

HIGH SPEED DC STEREO RECEIVER

Super Eleven



INSTRUCTION MANUAL

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IMPORTANT!

It is very important to check the Voltage Selector Switch setting and make sure that it corresponds to your line voltage before connecting the power cord into an AC outlet. If the Voltage Selector required re-setting, further details as follows.

FOR YOUR RECORDS

Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your Kenwood dealer for information or service on this product.

Model Super Eleven Serial number _____

UNPACKING

Unpack the unit carefully and make sure that all accessories and cables are put aside so they will not be lost.

Examine the unit for any possibility of shipping damage. If your unit is damaged or fails to operate, notify your dealer immediately. If your unit was shipped to you directly, notify the shipping company without delay. Only the consignee (the person or company receiving the unit) can file a claim against the carrier for shipping damage.

We recommend that you retain the original carton and packing materials for use should you transport or ship the unit in the future.

INSTALLATION PRECAUTIONS

- Avoid locations subject to direct sunlight.
- Avoid high or low temperature extremes.
- Keep the unit away from heat radiating sources.
- Choose a location that is relatively free of vibration or excessive dust.
- Make sure power is off before making any system connections.

WARNING:

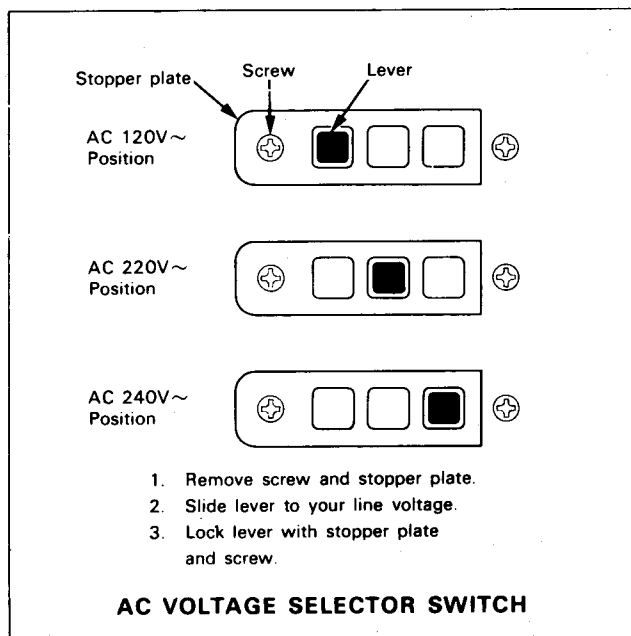
TO PREVENT FIRE OR SHOCK HAZARD,
DO NOT EXPOSE THIS APPLIANCE TO
RAIN OR MOISTURE.

AC VOLTAGE SELECTION

This unit operates on AC 120V, 220V or 240V. The AC Voltage Selector Switch on the rear panel is set to the voltage that prevails in the area to which the unit is shipped. Before connecting the power cord to your AC outlet, make sure that the setting position of this switch matches your line voltage. If not, it must be set to your voltage in accordance with the following direction.

Note:

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



SAFETY PRECAUTIONS

CLEANING

Do not use volatile solvents such as alcohol, paint thinner, gasoline, benzine, etc. to clean the cabinet. Use a silicone cloth or a clean dry cloth.

VENTILATION HOLES

The case top is slotted to allow ventilation. Never block these holes with ornamental cloths, books, or other objects. Make sure that metal objects such as coins, hairpins, or needles do not enter the unit through the ventilation holes. The result could be a serious malfunction or a possible shock hazard. Make sure that children do not insert foreign objects into the ventilation holes.

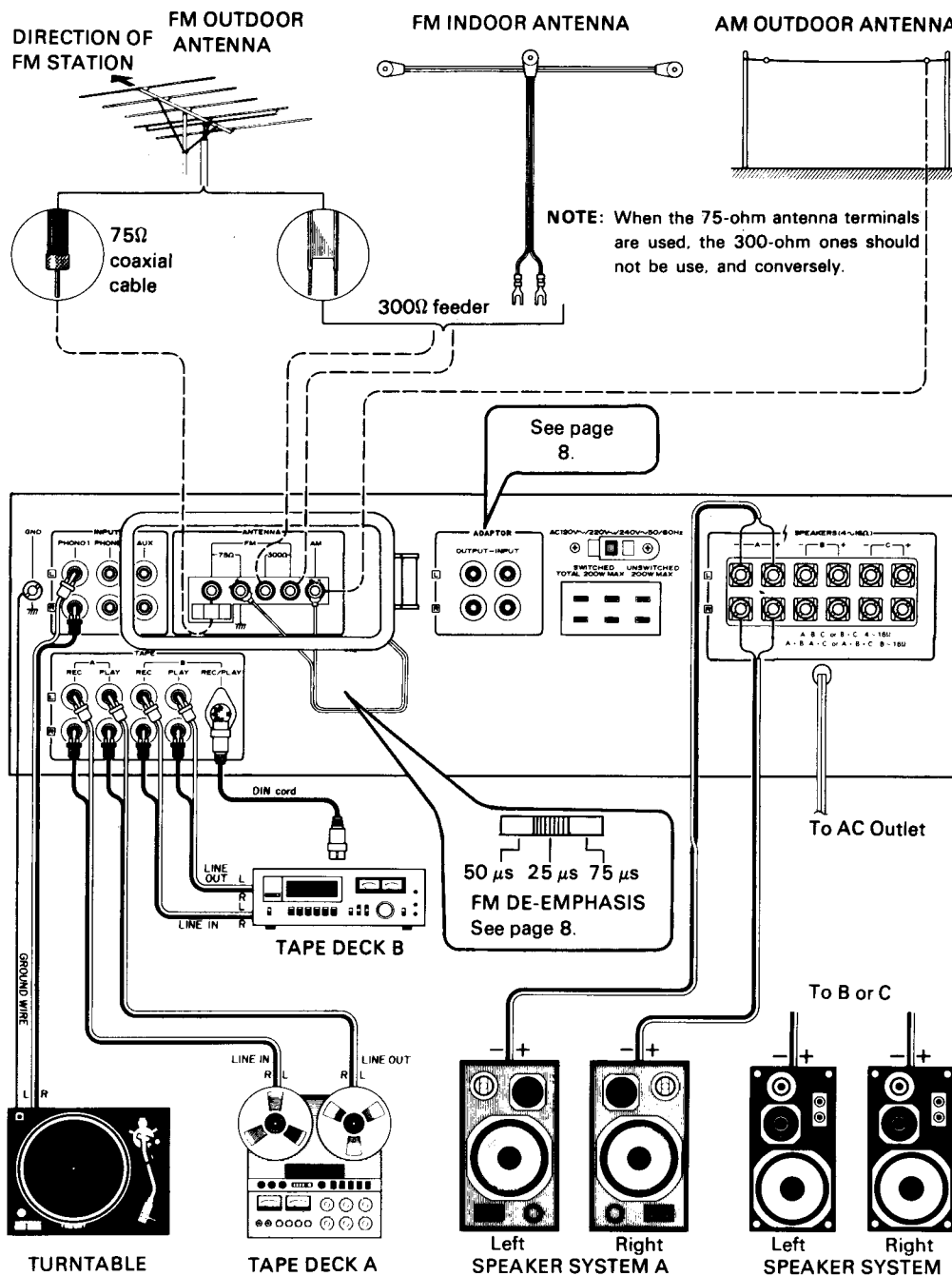
SERVICE OR MODIFICATIONS

Do not remove the cabinet or touch internal parts. Refer all service to qualified service personnel. Unauthorized modifications can result in a dangerous shock hazard and can void the warranty.

POWER CORD

Always insert or remove the power plug from the AC outlet by grasping the plug body. Never pull or stretch the cord. Take care that the cord is not subject to traffic or bent sharply around furniture. Keep heavy object off the cord; never route it under rugs, and avoid the use of extra extension cords. Attention to these precautions will avoid fire or shock hazards.

SYSTEM CONNECTION DIAGRAM



SYSTEM CONNECTIONS

SPEAKERS

If only one set of speakers is to be connected, make connections to the terminals marked SPEAKERS A, as shown on page 2. Connect the speakers to the **L** and **R** terminals in accordance with the location selected for each speaker. To ensure correct speaker phasing, observe polarity marks; connect terminals marked + on the receiver to similarly-marked speaker terminals. Do the same for receiver and speaker terminals marked with a minus sign. Reversal of speaker leads will result in loss of bass tones and poor stereo separation.

If a second set of speakers is to be used, make connections at the right set of terminals, marked B.

A third set of speakers may be connected to the terminals marked C.

Notes:

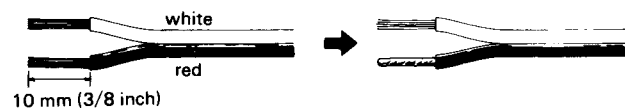
1. If a single pair of speakers or two pairs of speakers in combination with B and C are to be used, each speaker must be rated at 4 ohms or more.
2. If three pairs of speakers are to be connected to the SPEAKERS A, B, and C terminals and operated altogether, or in combination with A and B, or A and C, each speaker must be rated at 8 ohms or more.

WARNING!

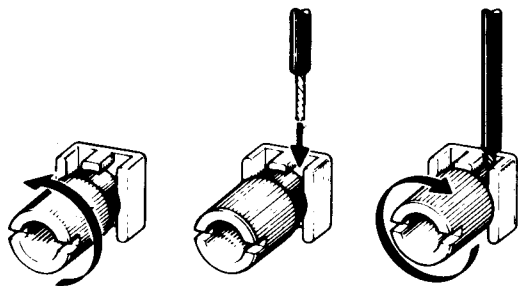
Particular attention must be given to making good electrical contact at the receiver-output and speaker terminals. Poor or loose connections can cause sparking or burning at the terminals because of the very high power that the receiver can deliver.

Follow these steps carefully.

1. Strip 10 mm (3/8 inch) of insulation from the ends of the speaker cable. Twist the bare strands of wire together and solder the ends to keep the strands from separating.



2. Back the caps of the SPEAKER terminals on the receiver all the way out by turning them counterclockwise as far as they will go.
3. Insert one end of the red cable into the hole in the + terminal as shown below.



4. Turn the cap clockwise and tighten securely to ensure a firm contact.
5. Connections at your speakers will vary depending upon the type of terminals used. Check the manufacturer's instructions and make sure that a good, tight, metal-to-metal contact is made.
6. Check all connections. Make sure all are tight, and that there are no loose strands of wire touching the wrong terminals or the metal cabinet or trim.

TURNTABLES

Your stereo turntable has two audio cables that are terminated with phono plugs. Plug the left channel plug into the **L** and the right channel plug into the **R** PHONO 1 INPUT jacks as shown on page 2.

If an additional turntable is to be used, make similar connections at the PHONO 2 jacks.

If the turntable has a ground wire, connect it to the unit's GND terminal to avoid hum.

AUX JACKS

INPUT AUX jacks are used to connect other high-level signal sources, such as tuners, extra tape decks (equipped with preamps), TV or VTR sound output mic preamps, etc.

TAPE DECKS

If only one tape deck is to be connected to the system it is recommended that it be connected to the jacks marked TAPE A.

Tape deck input and output cables are normally terminated with phono plugs.

Playback

Plug the left and right output cables of the tape deck into the **L** and **R** TAPE A PLAY jacks.

Record

Plug the left and right input cables of the tape deck into the **L** and **R** TAPE A REC jacks.

DIN Connector

If your tape deck is equipped with a DIN connector, connect it to the TAPE B REC/PLAY connector with the DIN connecting cord. The DIN connection makes both input and output connections with a single cord, and the signal must be controlled with the MONITOR switch on the front panel.

Note:

If connections are made with a DIN connecting cord, the TAPE B PLAY and REC jacks should not be used.

Second Tape Deck

Plug the input and output cables from the second tape deck into the REC and PLAY jacks marked B.

AC OUTLETS

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

1. SWITCHED OUTLETS

These outlets are controlled by the POWER switch and the Timer on the front panel. (The total capacity is 200 watts maximum.)

2. UNSWITCHED outlet

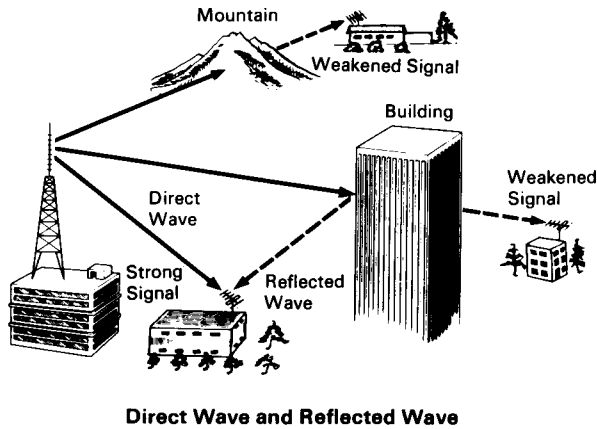
This outlet delivers power at all times. (The capacity is 200 watts maximum.)

Note:

Never connect any equipment whose power consumption exceeds the capacity of each outlet.

FM ANTENNAS

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.

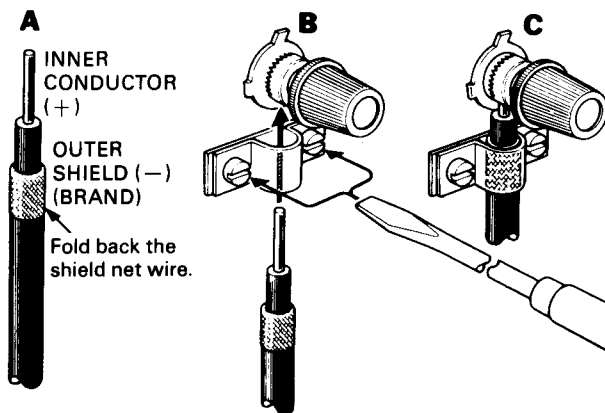


Direct Wave and Reflected Wave

FM Outdoor Antenna

In areas at a greater distance from the transmitting station, the use of an outdoor antenna is highly recommended. It is available in various types. For reception of stations located in many directions, a non-directional type antenna will offer better results. When using a directional antenna, always orient it for the best reception of the desired station. The correct position will be indicated by highest possible number of the SIGNAL LEDs on the unit.

If you use a coaxial FM antenna cable (75 ohms), the connection is shown as follows.

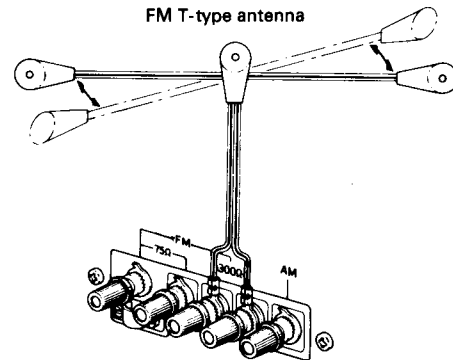


Strip the coaxial cable as shown in (A). Loosen the screws and connect the cable as shown in (B). Then tighten all screws for a connection like (C).

Coaxial Cable (75Ω) Connection

FM Indoor Antenna

In areas close to the transmitting station, the supplied T-type antenna may suffice. Spread two arms of the antenna horizontally and position them for the best reception, listening to an FM station. The antenna can then be taped to a wall or ceiling and must not be rounded nor folded. It should be remembered, however, that the pickup of reflections (similar to "ghosts" on TV) will result in poor stereo reception. These reflections must be reduced to a minimum, either by careful orientation of the T-type antenna or, if this will not eliminate them, by using a more directional outdoor antenna.



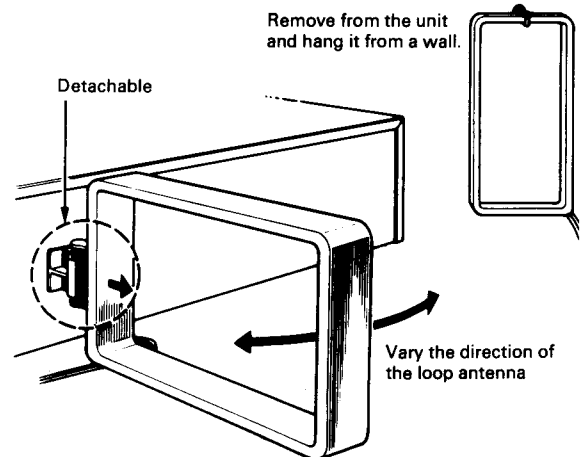
Twin Lead (300Ω) Connection

AM ANTENNAS

AM Loop Antenna

Tune to your favorite AM station and position the loop antenna for best reception. Try other stations and find the position that gives best overall reception.

When this unit is mounted in a rack or placed on a shelf with insufficient space behind, remove the loop antenna and hang it from a wall in the direction which gives best reception. If the length of the lead wire is too short, add a lead wire of an appropriate length.

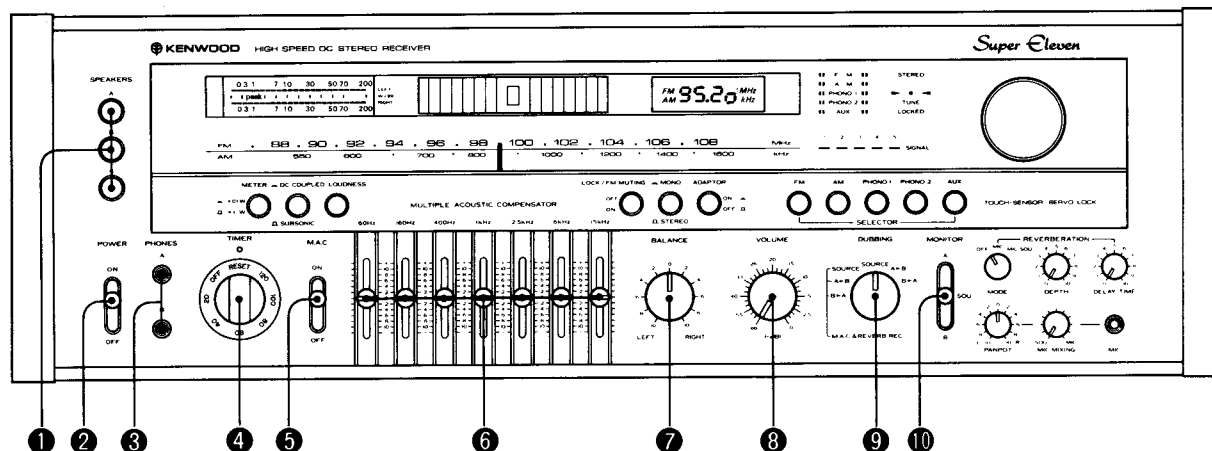


AM Loop Antenna Adjustment

AM Outdoor Antenna

In concrete buildings or at a great distance from the transmitter, it may be necessary to install an outdoor wire antenna. The end of this wire should be stripped of insulation and connected to the AM terminal. At this time, keep the loop antenna connected.

CONTROLS, INDICATORS AND CONNECTORS



1 SPEAKERS

- A — Activates speakers connected to the SPEAKERS A terminals on the rear panel.
 - B — Activates speakers connected to the SPEAKERS B terminals on the rear panel.
 - C — Activates speakers connected to the SPEAKERS C terminals on the rear panel.
- For private listening through headphones, release all the SPEAKERS switches.

2 POWER switch

- ON — Turns the receiver on.
- OFF — Turns the receiver off.

3 PHONES jacks

Insert stereo headphone plugs into these jacks.

4 TIMER control and indicator

The Super Eleven is equipped with a TIMER control which enables the set to be switched off automatically at any predetermined time within two hours from the time of setting. The indicator is flickering while the TIMER is in operation. If the predetermined time is set wrong unintentionally, for example, it has been set at 120 instead of 60, correction can be made by turning the TIMER control counterclockwise to the required time of 60. The TIMER control requires more force to turn counterclockwise than clockwise.

Note:

When the TIMER control is set to OFF, the AC power remains off, regardless of the setting of the POWER switch. Therefore, the TIMER control must be set to RESET to operate the receiver. The AC convenience outlet on the rear panel marked SWITCHED 200W is switched by the POWER switch and TIMER.

5 M.A.C. switch

- ON — With the switch in this position, the MULTIPLE ACOUSTIC COMPENSATOR is activated.
- OFF — With the switch in this position, the frequency response is absolutely flat, and the M.A.C. circuit is bypassed.

6 MULTIPLE ACOUSTIC COMPENSATOR

With the M.A.C. switch in the ON position, these controls can be used to give flexible control over tone allow adjustments to be made simultaneously at a number of different frequencies. The audio spectrum is divided into narrow bands with center frequencies of 60 Hz, 160 Hz, 400 Hz, 1 kHz, 2.5 kHz, 6 kHz, and 15 kHz and each band can be boosted or attenuated. Slide faders are employed for adjustment and the response is flat when all sliders are in their central positions.

7 BALANCE control

This control permits balancing of left and right channels when an imbalance exists in the sound source, or to correct an acoustic imbalance due to room conditions. Turn it to the left, from the zero position, to boost the left channel; turn it to the right from zero to raise the level for the right channel.

8 VOLUME control

This control adjusts left- and right-channel volume simultaneously. Set it for the desired listening level.

9 DUBBING switch

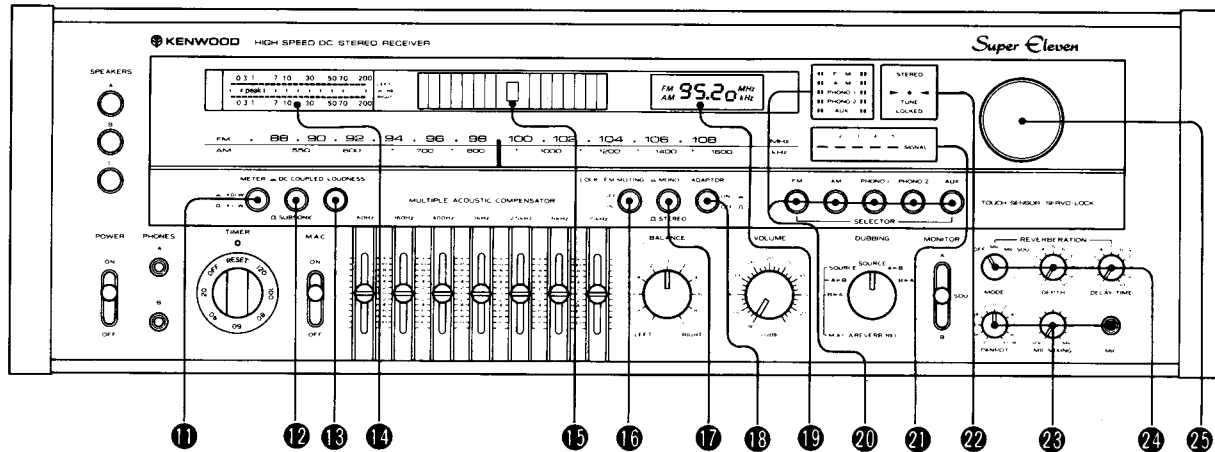
This six-position switch has two groups of settings: one group is SOURCE, A ▶ B, and B ▶ A marked clockwise from 12 o'clock; the other group is the three positions marked counterclockwise. To record a source or copy tape without signal processing, use the former group of settings. To record a source or copy tape with signal processing by M.A.C., REVERBERATION, and MIC circuits, use the latter group of settings. For further details refer to pages 9 and 10.

10 MONITOR switch

Switch positions and functions are as follows:

- SOU — The source signal is heard.
- A — For monitoring a recording or for playback on a tape deck connected to the TAPE A jacks.
- B — For monitoring a recording or for playback on a tape deck connected to the TAPE B jacks.

CONTROLS, INDICATORS AND CONNECTORS



11 METER range switch

This switch enables selection of the peak power display sensitivity.

$\square \times 1W$ — With the switch in this setting, power output into 8-ohm speakers is directly read on the peak power display.

$\square \times 0.1W$ — With the switch in this setting, the reading of power output on the display must be divided by 10, for example, the reading "30" on the display shows 3 watts output.

12 DC COUPLED/SUBSONIC switch

Depressing this switch obtains DC (direct) coupling through all amplifier circuits from the TAPE and AUX inputs to the speaker terminals. This setting provides absolutely linear frequency response. With the switch set to the "out" position, the subsonic filter activates and eliminates low-frequency rumble from the program source such as might be caused by warped records. Always set to the "out" position if a static DC leak is suspected at the input due to a circuit fault or imbalance in the program source. A DC leak will cause a steady displacement of the speaker voice coil.

13 LOUDNESS control

The LOUDNESS control compensates for a natural deficiency in human hearing, the human ear is less sensitive to bass notes at low volume levels. Use the LOUDNESS control to give the best bass response at normal listening levels. In the OFF position response is flat. Use this setting for loud listening levels.

14 PEAK power display

The PEAK power display shows the effective power being delivered to your speakers. The display is calibrated for an 8-ohm load. If 4-ohm speakers are used, multiply the reading by 2; for 16-ohm speakers, divide the reading by 2.

15 REVERBERATION display

This displays the reverberation effect graphically. When the reverberation time is increased (the DELAY TIME control is turned clockwise), the winking intervals of the light are lengthened. Conversely, when this time is reduced (the DELAY TIME control is turned counterclockwise), these intervals are cut short. Also, the illumination width increases in proportion to the amount of the DEPTH control is turned clockwise. The DELAY TIME and DEPTH controls are set to the preferred positions as you check out the reverberation, but if the illumination fills the display it means that these are excessive reverberation components (too much echo). Use this as a guide to adjustment.

16 LOCK/FM MUTING switch

Setting this switch to ON ensures perfect tuning by activating the servo-lock feature. It automatically locks the tuner to the station frequency at all times regardless of temperature or humidity changes. Setting this switch to OFF releases the servo-lock feature. When the reception is very weak and an excessively strong station operates on a neighboring channel, better results may be obtained by setting the LOCK/FM MUTING switch to OFF. In the "out" position of this switch muting is applied to silence interstation noise when tuning. To receive very weak stations, stations that are too weak to overcome the muting threshold, push in to disable muting.

17 MONO/STEREO switch

STEREO — This provides stereophonic reproduction from any stereo program source. The left channel is heard from the left speaker, and the right channel is heard from the right speaker.

MONO — Monophonic reproduction. The left and right channels are mixed together and heard from both speakers.

18 ADAPTOR switch

This switch enables operation of an adaptor connected between the ADAPTOR's OUTPUT-INPUT jacks on the rear panel. For further details refer to page 8.

19 FREQUENCY DISPLAY

The digital display indicates AM and FM frequencies, allowing you to tune correctly to the desired station using the TUNING knob.

20 SELECTOR switches and indicators

When one of these SELECTOR switches is depressed, the indicator corresponding to the SELECTOR switch will light to show which source is being operated.

FM — For reception of FM broadcasts

AM — For reception of AM broadcasts

PHONO 1 — Audio from turntable connected to the PHONO 1 input jacks

PHONO 2 — Audio from turntable connected to the PHONO 2 input jacks

AUX — Audio from a source connected to the AUX jacks

21 SIGNAL indicator

This indicator employs 5 LEDs to show the relative signal levels of incoming broadcasts. For best reception, both the AM and FM antennas should be installed so that the highest possible number of LEDs light.

22 STEREO/TUNE indicators

STEREO — The letters "STEREO" will light when an FM stereo broadcast is tuned in. However, it does not light when receiving an FM mono broadcast, or with the MONO/STEREO switch set to MONO.

TUNE — This green indicator shows precise FM tuning. Maximum stereo separation and minimum distortion are obtained when the middle LED lights. For further details refer to page 8.

23 MIC MIXING facilities

MIC input — Plug a 600-ohm to 50-kohm impedance microphone into this jack. The mic output can be mixed with a radio broadcast, a phono record or playback of a recorded tape.

MIC MIXING control — Turn this knob to the right to increase the microphone level in relation to that of the source signal which will decrease simultaneously. Keep this knob in the "SOU" setting when the microphone is not used otherwise, the source sound will be attenuated or may become totally inaudible.

PANPOT control — With the control the apparent position of the mic sound can be placed at any position between the two speakers. With the control set to the "0" position, mic sound will be heard from the middle of the two speakers. Turn it to the left, from the zero position, to shift mic sound toward the left speaker; turn it to the right from zero to shift mic sound toward the right speaker.

24 REVERBERATION controls

MODE:

OFF — With the switch in this position, the reverberation circuit is not activated.

MIC — With the switch in this position, the reverberation effect is applied to the mic sound only.

MIC SOU — With the switch in this position, the reverberation effect is applied to both the source and mic sound.

DEPTH:

This is used to adjust the depth of the reverberation. When it is set to the "0" position, only the original sound will be heard. The reverberation component increases as this control is turned clockwise. Listen to the sound and adjust this control to the position where the desired reverberations are heard.

DELAY TIME:

This is used to adjust the delay time. The reverberation effect becomes more pronounced as the control is turned clockwise.

25 TUNING knob

AM and FM stations are tuned by this tuning knob.

With the LOCK/FM MUTING switch set to ON, the servo-lock feature is activated for FM tuning; that is, the servo-lock feature is released while you are touching the knob for correct FM tuning and then is activated by removing your hand to lock the FM frequency for optimum reception.

OPERATING INSTRUCTIONS

REGARDING TUNE INDICATOR

When tuning to an FM broadcast with the LOCK/FM MUTING switch set to ON, the TUNE indicator lights to show the reception condition. Conditions of the TUNE indicator are described as follows:

- (▷◦◁) — Indicates no reception of FM broadcast.
- (▶◦◁) — Indicates that a broadcast station is at a frequency higher than that of the digital display. In this case, turn the TUNING knob clockwise until the middle LED of the TUNE indicator lights.
- (▷◦◁) — Indicates that a broadcast station is tuned in correctly.
- (▷◦◁) — Indicates that a broadcast station is at a frequency lower than that of the digital display. In this case, turn the TUNING knob counterclockwise until the middle LED of the TUNE indicator lights.
- (▶◦◁, ▷◦◁) — Indicates that the incoming signal is strong enough to overcome the threshold of servo-lock level. Thus, the servo-lock feature is activated after the TUNING knob is released and automatically takes over further precise tuning for optimum reception.

FM RECEPTION

1. Depress the FM switch.
2. Set the LOCK/FM MUTING switch to ON.
3. Turn the tuning knob to move the dial pointer to the desired frequency. Fine tune first so that as many SIGNAL LEDs as possible light, then tune carefully so that the middle LED of the TUNE indicator lights. The LOCKED indicator will light when your hand is removed from the tuning knob. This shows that the selected frequency has been locked by the servo-lock system and precise tuning will be maintained automatically.
4. Adjust volume and tone for your preference.

AM RECEPTION

1. Depress the AM switch.
2. Turn the TUNING knob to the desired station. Fine tune by observing the SIGNAL indicator and tune so that the maximum number of LEDs light.
3. Adjust volume and tone for your preference.

TURNTABLES

1. Depress the PHONO 1 or PHONO 2 switch of the SELECTOR corresponding to the turntable connected to the PHONO 1 or PHONO 2 INPUT jacks.
2. Operate the turntable selected with the SELECTOR switch.
3. Adjust the volume and the MULTIPLE ACOUSTIC COMPENSATOR controls for your preference.

TAPE DECKS

Tape Playback

1. Set the MONITOR switch to A or B corresponding to the tape deck connected to the TAPE A or TAPE B jacks.
2. Operate the tape deck connected to the TAPE jacks and playback the prerecorded tape.
3. Adjust the volume and the MULTIPLE ACOUSTIC COMPENSATOR controls for your preference.

Recording (with one tape deck)

1. Connect the tape deck to the TAPE A or TAPE B jacks.
2. Set the SELECTOR switch to the desired program source.
3. Set up your tape deck for recording.
4. Set recording levels with the controls on your tape deck.

5. Adjust listening level and tone for your preference while monitoring the signal being recorded.

Recording (with two tape decks)

1. Connect two tape decks to the TAPE A and TAPE B jacks.
2. Set the SELECTOR switch to the desired program source.
3. Set up your tape decks for recording.
4. Set recording levels with the controls on your tape decks.
5. Adjust listening level and tone for your preference while monitoring the signal being recorded.

Monitoring

If your tape deck is equipped with three heads, you can compare the sound quality of the recording immediately after it is made with that of the source material. Switching the MONITOR switch between SOU or A (or B) permits listening comparisons between recorded material and source material while the recording is in progress.

USE OF ADAPTOR

Depressing the ADAPTOR switch on the front panel activates the equipment (Dolby* NR unit, Expander, Tape Deck, etc.) connected between the ADAPTOR's OUTPUT-INPUT jacks on the rear panel.

Reception of Dolby FM broadcasts

1. Connect the Dolby NR unit between the ADAPTOR's OUTPUT-INPUT jacks.
2. Shift the FM DE-EMPHASIS switch on the rear panel to the 25 μ sec position.
3. Depress the FM switch.
4. Turn the TUNING knob to tune in the Dolby FM broadcast.
5. Depress the ADAPTOR switch.
6. Operate the Dolby NR unit connected between the ADAPTOR's OUTPUT-INPUT jacks.
7. Adjust volume and tone for your preference.
8. The Dolby NR unit must be operated following its own instructions.

* Dolby is the Trademark of Dolby Laboratories.

Tape Deck Operation

When a tape deck is connected between the ADAPTOR's OUTPUT-INPUT jacks, the sound recorded on the tape is similar to the sound heard from the speaker. If a tape deck equipped with three heads (erase, recording, and playback), the recording on the tape can be monitored by depressing the ADAPTOR switch.

FM DE-EMPHASIS SWITCH

Before shipment this switch has been preset to the appropriate position for the expected delivery area.

An incorrect setting will adversely affect high frequency response, so check for a correct setting before putting the unit into operation.

U.S.A. and U.S. military 75 μ s
European countries, Oceania 50 μ s

Note:

The 25 μ s setting should be selected when this receiver is used with an auxiliary Dolby* NR adaptor to receive Dolby FM broadcasts.

* Dolby is the Trademark of Dolby Laboratories.

MIC MIXING

The MIC input signal can be mixed with the source selected with the SELECTOR switch.

MIC and SOURCE mixing

1. Plug a microphone into the MIC jack.
2. To mix the mic sound with AM or FM broadcasts, depress the AM or FM switch and tune in the desired broadcast station.
3. To mix with a phono source, depress the PHONO switch and play a record.
4. Use the microphone and adjust the MIC MIXING control to the desired mixing ratio.
5. Turn the PANPOT control to the right or left from the zero position to place the mic sound in any desired position between the right and left speakers.
6. Use the VOLUME control to adjust the overall volume level. This will not change the ratio of the mixed microphone and source levels.

Microphone only

Turn the MIC MIXING control fully to the right (MIC position). Only the microphone sound will then be heard. Use the VOLUME control to adjust the output level. Use this method for public address purposes.

Note:

A howling sound may be caused if the microphone is brought too close to the speakers when volume is at a high level. Quickly turn the volume control counterclockwise in such a case.

REVERBERATION

Echo effect

1. Set the MODE switch to MIC or MIC. SOU if the reverberation effect is to be given to the MIC only or MIC and SOURCE sounds respectively.
2. Turn the DEPTH control clockwise and set it to "5".
3. Turn the DELAY TIME control clockwise and set the reverberation for your preference.
4. Adjust the DEPTH control again to the required reverberation level.
5. Use the volume control for overall output adjustment so that the reverberation ratio to the original sound is not changed.

Note:

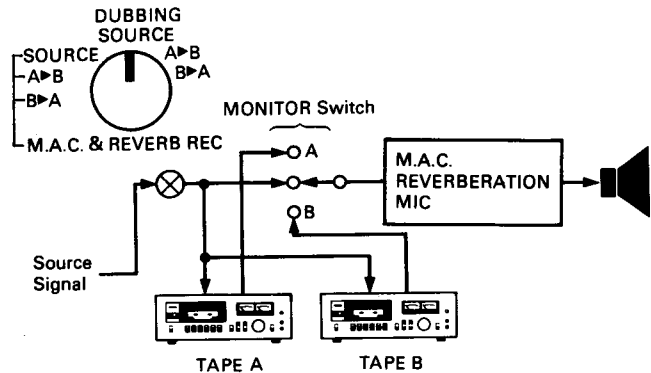
When the DEPTH control is set to "0", fully counterclockwise, the original sound is not affected by reverberation, regardless of the DELAY TIME control setting.

Duet effect

1. Set the MODE switch to MIC or MIC. SOU if the reverberation effect is to be given to the MIC only or MIC and SOURCE sounds respectively.
2. Set the DELAY TIME control to the extrem left "0".
3. Adjust the DEPTH control for your preference while hearing the microphone sound.
4. Use the volume control for overall output adjustment so that the reverberation ratio to the original sound is not changed.

USE OF THE DUBBING AND MONITOR SWITCHES

Recording without signal processing



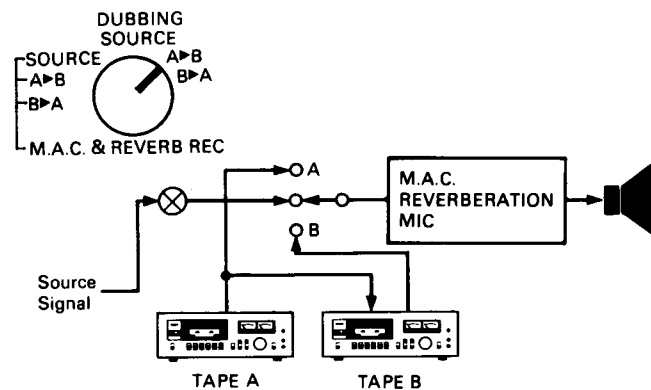
With the DUBBING switch set to SOURCE at the 12 o'clock position, recording, without signal processing, with two tape decks is available when two tape decks are incorporated into your system. The MONITOR switch can be used as follows:

SOU — The source signal is heard.

A — The signal being recorded or the signal immediately after being recorded on TAPE A is heard.

B — The signal being recorded or the signal immediately after being recorded on TAPE B is heard.

Dubbing (A ► B)



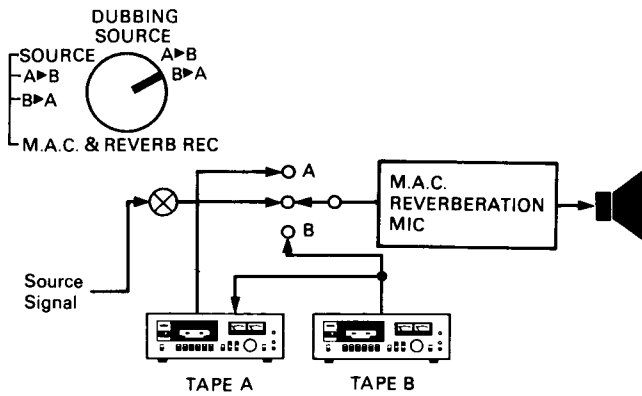
To record a copy on TAPE B from a tape played on TAPE A, set the DUBBING switch to A ► B marked clockwise. The MONITOR switch can be used as follows:

SOU — The source signal is heard from the speakers while tape dubbing from TAPE A to TAPE B is in progress.

A — The tape playback on TAPE A is heard.

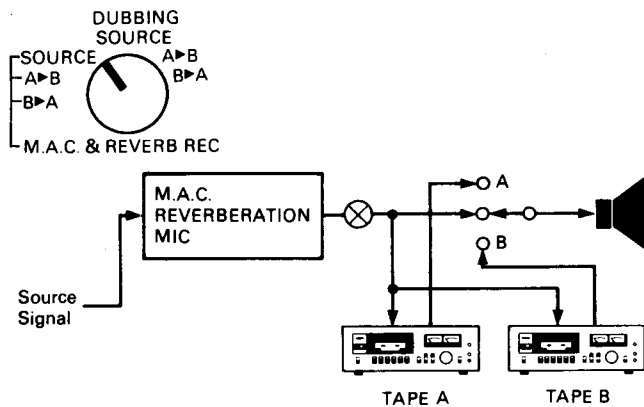
B — The recording a copy on TAPE B from a tape played on TAPE A or the copy immediately after being recorded on TAPE B is heard.

Dubbing (B ▶ A)



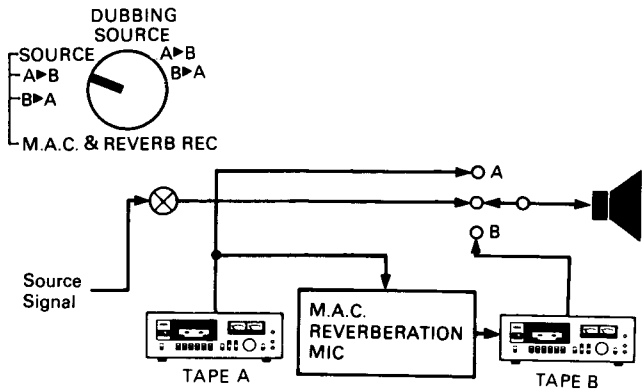
- To record a copy on TAPE A from a tape played on TAPE B, set the DUBBING switch to B ▶ A marked clockwise. The MONITOR switch can be used as follows:
- SOU** — The source signal is heard from the speakers while tape dubbing from TAPE B to TAPE A is in progress.
 - A** — The recording a copy on TAPE A from a tape played on TAPE B or the copy immediately after being recorded on TAPE A is heard.
 - B** — The tape playback on TAPE B is heard.

Recording with signal processing



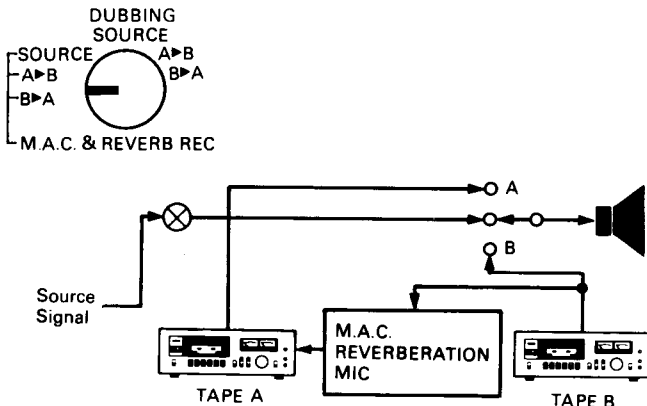
- With the DUBBING switch set to SOURCE marked counterclockwise, recording with signal processing is available. The recording with two tape decks is available when two tape decks are incorporated into your system. The MONITOR switch can be used as follows:
- SOU** — The source signal (with signal processing) is heard.
 - A** — The signal being recorded or immediately after it is recorded on TAPE A is heard.
 - B** — The signal being recorded or immediately after it is recorded on TAPE B is heard.

Dubbing with signal processing (A ▶ B)



- To record a copy (with signal processing) on TAPE B from a tape played on TAPE A, set the DUBBING switch to A ▶ B marked counterclockwise. The MONITOR switch can be used as follows:
- SOU** — The source signal is heard from the speaker while tape dubbing from TAPE A to TAPE B is in progress.
 - A** — The tape playback on TAPE A is heard.
 - B** — The recording a copy on TAPE B (with signal processing) from a tape played on TAPE A or immediately after it is made on TAPE B is heard.

Dubbing with signal processing (B ▶ A)



- To record a copy (with signal processing) on TAPE A from a tape played on TAPE B, set the DUBBING switch to B ▶ A marked counterclockwise. The MONITOR switch can be used as follows:
- SOU** — The source signal is heard from the speakers while tape dubbing from TAPE B to TAPE A is in progress.
 - A** — The recording a copy on TAPE A (with signal processing) from a tape played on TAPE B or immediately after it is made on TAPE B is heard.
 - B** — The tape playback from TAPE B is heard.

IN CASE OF DIFFICULTY

If your receiver should not perform as expected, consult the table below to see if the problem can be corrected before seeking help from your Kenwood dealer or service representative.

AM, FM, PHONO or Tape playback	CAUSE	REMEDY
Indicators light out, no sound, power on.	a) Power cord not plugged in. b) Poor connection at wall outlet. Power outlet inactive.	a) Check plug contact. b) Check outlet using a lamp or other appliance (outlet may be controlled by a wall switch).
No sound from left or right.	a) Speaker cords disconnected. b) SPEAKERS switched off. c) Volume control fully counterclockwise. d) MONITOR switch set to A or B PLAY.	a) Check speaker connections. b) Check SPEAKERS switches. c) Adjust volume. d) Set to SOU except when tape decks are in use.
Sound from left or right, but not both.	a) Poor speaker connections. b) Defective speaker. c) BALANCE set to one side extreme.	a) Check connections at both ends of speaker cord. b) Reverse speakers, if problem stays with speaker have speaker checked. c) Check setting of BALANCE control.
Occurs during AM reception only	CAUSE	REMEDY
Continuous low-frequency buzz. Most noticeable on weak stations or at night.	Interference from fluorescent lamps, lamp dimmers, other appliances.	Turn off fluorescent lamps or lamp dimmer. Try AM outdoor antenna and good ground at GND connections. This problem may be impossible to eliminate altogether.
High-frequency whistle especially at night.	a) Interference from TV set. b) Beat from adjacent AM station.	a) Turn off TV set, if problem disappears try relocating TV set. b) Impossible to eliminate, but try M.A.C. compensator.
Intermittent buzz or crackling sound.	a) Lightning b) Fluorescent lamps starting. c) Appliance or furnace starting.	a) No remedy. b) Try reversing AC plug. c) Try reversing AC plug.
Occurs During FM Reception only	CAUSE	REMEDY
Continuous hiss or buzzing.	Weak antenna signal	Install outdoor antenna.
Occasional sharp rhythmic crackling noise.	Ignition interference from autos.	Locate outdoor antenna as far from road as possible, use coaxial cable.
No sound on weak stations.	Signal too weak to overcome muting.	Set MONO/STEREO switch to MONO. Install outdoor antenna and orient for highest number of SIGNAL indicator.
PHONO Playback only	CAUSE	REMEDY
No sound from both or one speaker.	Turntable output disconnected.	Check phono cables.
Loud hum drowns out sound.	Poor ground connection at phono-cable connections.	Check phono plugs, particularly outer-shell connections.
Howling noise at maximum volume settings.	Acoustic pickup from speaker.	Increase distance between speaker and turntable. Place the turntable where no vibration occurs.

SPECIFICATIONS

AUDIO SECTION

Power Output

125 watts* per channel minimum RMS, both channel driven at 8 ohms from 20 Hz to 20,000 Hz with no more than 0.02% total harmonic distortion.

Total Harmonic Distortion

(20 Hz to 20,000 Hz from TAPE)

rated power into 8 ohms 0.02%

1 watt power into 8 ohms..... 0.008%

Intermodulation Distortion

(60 Hz : 7 kHz = 4 : 1 SMPTE)

rated power into 8 ohms 0.01%

1 watt power into 8 ohms..... 0.008%

Slew Rate $\pm 140V/\mu\text{sec}$

Rise Time 0.95 μsec

Damping Factor

(8 ohms at 1 kHz) 60

Input Sensitivity/Impedance

PHONO 2.5 mV/50k ohms

TAPE, AUX 200 mV/50k ohms

MIC 3.0 mV/50k ohms

Signal to Noise Ratio (A weighted)

PHONO 80 dB for 2.5 mV input

86 dB for 5.0 mV input

TAPE, AUX 105 dB for 200 mV input

MIC 70 dB for 3.0 mV input

Maximum PHONO Input Level

at 1,000 Hz 180 mV (rms), THD 0.02%

Frequency Response

PHONO RIAA

Standard Curve 20 Hz to 20,000 Hz ± 0.3 dB

TAPE, AUX DC Hz to 230,000 Hz -3 dB

Multiple Acoustic Compensator

60 Hz, 160 Hz, 400 Hz, 1 kHz,

2.5 kHz, 6 kHz and 15 kHz... ± 10 dB at each frequency

Loudness Control

(VOL. -30 dB) $+10$ dB at 100 Hz

Subsonic Filter 18 Hz 6 dB/oct

Output Level/Impedance

TAPE REC Out (Pin) 200 mV/300 ohms

TAPE REC Out (DIN) 40 mV/75k ohms

REVERB SECTION

Reverberating Time 0 to 3 sec at 400 Hz

Delay Time 100 msec

FM TUNER SECTION

Usable Sensitivity 10.3 dBf (1.8 μV)

50 dB Quieting Sensitivity

Mono 14.7 dBf (3.0 μV)

Stereo 37.2 dBf (40 μV)

Signal to Noise Ratio at 65 dBf

Mono 78 dB

Stereo 73 dB

Total Harmonic Distortion at 1,000 Hz

Mono 0.1%

Stereo 0.15%

Frequency Response 20 Hz to 15,000 Hz

$+0.5$ dB, -1.0 dB

Capture Ratio 1.0 dB

Image Rejection Ratio 60 dB

Spurious Response Ratio 80 dB

IF Response Ratio 80 dB

Alternate Channel Selectivity 75 dB at 400 kHz

AM Suppression Ratio 65 dB

Stereo Separation Ratio

at 1,000 Hz 50 dB

at 100 Hz to 10,000 Hz 40 dB

Subcarrier Product Ratio 46 dB

Antenna Impedance 300 ohms balanced and

75 ohms unbalanced

FM Frequency Range 88 MHz to 108 MHz

AM TUNER SECTION

Usable Sensitivity 15 μV (350 $\mu\text{V}/\text{m}$)

Signal to Noise Ratio 50 dB

Image Rejection 50 dB

Selectivity 30 dB

GENERAL

Power Consumption 710 watts at full power

80 watts at no signal

AC Outlets Switched 2, Unswitched 1

Dimensions W: 624 mm (24-9/16")

H: 206 mm (8-1/8")

D: 460 mm (18-1/8")

Net Weight 20.2 kg (44.5 lb)

Gross Weight 24.5 kg (54.0 lb)

* Measured pursuant to Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifier in U.S.A.

Note:

Kenwood follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

Super Eleven



SPECIFICATIONS

AUDIO SECTION

Power Output

125 watts* per channel minimum RMS, both channels driven at 8 ohms from 20 Hz to 20,000 Hz with no more than 0.02% total harmonic distortion.

Total Harmonic Distortion

(20 Hz to 20,000 Hz from TAPE)
 rated power into 8 ohms 0.02%
 1 watt power into 8 ohms 0.008%

Intermodulation Distortion

(80 Hz : 7 kHz = 4 : 1 SMPTE)
 rated power into 8 ohms 0.01%
 1 watt power into 8 ohms 0.008%

Slew Rate

± 140V/μsec

Rise Time

0.95 μsec

Damping Factor

(8 ohms at 1 kHz) 60

Input Sensitivity/Impedance

PHONO 2.5 mV/50k ohms
 TAPE, AUX. 200 mV/50k ohms
 MIC 3.0 mV/50k ohms

Signal to Noise Ratio (A weighted)

PHONO 80 dB for 2.5 mV input

TAPE, AUX. 86 dB for 5.0 mV input

MIC 105 dB for 200 mV input

70 dB for 3.0 mV input

Maximum PHONO Input Level

at 1,000 Hz 180 mV (rms), THD 0.02%

Frequency Response

PHONO RIAA 20 Hz to 20,000 Hz ±0.3 dB

Standard Curve DC Hz to 230,000 Hz -3 dB

Multiple Acoustic Compensator

60 Hz, 160 Hz, 400 Hz, 1 kHz, ±10 dB at each frequency

2.5 kHz, 6 kHz and 15 kHz

Loudness Control +10 dB at 100 Hz

(VOL. -30 dB)

Subsonic Filter 18 Hz 6 dB/oct

Output Level/Impedance

TAPE REC Out (Pin) 200 mV/300 ohms

TAPE REC Out (DIN) 40 mV/75k ohms

REVERB SECTION

Reverberating Time 0 to 3 sec at 400 Hz

Delay Time 100 msec

FM TUNER SECTION

Usable Sensitivity 10.3 dBf (1.8 μV)

50 dB Quieting Sensitivity

Mono 14.7 dBf (3.0 μV)

Stereo 37.2 dBf (4.0 μV)

Signal to Noise Ratio at 65 dBf

Mono 78 dB

Stereo 73 dB

Total Harmonic Distortion at 1,000 Hz

Mono 0.1%

Stereo 0.15%

Frequency Response

20 Hz to 15,000 Hz

+0.5 dB, -1.0 dB

Capture Ratio

1.0 dB

Image Rejection Ratio

60 dB

Spurious Response Ratio

80 dB

IF Response Ratio

80 dB

Alternate Channel Selectivity

75 dB at 400 kHz

AM Suppression Ratio

65 dB

Stereo Separation Ratio

at 1,000 Hz 50 dB

at 100 Hz to 10,000 Hz 40 dB

Subcarrier Product Ratio

46 dB

Antenna Impedance

300 ohms balanced and

75 ohms unbalanced

FM Frequency Range

88 MHz to 108 MHz

AM TUNER SECTION

Usable Sensitivity 15 μV (350 μV/m)

Signal to Noise Ratio

50 dB

Image Rejection

50 dB

Selectivity

30 dB

GENERAL

Power Consumption 710 watts at full power

80 watts at no signal

AC Outlets Switched 2, Unswitched 1

Dimensions W 624 mm (24-9/16")

H 206 mm (8-1/8")

D 460 mm (18-1/8")

Net Weight 20.2 kg (44.5 lb)

Gross Weight 24.5 kg (54.0 lb)

* Measured pursuant to Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifier in U.S.A.

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Kenwood strebt ständige Verbesserungen in der Entwicklung an. Daher bleiben Änderungen der technischen Daten jederzeit vorbehalten.

Kenwood poursuit une politique de progrès constants en ce qui concerne le développement. Pour cette raison, les spécifications sont sujettes à modifications sans préavis.

- PA68H
- 22~24, 26, 27, 29, 30
- 25C945
- 25C2259
- 25A939 (B, V)
- 25C1904 (B, V)
- 25C2591 (G, R)
- 25A1111 (G, R)
- 25C1945
- 25A1023
- 25A954
- 25D762 or 25D330
- 25A733 (A)
- EQA01-0519
- IN60
- ~21: IS2076 or IS1555
- STV-4H (G)
- IS2076A
- 26: WD88
- WZ-162
- WZ-197
- W4C51-13 X2
- 28D555
- 25B600

