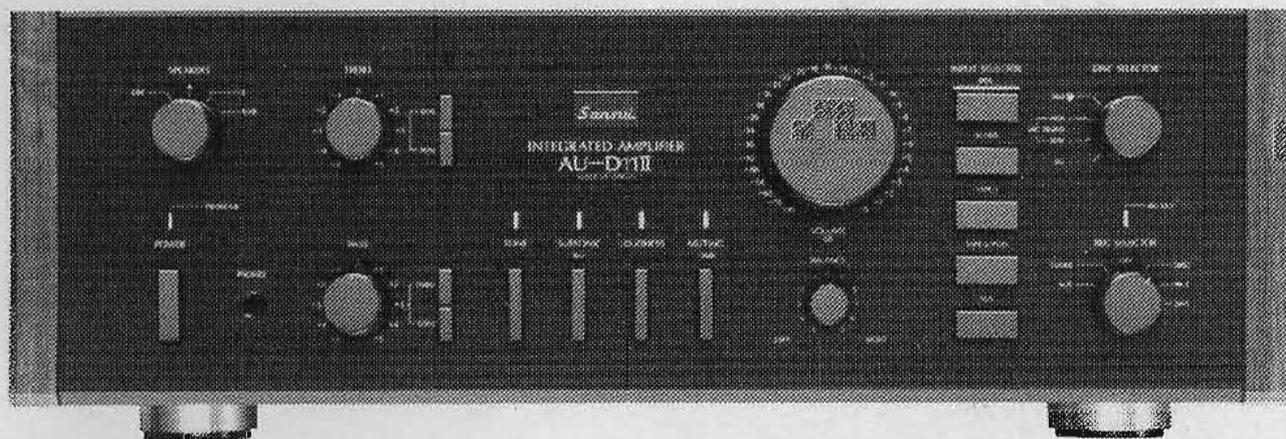


Sansui

AU-D11II

OPERATING INSTRUCTIONS



We are grateful for your choice of this Sansui high fidelity product. Before you operate it, we suggest that you read this booklet once through carefully, familiarizing yourself with the important precautions, operational procedures and every one of the product's many features. It will help to ensure that you will avoid possible damage and that the product's superb performance will be yours to enjoy for many years to come.

Precautions

* Bear in mind the following points.



Power plug

When disconnecting the power cord from the power outlet, always take hold of the plug, and not the wire, and pull free. Never connect or disconnect the power plug with wet hands since you may receive an electric shock.

* Remember to disconnect the power plug from the power outlet when you do not intend to use the unit for a prolonged period of time.



Do not remove the case and bottom panel

Any inspections or adjustments inside the unit may lead to malfunctions and electric shocks. Do not touch any of the inside parts. SANSUI's warranty is not effective if a deterioration in the unit's performance results from remodeling inside.



Do not block the ventilation holes

Do not block the ventilation holes on the top of the unit by placing records or other objects over them. This will increase the inside temperature and may lead to a failure or malfunction.



Inside the unit

If a hairpin, coin or any other metal object finds its way inside the unit or if water is splashed over the unit, disconnect the power plug from the outlet immediately and consult your dealer or SANSUI Service Station. Continued use may result in trouble or electric shock.



Installation precautions

Do not install the unit in any of the following locations since this may result in a deterioration in performance or malfunction:

- * Locations exposed to direct sunlight or near objects radiating heat such as heating appliances.
- * Locations exposed to moisture or humidity.
- * Locations with poor ventilation exposed to dust and dirt.
- * Locations which are unstable and not perfectly flat or which are susceptible to vibration.
- * On top of a high power output amplifier, audio components or any other product which radiates heat.



Do not wipe with thinners

Wipe the panels and case from time to time with a soft cloth. Using any kind of thinner, alcohol or volatile liquid will mar the surface, cause blotching on the exterior and erase the markings and should therefore be avoided.

Do not use insecticide sprays in the vicinity.

This unit dissipates the heat most effectively when installed on a flat surface. Do not stand it up or install it at an angle.

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

For the United Kingdom only

Important

The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral
Brown: Live

If the colours of the wires in the mains lead of this equipment should not correspond to the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured **blue** must be connected to the terminal which is marked with the letter 'N' or coloured black.

The wire which is coloured **brown** must be connected to the terminal which is marked with the letter 'L' or coloured red.

Ensure that your equipment is connected correctly. If you are in any doubt, consult a qualified electrician.

For equipment purchased outside the U.K. with a "EUROPEAN" two-pin mains plug, the plug should be removed and connections made in accordance with the above instructions. Ensure also that the equipment is properly adjusted to 240 volts operation. If you are in any doubt, consult a qualified electrician, or our Service Agent in the U.K.

Connections

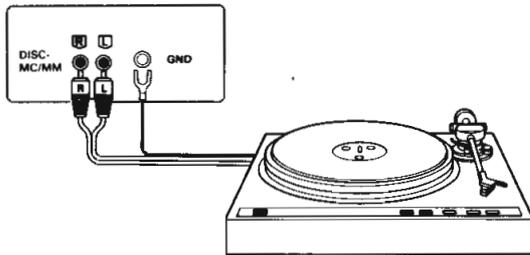
Refer to the separate connection diagram sheet as you read the following.

Connection precautions

- * When connecting, either disconnect the power plug from the power outlet or turn off the unit's power using the POWER switch.
- * Before connecting, read through the Operating Instructions of the other audio components which will be connected to this unit.
- * Check the left and right channels and connect properly (L to L and R to R).
- * Insert the plugs securely. Improper connection can lead to the generation of noise.

Turntable

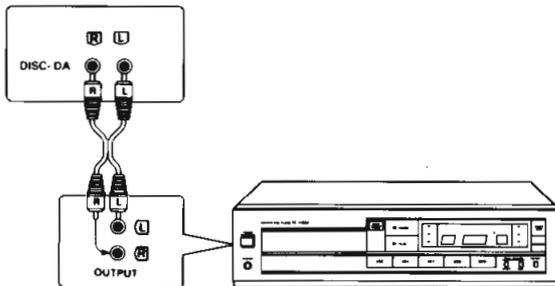
Connect the turntable's output cord L (white) plug to the L DISC-MC/MM terminal and the R (red) plug to the R terminal. If your turntable is equipped with a grounding cable, connect it to the unit's GND terminal. But disconnect it if you notice increased hum.



Compact disc player

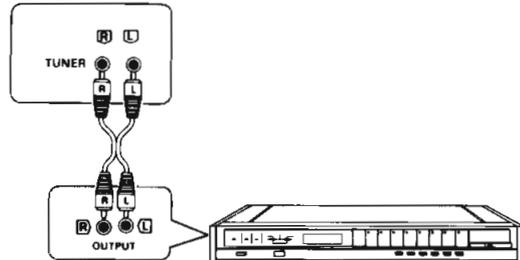
When a compact disc player (SANSUI PC-V1000, etc.) is used, it should be connected to the DISC-DA terminals. Use a pin-plug cord to connect the DISC-DA terminals to the output terminals of the compact disc player.

- * The DISC-DA terminals have the same electrical specifications as the TUNER and AUX terminals.



Tuner

Connect the TUNER terminals with the OUTPUT terminals on the tuner using the pin plug cord.

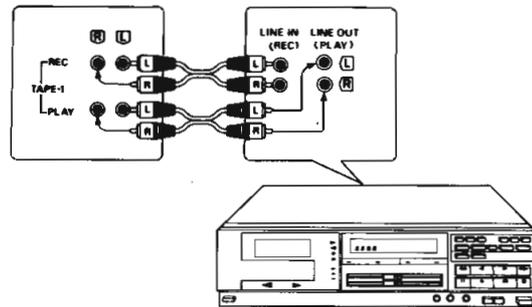


Tape deck

When a single tape deck is to be used, connect it to the TAPE-1 terminals. A second tape deck may be connected to the TAPE-2/PCM terminals, allowing you to perform simultaneous recording or tape dubbing (copying).

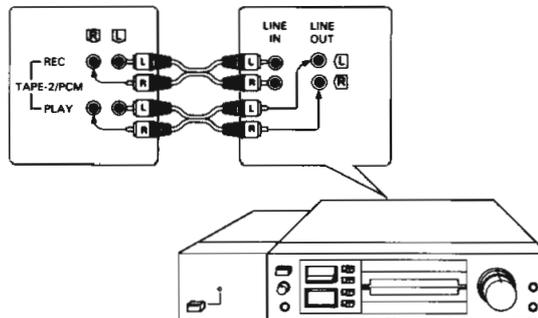
Recording connections: Connect the tape recording (REC) terminals to the recording input (LINE IN) terminals on the tape deck using the pin plug cord.

Playback connections: Connect the tape playback (PLAY) terminals to the playback output (LINE OUT) terminals on the tape deck using the pin plug cord.



PCM audio processor

When using a PCM audio processor (SANSUI PC-X1, etc.), connect it to the TAPE-2/PCM terminals. Use a pin-plug cord to connect the unit's TAPE-2/PCM REC terminals to the PCM audio processor's LINE IN terminals, and connect another pin-plug cord between the unit's TAPE-2/PCM PLAY terminals and the PCM audio processor's LINE OUT terminals.



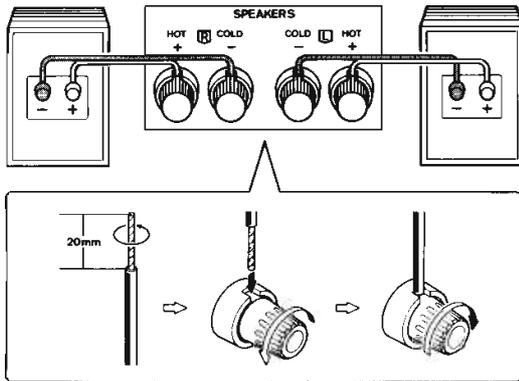
Speaker systems

There are two sets of SPEAKERS terminals for connecting speakers, SYSTEM-A, and SYSTEM-B. When using only a single set of speakers, connect them to the SYSTEM-A terminals.

Connect the (+) speaker terminals to the red (+) terminals on the speaker system and the (-) speaker terminals to the black (-) terminals. If these polarities are not aligned properly, the sound of the instruments will not be positioned stably, the sound in the center will appear lacking and a true stereo effect will not be obtained.

* When connecting, do not allow the conductor of the speaker cords to be exposed from the terminals and come into contact with other terminals.

* Since the output stage of this unit is in the form of a bridge, the SPEAKERS negative terminals (-) must not be connected in common; they also must not be connected to the GND terminal (chassis) of other components.



About speaker system impedance

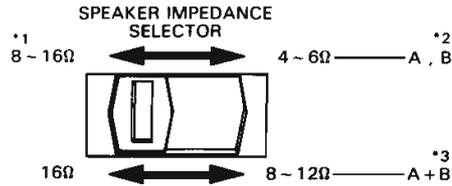
When the two speaker systems connected to the SYSTEM-A and SYSTEM-B terminals are to be used separately, their rated impedance may range from 4 ~ 16Ω, but when two systems are to be used together (A + B), the rated impedance of both systems should be 8Ω or more. If even one of the speaker systems has a rated impedance of less than 8Ω, the protection circuit may operate during play, or malfunction may result.

SPEAKER IMPEDANCE SELECTOR switch

Located on the rear panel, this switch should be set to the rated impedance of the speaker systems connected to the unit.

* The rated impedance is shown on the units themselves, or in the operating instructions, of your speakers.

If this switch is not set properly, full output may not be achieved, or abnormal heat may be produced.



*1: Rated impedance of speaker system.

*2: When using only one set of the speaker systems connected to either SPEAKERS SYSTEM-A or -B terminals.

*3: When using both sets of speaker systems connected to SPEAKERS SYSTEM-A and -B terminals.

AUX terminals

The AUX terminals are supplementary terminals with the same electrical specifications as the TUNER and TAPE PLAY terminals. A tape deck for playback only, or a second tuner can be connected to these terminals. Use a pin-plug cord to connect these terminals to the output terminals of the desired component.

AC outlets

This unit is provided with auxiliary AC outlets which are handy for connecting a tuner, tape deck or turntable to supply power to these units.

SWITCHED (100 W capacity): The power of the connected components is switched on and off when the unit's POWER switch is operated.

UNSWITCHED (250 W capacity): The power is supplied to the connected components regardless of the position of the unit's POWER switch.

It is extremely dangerous to connect an electrical appliance having a power consumption exceeding the specified capacity. Before connecting the appliance or components, check its power consumption rating.

* A high voltage flows to the AC outlets and so hairpins or other metal objects must not be inserted since this will result in an electric shock. Small children should not be allowed to play with these outlets.

NOTE: Depending on the laws and regulation enforced locally, models without AC outlets may be supplied to some areas. Also, depending on the sales area, the shape of the AC outlets and their capacity may differ.

Operating procedures

Before switching on the power

First set the VOLUME control to the minimum position, and then depress the POWER switch to supply the power.

For several seconds after the power has been switched on, the protector circuit is activated until the circuits inside the unit have begun to operate stably, and the PROTECTOR indicator winks. While the protector circuit is activated, no sound will be heard through the speakers. The amplifier is fully operational when the PROTECTOR indicator stops winking and lights.

Basic operation

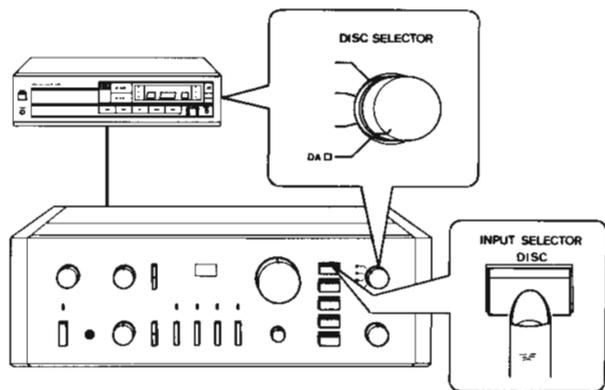
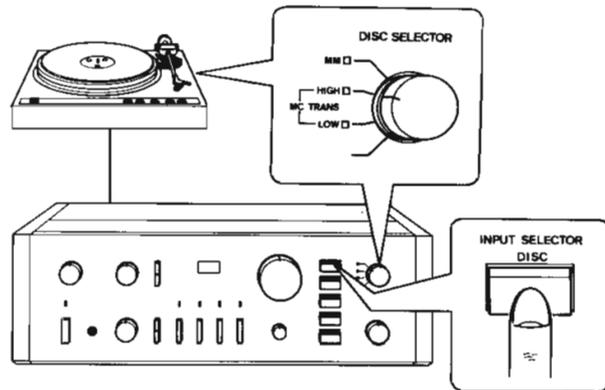
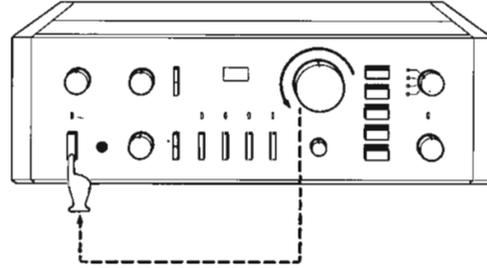
1. Select the speakers you intend to use with the SPEAKERS switch. If you intend to listen to the sound through your headphones, plug them into the PHONES jack.
 2. Depress the INPUT SELECTOR switch in accordance with the program source to which you wish to listen.
Record: Depress the DISC switch, and set the DISC SELECTOR switch in accordance with the cartridge of your turntable.
Compact disc: Depress the DISC switch, and set the DISC SELECTOR switch to DA.
Radio broadcast: Depress the TUNER switch.
Tape: Depending on the tape deck used, depress either the TAPE-1 or TAPE-2/PCM switch.
 3. Operate the program source unit.
 4. Adjust the sound with the VOLUME control. The MUTING switch is handy for reducing the volume temporarily.
 5. Attain a balance between the sound of the left and right channels using the BALANCE control.
 6. To adjust the tone quality, depress the TONE switch, and then adjust the BASS and TREBLE switches after the TONE indicator has lighted.
- * If you do not intend to record, set the REC SELECTOR switch to the OFF position.

Record play

1. Depress the INPUT SELECTOR DISC switch.
 2. Set the DISC SELECTOR switch in accordance with the cartridge of the turntable used.
MM: For high-output (1 mV or more), MM (moving magnet) type cartridge.
MC TRANS-HIGH: For low-output (less than 1 mV), MC (moving coil) type cartridge, but with relatively high output-voltage.
MC TRANS-LOW: For low-output MC type cartridge, with relatively low output-voltage.
 3. Operate the turntable and play the record.
 4. Adjust the volume, balance and tone to your preference.
- * When badly warped records are played, ultra-low-frequency noise is generated, undesirable vibrations are applied to the low-frequency speakers (woofers) and the sound quality is adversely affected. If the SUBSONIC switch is depressed, the indicator lights and the ultra-low-frequency noise can be suppressed.

Compact disc playback

1. Depress the INPUT SELECTOR DISC switch.
2. Set the DISC SELECTOR switch to DA.
3. Operate the compact disc player to playback the compact disc.
4. Adjust the volume, balance, and tone to your preference.



Listening to radio broadcasts

1. Depress the INPUT SELECTOR TUNER switch.
 2. Operate the tuner and tune in the desired station.
 3. Adjust the volume, balance and tone to your preference.
- * Weak FM signals are often disturbed by ignition noise from nearby automobiles and other noise. Therefore, for better FM reception, installation of an outdoor FM antenna is suggested. For antenna connection, be sure to use a coaxial cable, not a twin lead type.

Sound reproduction from component connected to AUX terminals

- A tuner, tape deck or other stereo component can be connected to the AUX terminals when you want to listen to a broadcast or tape, etc.
1. Depress the INPUT SELECTOR AUX switch.
 2. Operate the component connected to the AUX terminals and make it operational.
 3. Adjust the volume, balance and tone to your preference.

Tape playback

1. Depress the INPUT SELECTOR TAPE-1 or TAPE-2/PCM switch.
 - * Depress the TAPE-1 switch when the tape deck has been connected to the TAPE-1 terminals; depress the TAPE-2/PCM switch when it has been connected to the TAPE-2/PCM terminals.
 2. Operate the tape deck and play back the tape.
 3. Adjust the volume, balance and tone to your preference.
- * If your tape deck is used for a prolonged period of time, the sound quality will be impaired by dirt on the surface of the heads and capstan, etc.
- For optimum tape play, refer to the Operating Instructions of your tape deck and clean the head section regularly.

Tape recording

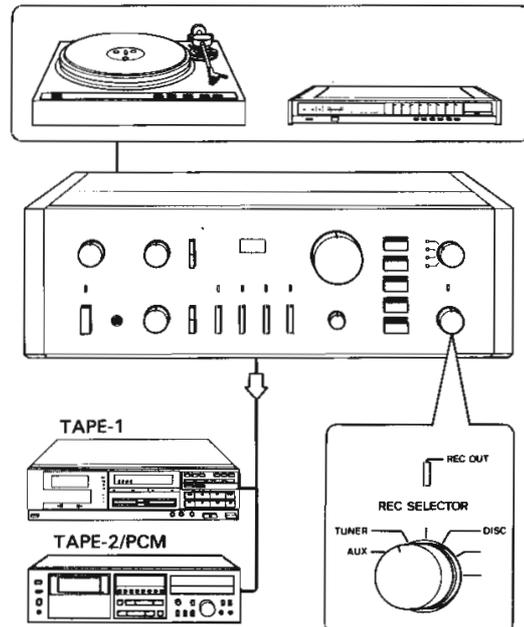
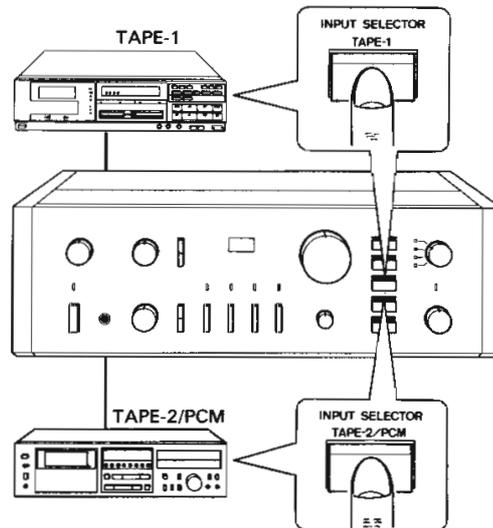
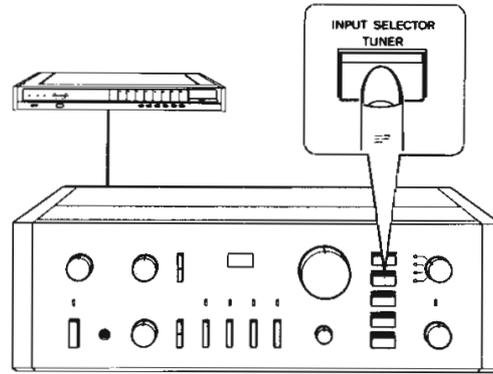
A record, broadcast or other program source can be recorded on the tape deck connected to the TAPE REC terminals.

1. Set the REC SELECTOR switch to the position corresponding to the program source which is to be recorded.
 2. Depress the appropriate INPUT SELECTOR switch to select to the program source you want to record.
 3. Start playing the program source.
 4. Operate the tape deck, adjust the recording level and start recording.
- * The volume and the tone of the signals to be recorded cannot be adjusted using the VOLUME and tone controls.
 - * The functions of the REC SELECTOR switch and INPUT SELECTOR switch are independent. It is therefore possible to set the INPUT SELECTOR switch to another position during recording and listen to an alternative program source.

Monitoring the recording

Monitoring recordings can be performed only with a 3-head tape deck with independent recording and playback heads. ("Monitoring" refers to playing back the sound which has been recorded during the recording process.) It cannot be performed with a tape deck having a record/playback combined head.

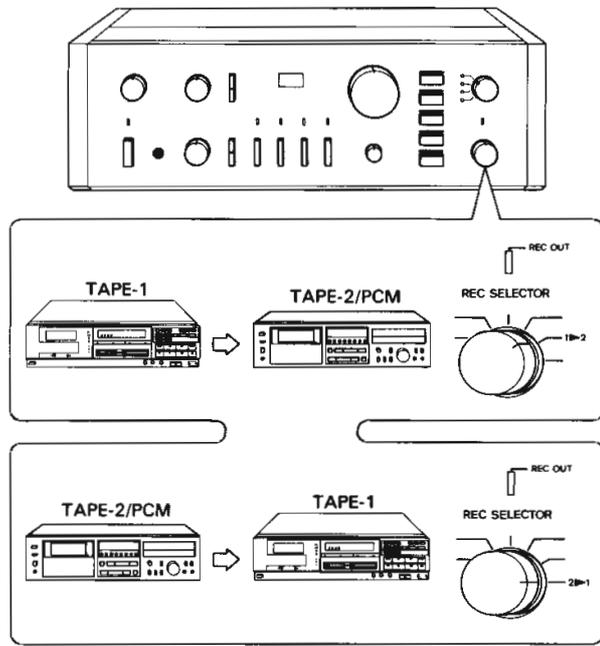
1. Set the tape monitor switch on the tape deck to the TAPE position.
2. Depress the TAPE-1 or TAPE-2/PCM switch in accordance with the tape deck used for recording.



Dubbing from tape to tape

Two tape decks can be used to dub the contents of a pre-recorded tape onto another tape.

1. Set the REC SELECTOR switch to the 1 ► 2 or 2 ► 1 position.
 - * Set to 1 ► 2 when dubbing from tape deck 1 to tape deck 2; set to 2 ► 1 when dubbing from tape deck 2 to deck 1.
2. Operate the playback and recording tape decks and start recording.
 - * It is possible to listen to another program source during tape dubbing through the speakers. In this case, depress the appropriate INPUT SELECTOR switch to the program source you want to hear.
 - * To check the sound during tape dubbing, depress the TAPE-1 or TAPE-2/PCM switch.



Specifications

Power output

Min. RMS, both channels driven, from 10 to 20,000 Hz, with no more than 0.0028% total harmonic distortion.
130 watts per channel into 8 ohms.

Load impedance 8 ohms

Total harmonic distortion less than 0.0028% at or below rated min. RMS power output

Intermodulation distortion (60 Hz: 7 kHz = 4:1 SMPTE method) less than 0.0028% at rated power output

Frequency response (at 1 watt)

Overall (from AUX) DC to 300,000 Hz, +0 dB
-3.0 dB

RIAA curve deviation (DISC-MM, 20 Hz to 20 kHz) +0.2 dB, -0.2 dB

Input sensitivity and impedance (at 1 kHz)

DISC-MC-HIGH 250 μ V/40 ohms
DISC-MC-LOW 100 μ V/3.2 ohms
(Max. input capability (LOW): 25 mV at 1 kHz, less than 0.01% total harmonic distortion)

DISC-MM 2.5 mV/47 kilohms
(Max. input capability; 200 mV at 1 kHz, less than 0.01% total harmonic distortion)

DISC-DA 150 mV/27 kilohms
AUX, TUNER, TAPE PLAY-1, 2 150 mV/27 kilohms

Output level (1,000 Hz)

TAPE REC-1, 2 150 mV into 47 kilohms

Signal to noise ratio (short-circuit, A-network)

DISC-MC 80 dB
DISC-MM 90 dB
AUX, TUNER, TAPE PLAY-1, 2 110 dB

Controls and Filter

BASS \pm 10 dB at 50 Hz
Tone selector 125 Hz, 250 Hz
TREBLE \pm 10 dB at 10 kHz
Tone selector 3 kHz, 6 kHz
SUBSONIC -3 dB at 16 Hz (6 dB/oct)
MUTING -20 dB
LOUDNESS +8 dB at 50 Hz
(VOLUME: -30 dB position) +6 dB at 10 kHz

Power requirements

Power voltage 120/220/240V (50/60 Hz)
For U.S.A. & Canada 120V (60 Hz)
Power consumption 470 watts 560 VA Rated
700 watts Maximum

Dimensions

466 mm (18-3/8") W
161 mm (6-3/8") H
431 mm (17") D

Weight

17 kg (37.4 lbs) net
19 kg (41.8 lbs) packed

* Design and specifications subject to changes without notice for improvements.

* In order to simplify the explanation illustrations may sometimes differ from the originals.

1 POWER Switch

2 PROTECTOR Indicator

Power is supplied to the amplifier when this switch is depressed and the indicator winks. After several seconds, the indicator stops winking and lights to indicate that the amplifier is now fully operational. The power is switched off when the switch is released.

- * No sound will be heard through the speakers while the indicator is winking. If the indicator changes to winking during operation, it means that the built-in protection circuit has been activated because of trouble inside the amplifier.

3 PHONES Jack

This is the jack for the headphones. Connect the plug on the stereo headphones for private listening.

Adjust the volume so that it does not hurt your ears when using the headphones.

- * If you do not intend to use your headphones, always ensure that you unplug them.

4 SPEAKERS Switch

This switch selects the speaker systems you want to hear.

OFF: To cut off the source from the speaker systems when listening with headphones.

A: To drive the speaker systems connected to the SPEAKERS SYSTEM-A terminals.

B: To drive those connected to the SYSTEM-B terminals.

A + B: To drive both A and B pairs speaker systems.

- * Set the SPEAKER IMPEDANCE SELECTOR switch on the unit's rear panel in accordance with the rated impedance of the speakers you use. Be especially careful when using the "A + B" position.

5 TONE Switch

When this switch is depressed when the tone controls are rotated to adjust the sound quality, the indicator lights to indicate that the sound can be adjusted.

When the switch is released, the indicator goes off, the tone circuits are isolated from the signal path and the frequency response is made flat.

6 Tone Controls

When the TONE indicator lights, the sound quality can be adjusted using these knobs and switches.

The bass sound is emphasized when the BASS knob is rotated clockwise from its "0" position while it is attenuated when the knob is rotated counterclockwise.

The BASS switches are used to select 250 Hz or 125 Hz, the frequency at which the bass controls start to have an effect.

The treble sound is emphasized when the TREBLE knob is rotated clockwise from its "0" position while it is attenuated when the knob is rotated counterclockwise.

The TREBLE switches are used to select 6 kHz or 3 kHz, the frequency at which the treble controls start to have an effect.

- * When the TONE indicator goes off, it means that the frequency response is flat and that the tone controls are not working.
- * One of the BASS and TREBLE switches must be depressed.

7 SUBSONIC Switch

When this switch is depressed, the indicator lights, and low frequencies (16 Hz) outside the audible range are attenuated 6 dB/oct by the subsonic filter. When warped records are played, extra-low-frequency noise is produced, resulting in distortion and poor tonal qualities. This filter helps reduce such distortion.

When the switch is pressed again, the indicator goes out, and the filter function is turned off.

8 LOUDNESS Switch

As sound volume is decreased, the human ear tends to show reduced sensitivity to high- and low-frequency sounds. At low volume listening levels, these sounds may appear weak and insufficient. When listening at low volume levels, this switch can be depressed to help compensate for such conditions. The indicator will light, and low and high frequency sounds will be boosted to an appropriate level to help maintain the balance of sound.

When the switch is pressed again, the indicator will go out, the loudness circuit will be turned off, and frequency response will return to its normal (flat) levels.

9 MUTING Switch

This switch cuts the volume by 20 dB. Depress it when you want to temporarily reduce the volume; the indicator lights and the sound is muted. When the switch is released, the indicator goes off and the sound regains its former strength. Bear in mind that the volume is increased rather suddenly.

10 VOLUME Control

This control adjusts the volume of the speakers or headphones. The sound is increased as it is rotated clockwise. Listen to music and set it to a comfortable listening level.

11 BALANCE Control

The volume of the left and right speakers can be adjusted by the BALANCE control. As the control is turned counterclockwise from the center position, the sound from the left speaker becomes louder than that from the right speaker, and vice versa. Adjust so that the sounds from the left and right speakers are heard with equal volume at your listening position.

12 INPUT SELECTOR Switches

These switches are for selecting your desired program source. When a switch is depressed, the indicator above the switch will light.

DISC: This switch is depressed when you wish to listen to records on the turntable connected to the DISC-MC/MM terminals, or when you wish to listen to the compact disc player connected to the DISC-DA terminals. After depressing this switch, set the DISC SELECTOR switch appropriately.

TUNER: This switch is depressed when you wish to listen to radio broadcasts from the tuner connected to the TUNER terminals.

TAPE-1: This switch is depressed when playing back tapes on the tape deck connected to the TAPE-1 terminals.

TAPE-2/PCM: This switch is depressed when using a second tape deck, or PCM audio processor connected to the TAPE-2/PCM terminals, for tape playback or PCM audio playback.

AUX: This switch is depressed when using the component connected to the AUX terminals for playback.

- * Be sure to press the desired switch (one only) firmly.

13 DISC SELECTOR Switch

When the INPUT SELECTOR switch is set to DISC, this switch is set in accordance with the component used.

MM: Set the switch to this position when the cartridge of the turntable connected to the DISC-MC/MM terminals is a high-output (1 mV or more), MM (moving magnet) type cartridge.

MC TRANS-HIGH: Set the switch to this position when the cartridge of the turntable connected to the DISC-MC/MM terminals is a low-output (less than 1 mV) MC (moving coil) type cartridge, but with relatively high output voltage.

MC TRANS-LOW: Set the switch to this position when the cartridge of the turntable connected to the DISC-MC/MM terminals is a low-output MC type cartridge with relatively low output voltage.

* The MC TRANS-HIGH/LOW positions are for switching the unit's internal MC transformer gain in accordance with the cartridge's output voltage, but the input impedance is simultaneously switched. In the MC TRANS-HIGH position, the input impedance is 40 Ω , while in the LOW position, it is switched to 3.2 Ω .

In order to get the best performance from your cartridge, it may be advantageous to set this switch to one of these positions in accordance with the internal impedance of your cartridge.

DA: Set the switch to this position when listening to compact discs played on the compact disc player connected to the DISC-DA terminals.

* The indicators for the various positions of the DISC SELECTOR switch light only when the INPUT SELECTOR switch is set to DISC.

* When changing the DISC SELECTOR switch position, the sound volume should be turned down first.

14 REC SELECTOR Switch

This control is for selecting the program source for tape recording. With this control, recording can be performed regardless of the setting of the INPUT SELECTOR switches.

AUX: For recording signals from the component connected to the AUX terminals.

TUNER: For recording radio broadcasts received by the tuner connected to the TUNER terminals.

OFF: Set to this position when not performing tape recording. In this position, the TAPE REC terminals are disconnected from the signal path, thus eliminating any electrical influence from the tape deck. When not performing tape recording, be sure to set the switch to this position.

DISC: For recording programs from the turntable connected to the DISC-MC/MM terminals, or from the compact disc player connected to the DISC-DA terminals.

When tape recording from these program sources, be sure to set the DISC SELECTOR switch properly.

1 ▶ 2: For recording from the tape deck connected to the TAPE-1 terminals to the deck connected to the TAPE-2/PCM terminals.

2 ▶ 1: For recording from the tape deck connected to the TAPE-2/PCM terminals to the deck connected to the TAPE-1 terminals.

15 REC OUT Indicator

When the REC SELECTOR switch is set to any position other than OFF, this indicator lights to show that recording is possible. The indicator goes out when the REC SELECTOR switch is set to the OFF position.