Speaker Impedance

**PRE-AMPLIFIER SECTION**

**Input Sensitivity and Impedance**

Phono 1  
Phono 2  
Tuner  
ALX  
Tape Play A, B 4 CH IN  
Maximum Input Voltage (rms)  
Phono 1, 2  
Signal-to-Noise Ratio (H.F. A CURVED)  
Phono 1, 2  
Tuner  
ALX  
Tape Play A, B 4 CH IN  
Output Voltage and Impedance  
Tape Rec. A, B (Print)  
Din connector  
4 CH QUT

2.5 mV 50 K ohms  
2.5 mV 50 K ohms  
150 mV 50 K ohms  
150 mV 50 K ohms  
150 mV 50 K ohms  
140 mV T.H.D. 0.5% at 1,000 Hz  
76 dB  
90 dB  
90 dB  
90 dB  
150 mV 50 ohms  
40 mV 70 K ohms  
150 mV 50 ohms

**Frequency Response**

Phono 1, 2  
Tuner, AUX, Tape Play  
Tone Controls  
Bass  
Treble  
Loudness Control (1-30 dB)

Low Filter 80 Hz  
High Filter 7 kHz

**GENERAL**

Switches  
Speaker Selector  
Input Selector  
Mode  
Function  
Tape Monitor  
Other  
AC Outlet  
Power Consumption  
Dimensions  
Weight  
OFF - A, B, A + B  
Phono 1, 2, Tuner, Aux.  
Stereo - Mono  
Muting, Defeat, Low H.F. Filter, Loudness  
A, B, Tape Dabbling A -> B, B -> A  
Phono Jack  
Switched 2, Unswitched 1  
140 watts at full power  
15 watts at no signal  
14 1/2" x 11 1/2" x 14.35 (mm), H 6-3/16" (157mm),  
D 1 1/2" (39.5mm)  
24.2 lbs (11 kg)

RMS Standard curve +0.5 dB  
10 Hz - 40,000 Hz -1.5 dB

+10dB at 100 Hz  
+10dB at 10,000 Hz  
+8 dB at 100 Hz  
+3 dB at 10,000 Hz  
6 dB / oct  
6 dB / oct

## INDICATIONS

In initially installing this amplifier improper connections to a tuner or record player may result in one of the following indications of trouble. Their possible causes and corrective measures are listed below to facilitate installation.

During Tuner or Record Operation	Cause	Correction
No pilot lamp indication, no sound although AC is switched ON	Four AC plug connection.	Check plug contact.
No sound from LEFT and RIGHT.	<p>SPEAKERS switched to A + B position.                      SPEAKERS switched to OFF.                      Volume Control at 0 (Extreme left).                      TAPE MONITOR switch at A (or B).</p> <p>4 CHANNEL NORMAL-SEPARATE switch at SEPARATE position.                      Four speaker cord connections.                      BALANCE control set to one extreme or other.                      Protection Circuit indication of short circuit in the left or right output.</p>	<p>Both A-B groups of speakers are required in this case. 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 SOURCE except when using tape recorder's.</p> <p>Always set to NORMAL except when using together with 4 channel system.                      Check amp. output and speakers connections.                      Adjust BALANCE control.                      Check speaker cord connections.</p>
Sound only from one side.	<p>LEFT RIGHT resistor values unbalanced.                      Difference in volume level of radio and phono. levels.</p>	Adjust BALANCE control. Set to appropriate volume level.
Intermittent Response.	<p>Four Player output cord connections.                      Poor Player output cord connections.</p>	Check speaker cord connections.
Unbalance results when volume is lowered.	<p>LEFT RIGHT resistor values unbalanced.                      Difference in received signal and phono output levels.</p>	Adjust BALANCE control. Set to appropriate volume level.
During Phono Record Operation Only	Cause	Correction
No sound from LEFT and RIGHT, or sound only from one side.	<p>Player output disconnected.                      Poor Player output cord connections.</p>	<p>See that player output cord is firmly plugged into amp. input.                      See that player output cord is firmly plugged into amp. input.</p>
Low hum drowns out sound.	<p>Player output cord picking up hum from AC cord.</p>	<p>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 terminals.                      Route player cord so buzz hum is minimized.</p>
Sound audible but background hum occurs.	<p>Player not grounded.                      TV signal picked up by player output cord.                      Speaker vibrations induce feedback in pickup.</p>	<p>Increase distance between player and speakers.                      Choose speaker locations carefully. Remember, loose flooring induces howling.</p>
Sound audible but continuous background buzz interferes.	<p>Player not grounded.                      TV signal picked up by player output cord.                      Speaker vibrations induce feedback in pickup.</p>	<p>Increase distance between player and speakers.                      Choose speaker locations carefully. Remember, loose flooring induces howling.</p>
Howling noise occurs when volume is raised or bass response is increased.	<p>Player not grounded.                      TV signal picked up by player output cord.                      Speaker vibrations induce feedback in pickup.</p>	<p>Increase distance between player and speakers.                      Choose speaker locations carefully. Remember, loose flooring induces howling.</p>

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