

INTEGRATED AMPLIFIER
AU-X501

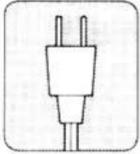
OPERATING INSTRUCTIONS



Thank you for purchasing this fine SANSUI product. Taking the time to read these operating instructions carefully before use will acquaint you fully with all its features and help ensure optimum performance.

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

Precautions



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.

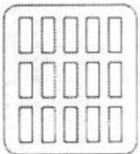
* Remember to disconnect the power plug from the power outlet when you do not intend to use the unit for a prolonged period of time.



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.

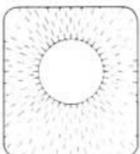
SANSUI's warranty is not effective if a deterioration in the unit's performance results from remodeling inside.



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.

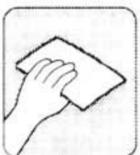
This will increase the inside temperature and may lead to a failure or malfunction.



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.



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.

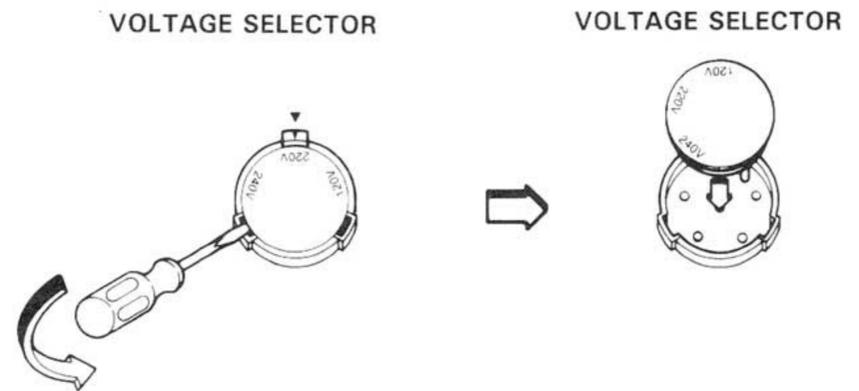
This unit dissipates the heat most effectively when installed on a flat surface. Do not stand it up or install it at an angle.

Before connecting the power plug

Before connecting the power plug to an electrical outlet, check to be sure that the unit is set to the proper voltage for your area. If the voltage of the unit is improperly set, fire hazard or damage to the unit may result. If you find that the unit is not set to the proper voltage for your area, follow the instructions listed below:

• Units with 120V/220V/240V VOLTAGE SELECTOR at rear panel

These units are set at either 120V, 220V or 240V with the VOLTAGE SELECTOR. To change the voltage use a minus screwdriver to remove the plug, and reinsert it so that the mark (▼) matches the desired voltage.



• Units with 220V/240V VOLTAGE SELECTOR switch at rear panel

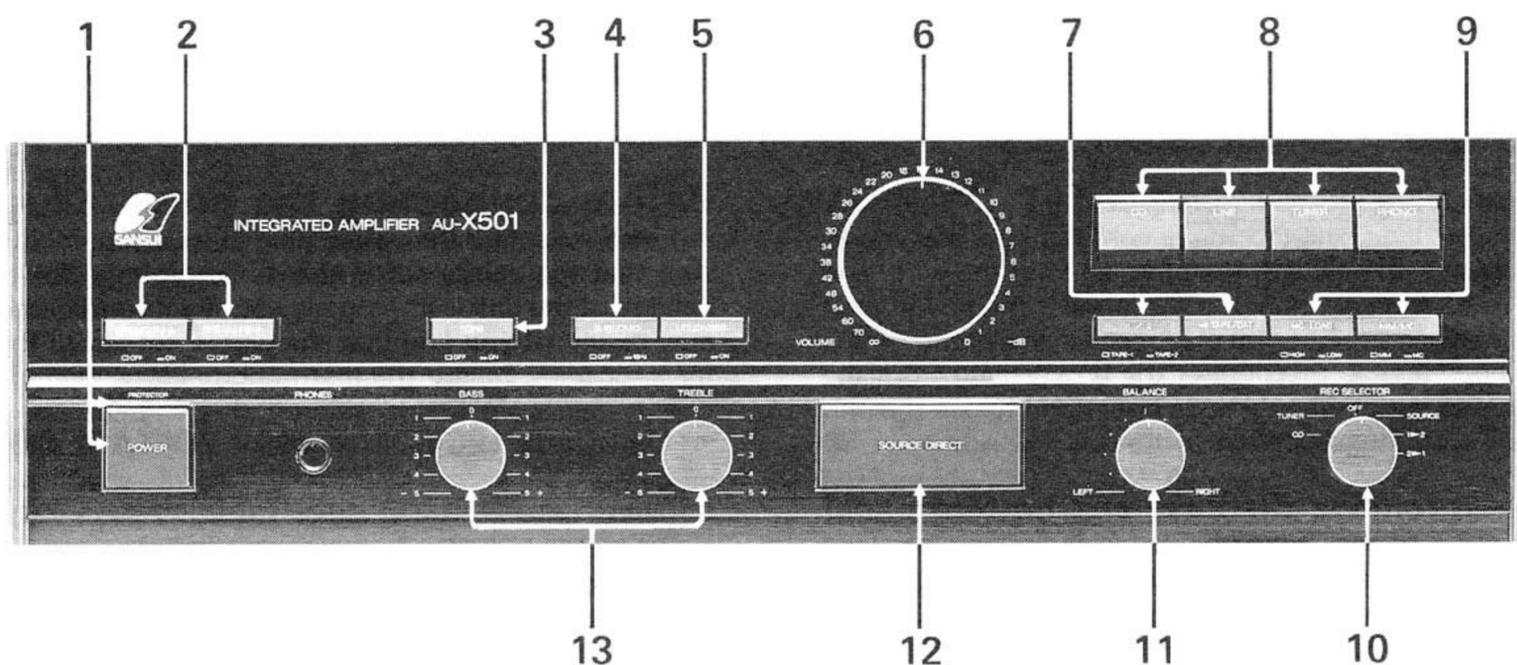
These units are set at either 220V or 240V with the VOLTAGE SELECTOR switch. To change the voltage, use a minus screwdriver or similar device to slide the switch.



• Units without voltage selector switch

Units destined for some areas are not fitted with a voltage selector switch due to laws and regulations existing in those areas. In such a case, the power supply voltage is set to the voltage used in the area where the unit is purchased.

If the unit is to be used in an area where the power requirements are different, make sure you consult your nearest authorized SANSUI Service Station.



1 POWER Switch and 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.

2 SPEAKERS Switches

Depress the switch SPEAKERS-A or SPEAKERS-B, corresponding to the terminals to which the speaker system has been connected, to the "ON" position, and sound will then be heard through those speakers.

If two switches are set to "ON", sound can be heard simultaneously through two sets of speaker systems.

When you want to listen to the sound through your headphones and not through the speakers, set all the SPEAKERS switches to the "OFF" position.

3 TONE Switch

Set this switch to the "ON" position when adjusting the sound quality with the tone controls.

When this switch is released to the "OFF" position, the tone control circuitry is isolated and a flat frequency response is obtained. In this case, the sound quality cannot be adjusted even if the tone controls are operated.

4 SUBSONIC Switch

When this switch is pressed to the "16 Hz" position, 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 to its "OFF" position the filter function is turned off.

5 LOUDNESS Switch

Under low-volume listening conditions, the human ear is less sensitive to bass and high treble sounds; under these conditions low range and high range sounds may be inadequately heard.

When listening under low-volume conditions, depress this switch to the "ON" position, and sounds in the low and high ranges will be boosted, thus preserving the balance of sound as it is heard.

When the switch is pressed once again and released to the "OFF" position, the loudness circuit will be disconnected, returning frequency characteristics to their flat state.

6 VOLUME Control

This is used to control the sound heard from the speakers or through the headphones. On the panel the maximum output level is indicated as "0 dB" and the attenuation is displayed in -dB units. The volume is reduced to its minimum at the "∞" position and it increases as the control is rotated clockwise.

7 TAPE/DAT Switches

These switches are used for audio playback using the tape deck or DAT (digital audio tape recorder) which has been connected to the TAPE/DAT terminals.

First, press the TAPE/DAT switch. The indicator will light indicating that the tape deck connected to "1" (TAPE-1) or "2" (TAPE-2) of the TAPE/DAT terminal is in the playback mode. Next, using the 1/2 switch select "TAPE-1" or "TAPE-2".

* When the tape deck or DAT is not being used, press the TAPE/DAT switch again and turn off the indicator. The program source selected by one of the input selector switches cannot be heard while any of the above indicators is still lighted.

8 Input Selector Switches

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

PHONO: This switch is pressed when you wish to listen to records on the turntable connected to the PHONO terminals.

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

LINE: This switch is pressed when using the component connected to the LINE terminals for playback.

CD: This switch is pressed when you wish to listen to the compact disc player connected to the CD terminals.

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

9 Cartridge Selector Switches

Set these switches according to the type (output voltage and impedance) of the cartridge which you are using.

MM/MC: When using a high output cartridge such as an MM (moving magnet) type, set this switch to "MM". When using a low output type such as an MC (moving coil) type, set it to "MC".

MC LOAD: Set this switch according to the impedance of the MC cartridge which you are using. For a high impedance (100 ohms or more) type, set it to "HIGH". For a low impedance (22 ohms or less) type, set it to "LOW". If the impedance of your cartridge is between 22 ohms and 100 ohms, set the switch to the position which gives best results.

10 REC SELECTOR Switch

Set this to the position which corresponds to the program source to be recorded when making a recording on tape with a component connected to the TAPE/DAT terminals.

CD: In this position, you can record a compact disc irrespective of the position of the INPUT SELECTOR or TAPE/DAT switch.

TUNER: In this position, you can record a radio broadcast irrespective of the position of the INPUT SELECTOR or TAPE/DAT switch.

OFF: When no recording is to be made.

At this position, the recording circuit is cut off and no electrical effects from the tape deck are felt.

SOURCE: When recording the program source selected by an input selector switch.

1 ► 2: When recording onto the tape deck or other such component connected to the TAPE/DAT-2 terminals from the component connected to the TAPE/DAT-1 terminals.

2 ► 1: When recording onto the tape deck or other such component connected to the TAPE/DAT-1 terminals from the component connected to the TAPE/DAT-2 terminals.

* At any position except "SOURCE" the program source selected by the input selector switch can be heard during the actual recording.

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 SOURCE DIRECT Switch

This switch is designed to simplify the path inside the control amplifier along which the signals travel and to give the sound extra clarity. When this switch is pressed, the indicator lights and the source direct circuit is selected; when it is pressed again, the indicator goes off and the original circuit configuration is selected.

* The BALANCE control and SUBSONIC switch do not function even when operated while the indicator is lighted.

13 Tone Controls (BASS/TREBLE)

These are controls used for adjusting the tone level of sound produced from speaker systems and headphones.

The BASS control can be used for adjusting the low-frequency sound, and the TREBLE control can be used for adjusting the high-frequency sound. The tone of the respective controls is emphasized when the controls are turned to the right from the central position, and when turned to the left, tone is reduced.

When the tone controls are set to the central position, frequency characteristics are flat.

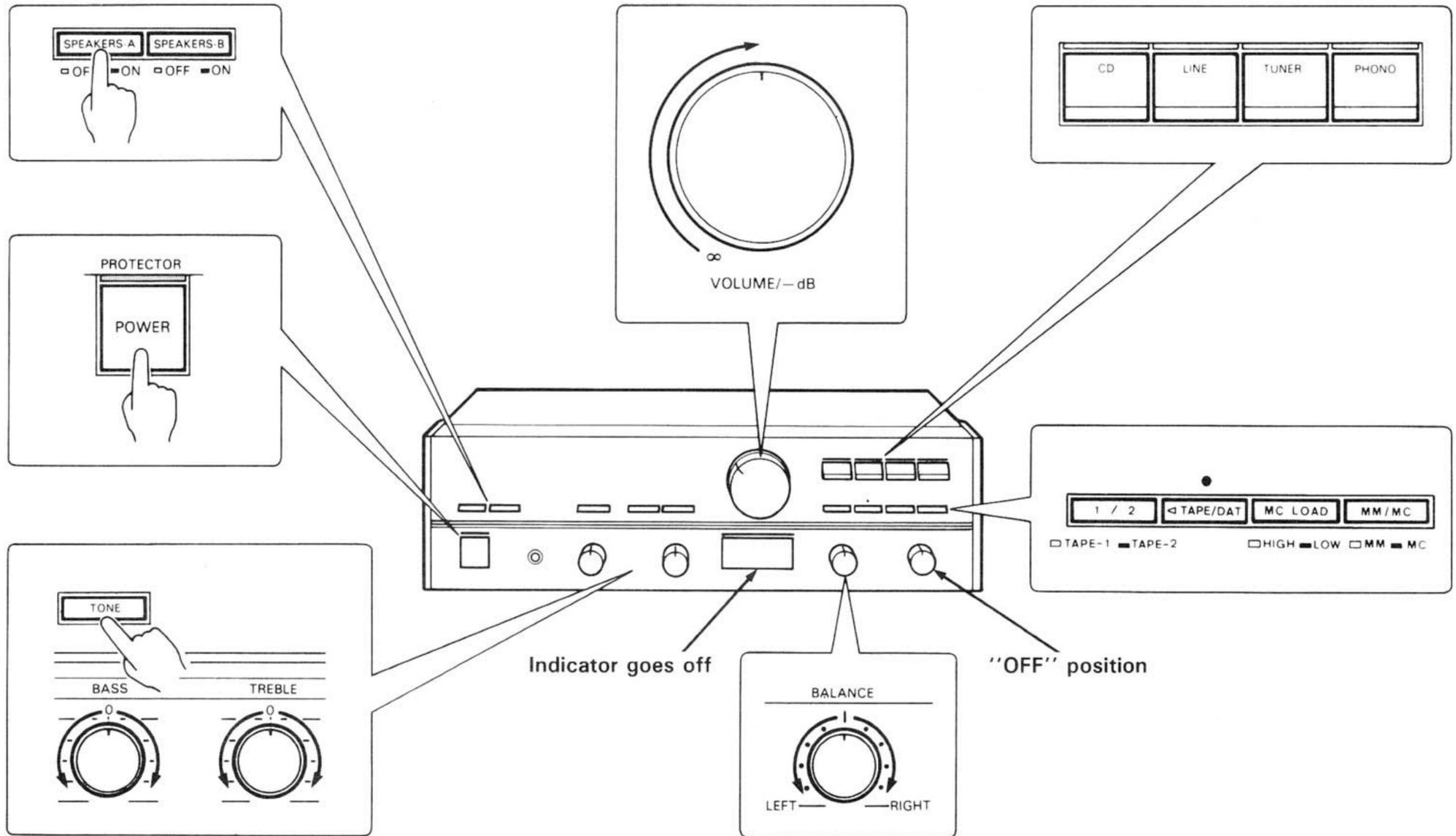
14 PHONES Jack

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.

Operating procedures



Before starting operation

Check that the controls have been set to the following positions before commencing operation

- * Rotate the VOLUME control counterclockwise as far as it will go and set it at the "∞" minimum volume position.
- * Set the BALANCE control to its center position.
- * Set the BASS and TREBLE tone controls to the "0" (center) position.
- * Set the REC SELECTOR to its "OFF" position.
- * Set the SUBSONIC, TONE and LOUDNESS switches to the "OFF" position.
- * Set the TAPE/DAT and SOURCE DIRECT switches so that their indicators are off.
- * Set the SPEAKERS-A or SPEAKERS-B switch to "ON" in accordance with the terminals to which the speakers being used have been connected.

After these checks, press the **POWER** switch to turn on the power.

The PROTECTOR indicator winks and after several seconds have elapsed it will change to the lighted state and the amplifier will be operational.

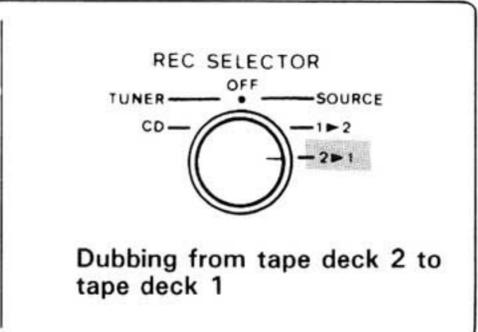
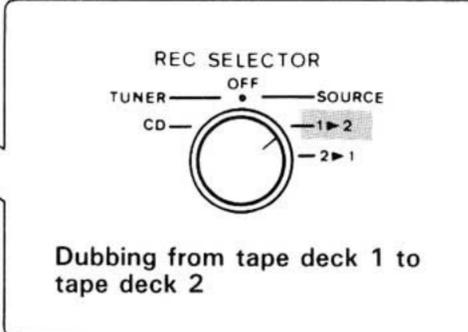
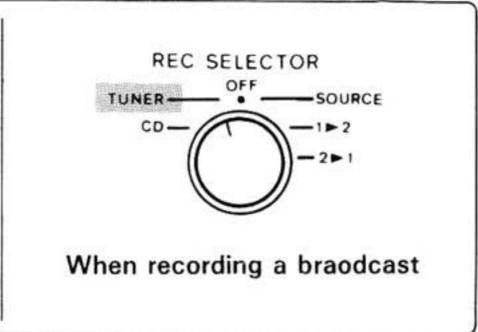
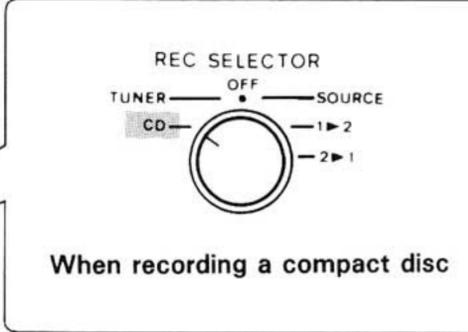
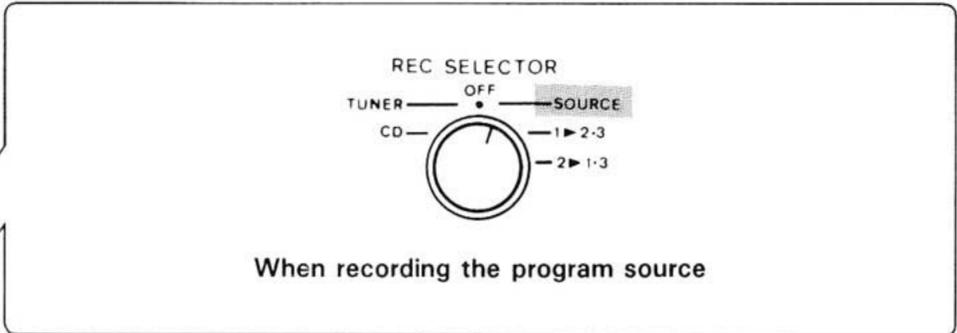
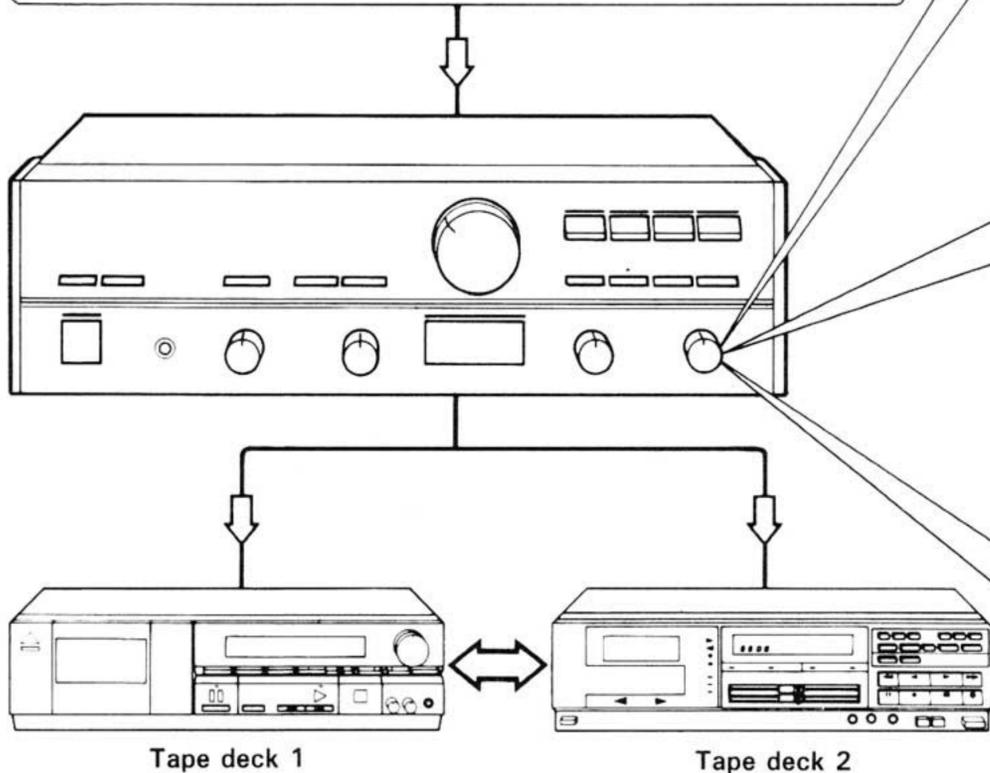
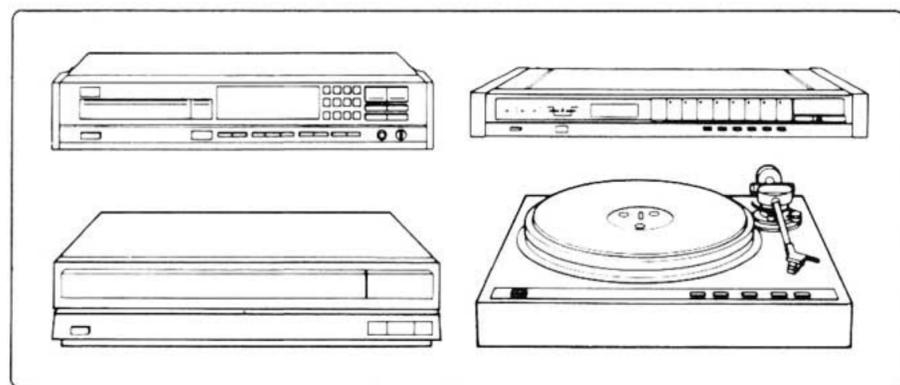
CAUTION

Once tape play has finished, press the TAPE/DAT switch and extinguish the indicator.

If an indicator is still lighted, it will not be possible to hear another program source.

Playing a program source

1. Press the desired input selector switch or TAPE/DAT switch to select the program source which you wish to listen to.
 - To listen to a record:** Press the PHONO switch, and set the MM/MC switch and MC LOAD switch in accordance with the cartridge of your turntable.
 - To listen to a radio broadcast:** Press the TUNER switch.
 - To listen to a compact disc:** Press the CD switch.
 - To listen to a component connected to LINE terminals:** Press the LINE switch.
 - To listen to a tape:** Press the TAPE/DAT switch, and depending on the tape deck used, press the 1/2 switch.
2. Operate the program source unit.
3. Gradually turn the VOLUME control clockwise until the desired volume level is obtained.
4. Attain a balance between the sound of the left and right channels using the BALANCE control.
5. To adjust the tone quality, press the TONE switch, and then adjust the BASS and TREBLE controls.
 - * When you wish to use headphones, insert the plug of the headphones into the PHONES jack, and press the SPEAKERS switches to the "OFF" position.
 - * When listening under low-volume conditions, press the LOUDNESS switch to the "ON" position, and sounds in the low and high ranges will be boosted, thus preserving the balance of sound as it is heard.
 - * 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. Press the SUBSONIC switch to the "16 Hz" position, and the ultra-low-frequency noise can be suppressed.



Recording tapes

A record, compact disc, broadcast or the program source of a component connected to the LINE terminals can be recorded by the tape deck connected to the TAPE/DAT recording (REC) terminals.

To record the program source of a component connected to the PHONO or LINE terminals

1. Set the REC SELECTOR to the "SOURCE" position.
2. Select the input selector switch which corresponds to the program source (record or LINE) which is to be recorded.
3. Start playing the program source.
4. Operate the tape deck, adjust the recording level and start recording.

To record a compact disc or a broadcast

1. Set the REC SELECTOR to the "CD" or "TUNER" position.
2. Press the "CD" or "TUNER" switch of the INPUT SELECTOR, then operate the compact disc player or tuner.
3. Operate the tape deck, adjust the recording level and start recording.

* You can also record a compact disc or a radio broadcast by setting the REC SELECTOR to "SOURCE" and pressing the "CD" or "TUNER" switch of the INPUT SELECTOR.

* The VOLUME, BALANCE, TONE and other controls have no effect on the recording level or sound quality of the signals being recorded even if they are operated.

* When recording with the REC SELECTOR set to "CD" or "TUNER", you can listen to another program source by switching the input selector.

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 tape deck 1.

2. Operate the playback and recording tape decks and start recording.

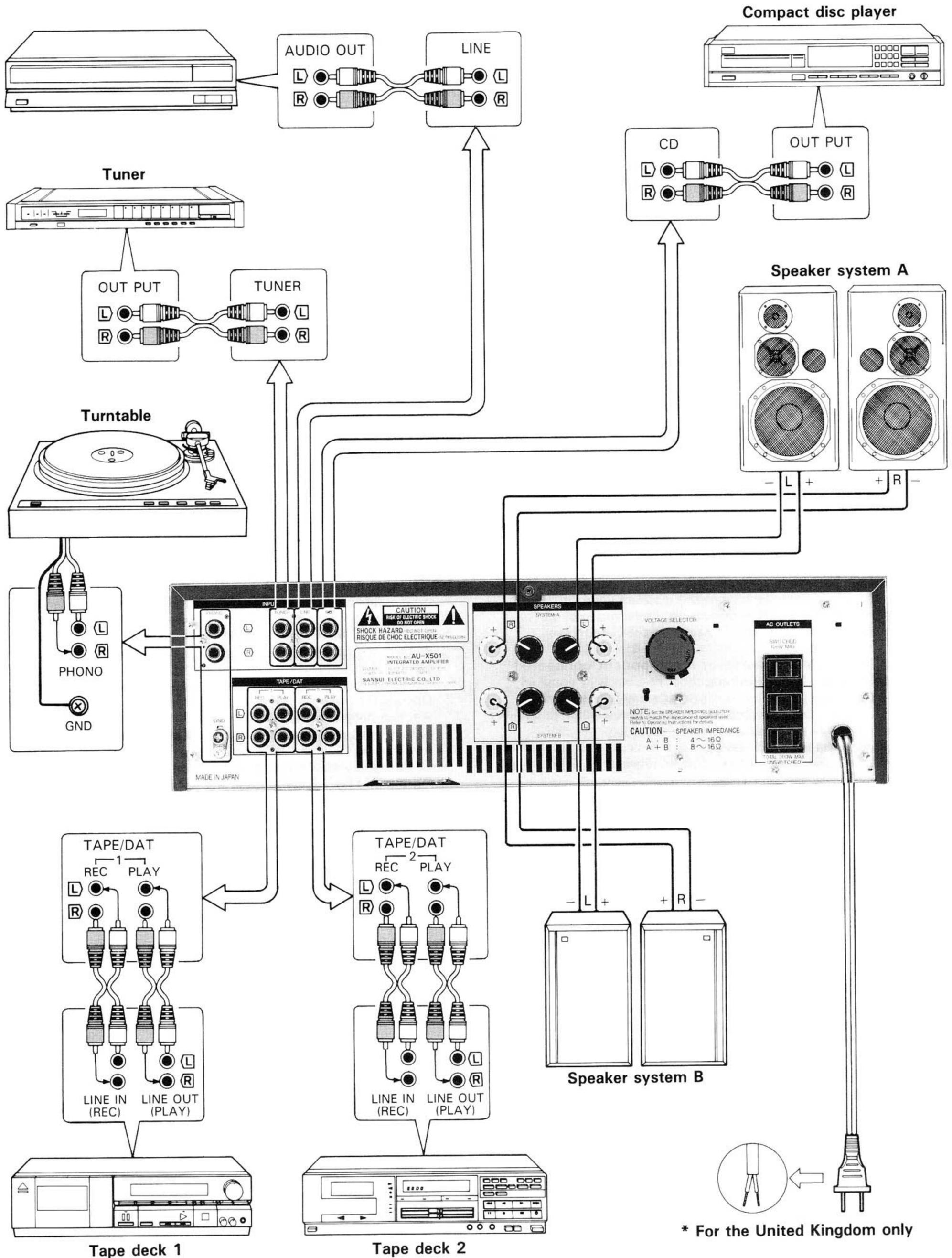
* Another program source can be heard through the speakers during tape copying. In this case, select the program source to be heard using the input selector.

* The program source during tape copying can be heard by pressing the TAPE/DAT switch and the 1/2 switch corresponding to the playback deck.

If the recording tape deck has a monitoring function (a 3-head deck in which the recording and playback heads are independent), the sound of the recording can be monitored by pressing the switch corresponding to the recording deck.

Connections

* Mains plug may vary to some extent depending on sales area, local laws and regulations.



Connection precautions

- * When connecting, either disconnect the power plug from the power outlet or turn off the unit's power using the POWER switch.
- * 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.

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

UNSWITCHED (200W total capacity): The power is supplied to the connected components regardless of the position of the unit's POWER switch.

(Models sold on the European market require a single UNSWITCHED-type AC outlet.)

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.

NOTE: Depending on the sales area, the profile of the AC outlet may differ from the photograph.

Turntable

Connect the turntable's output cord L (white) plug to the L PHONO 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.

- * If you use the turntable alongside this unit, hum and noise pickup may sometimes occur. In such a case, install the turntable at a position where hum and noise are not picked up.

Compact disc player

Connect the CD terminals to the OUTPUT terminals on the compact disc player using the pin-plug cord.

Tuner

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

LINE terminals

The LINE terminals have an electrical performance which is equivalent to that of the CD terminals and TUNER terminals, which means that they can be used as the audio output terminals for a video disc player or TV tuner.

Connect the LINE terminals to the OUTPUT terminals on the component using the pin-plug cord.

Tape deck

There are two sets of TAPE/DAT terminals for connecting a tape deck. This permits up to two tape decks to be connected to perform simultaneous recording or tape dubbing. (1 ► 2, 2 ► 1)

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

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

DAT (digital audio tape recorder) or PCM audio processor

Connect a DAT or PCM audio processor to the TAPE/DAT terminals.

Recording connection: Connect the TAPE REC terminals to the input (LINE IN) terminals on the DAT or PCM audio processor using the pin-plug cord.

Playback connection: Connect the TAPE PLAY terminals to the output (LINE OUT) terminals on the DAT or PCM audio processor using the pin-plug cord.

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.

AC outlets on the rear panel accept AC power plug "BULGIN P.772" or equivalent.

