OWNER'S MANUAL

STereo INTEGRATED AMPLIFIER RA-550

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

Write your SERIAL NUMBER here. The number is located near the name plate on the unit's rear panel.
INTRODUCTION

We at Rotel want to thank you for purchasing our audio product. Rotel audio products are designed to use the latest electronic technology, and they incorporate our long experience as a specialist manufacturer of audio equipment. We are confident that you will find satisfaction in the high quality sound and top performance, and that you will find pleasure in the functional beauty achieved through human-engineering concept. Before starting operation, please read this instruction manual thoroughly and acquaint yourself with the proper mode of using the unit and all its connections.

We hope you will enjoy top-notch performance for many years to come.

ventilation may result in damage due to excessive heat.
5. Do not open the cabinet
In order to avoid electric shock or damage to the component, never open the cabinet. If a foreign object falls inside the unit by mistake, turn the power off, disconnect the wall plug, and consult a qualified electrician or your dealer.
6. Turn the volume control initially to minimum
When lowering the tonearm of your turntable onto a record, an excess of current in the lower frequency range may cause damage to the speakers. To prevent this, always minimize the volume setting initially.
7. Moving the unit
When transporting, remove the AC cord from the wall outlet and all other connected cords on the rear panel to prevent wire breakage and short circuits.
8. If the unit gets wet
If the unit should get wet, immediately disconnect the AC cord, and consult your dealer or a qualified electrician.
9. Cleaning and maintenance
Do not use chemicals such as benzine or thinners on the front panel. Always use a soft, dry cloth to clean the unit.
10. Retain the owner's manual
Retain the owner's manual near the unit, and write down the serial number (found on the rear panel) on the cover.

INSTALLATION

Be sure to place the unit in a level and flat place where it is free from humidity, vibration, high temperature and not exposed to direct sunlight. Be careful not to place the unit in a highly enclosed place such as near a wall or on a bookshelf. A poor ventilation will cause undesirable effects to the unit.

SPEAKERS

Be sure to use only speakers rated at 4 – 16 ohms. The unit will accept two pairs of speaker systems, but if the two systems are to be driven at a time, each speaker should be rated at 8 – 16 ohms. The speaker impedance may be found on its name plate or the instruction manual of the speaker.
CONNECTING COMPONENTS

Connect all necessary audio components to the rear panel of the unit, using RCA cords or DIN type record/playback cord. See the diagram in "Connection Guide" for illustration of properly completed connections.

When connecting RCA pin cords, be sure that L and R markings on each component are matched correctly. Connect the grounding wire of the turntable to the terminal marked GND on the amplifier. Be sure to insert pin plug or DIN plug all the way into the jack to insure perfect connection.

CONNECTION GUIDE

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DIN TYPE REC/PB CORD
**SWITCHES AND CONTROLS**

(1) **Power Button**
Depress this button to turn on the unit. When the unit is turned on, the Monitor/Function indicator will light up. Releasing the button will turn off the unit.

(2) **Speakers Button (A/B)**
You can select the speaker system(s) you wish to use by means of buttons A and B. Depress button A to activate the speaker system connected to terminals A on the rear panel and button B for the system connected to terminals B. Depressing both A and B buttons will activate both speaker systems.

(3) **Headphones Jack**
Plug your headphones into this jack for private listening. When using headphones, both A and B speaker buttons should be in the released (OFF) position. The volume of the headphone sound can be controlled with the volume control.

(4) **Tone Controls (BASS/ TREBLE)**
Two separate tone controls regulate bass and treble respectively: BASS is for the low frequency range and TREBLE for the high frequency range. Rotate the knob clockwise to increase the response, and counterclockwise to decrease it. A flat response will be obtained when both controls are at the mid-position. Use the controls effectively to obtain optimum sound performance.

(5) **Balance Control**
This knob regulates the relative sound outputs from each channel. At the mid-position, the level of sound from both speakers will be the same. Turning it to the right will cause the volume level of the left speaker relative to the right speaker to decrease, and vice versa. Adjust the setting of the control according to your listening position.

(6) **Subsonic Filter**
Depress this button to activate the filter function. Release it to remove the filter from circuit. This filter cuts off frequencies below 20Hz at -6dB/octave, effectively reducing disturbing subsonic effects, such as turntable rumble or shock produced when the stylus is lowered onto a record.

(7) **Mode Button**
For normal stereo listening, this button should be left in the released position (OFF). Depressing this button will put the unit into the mono mode, causing the source to be heard monaurally.

(8) **Power Indicator/Indicator Sensitivity Selector**
Two separate power indicators, each consisting of 6 LEDs, display the changing power output level of each channel (the wattage marked above each LED is applicable to 8-ohm speakers). At low output levels, only a few LEDs will light up, making it difficult to read off the power output. The indicator sensitivity selector is used to remedy this situation. Depressing this button will increase the sensitivity of the indicator by a factor of 10, thereby facilitating reading of output at low levels. Releasing the button will return power indication to the normal mode.

(9) **Loudness Button**
This button is used to help overcome the human ear's loss of sensitivity to low and high frequencies when listening at reduced volume levels. When it is depressed, bass and treble frequencies will be boosted to provide natural sound quality. Leave the button released (OFF) for normal or high volume levels.

(10) **Volume Control and Audio Muting Button**
The large wheel knob is used to adjust the volume level. No sound will be produced when it is in the leftmost position. Turning it clockwise will increase the volume level. The MUTING button, when depressed, reduces the volume to one-sixth. Releasing the button will immediately restore the previous volume level. This function is convenient when lowering the tone arm onto a record, for example.

(11) **Tape Monitor Button (TAPE 1/TAPE 2)**
Two tape decks can be connected up to this unit. Depress the TAPE 1 or TAPE 2 button as desired for tape playback. Depressing both buttons will permit dubbing from TAPE 1 to TAPE 2.

(12) **Function Selector (AUX/TUNER/PHONO) and Phono Selector**
The function selector consisting of three pushbuttons is used to select either the tuner, turntable or equipment connected to AUX. For turntable operation, set the phono selector to the appropriate position according to your cartridge type: If your cartridge is a moving coil type, select the MC position to put the built-in MC head amp into circuit. Select the MM position when using a moving magnet type cartridge.

When listening to the program source, be sure to leave both tape
monitor buttons released (OFF). Make sure that the red LEDs above the tape monitor buttons are off before depressing any of the function buttons.

(13) Monitor/Function Indicator

Five LEDs located above the monitor/function buttons indicate which button has been depressed. A red LED(s) lights up when playing back, monitoring or dubbing. A green LED glows when listening to any program source except from a tape deck.

OPERATION

Checking before Operation
- Check to see if the power cord is connected correctly.
- Check to see if all audio components are correctly connected.
- Set the volume control to minimum.
- Depress SPEAKERS button A or B (or both) according to the speaker system(s) you wish to use.
- When using headphones, set both SPEAKERS buttons to the released (OFF) position.

A. Listening to Signals from Tuner, Turntable and Equipment Connected to AUX Terminal

1. Set tape monitor buttons to OFF.
2. Select the appropriate button of the function selector:
   AM and FM broadcasting – TUNER button
   Record play – PHONO button
   Equipment connected to AUX terminal – AUX button

Note: Check the position of the phono selector before depressing the PHONO button. The MC position is for a moving coil type cartridge, and the MM position for a moving magnet type. Be sure to select the correct position to ensure maximum performance. When the selector is in the MC position, the built-in MC head amp will be in circuit.

3. Depress the POWER button on the unit. Turn on the other component(s) you are going to use.
4. Commence play, following the instructions provided with the respective components: tuner, turntable, etc.
5. Raise the volume of the unit to the desired level.

B. Playback Using Tape Deck

1. Set the tape monitor switch to TAPE 1 or 2, according to the tape deck you wish to use.
2. Turn on the unit and the tape deck.
3. Commence playback, following the instructions provided with your deck.
4. Raise the volume to the desired level.

C. Recording from Program Source

1. Play a record or tune in the desired station (see paragraph A).
2. Put the deck in the record mode to start recording.

- Recording onto two decks is possible by putting the decks connected to the TAPE 1 and TAPE 2 terminals in the recording mode.

- When the tape monitor buttons are set to OFF, the source signal can be monitored prior to recording.
- If your deck is a 3-head type, set the tape monitor button to ON to enable the recorded signal to be monitored.
- Manipulating controls and buttons, such as volume, tone, balance, filter, mode and loudness will have no effect on the recording.

D. Tape Dubbing

1. Turn on the unit and both tape decks connected to TAPE 1 and TAPE 2.
2. Press both tape monitor buttons.
3. The deck connected to TAPE 1 is for playback and the one connected to TAPE 2 is for recording. Set the former in the playback mode and the latter in the recording mode to start dubbing from TAPE 1 to TAPE 2.
4. Monitor the sound with volume, tone and other controls set as desired.

PROTECTION CIRCUIT

To prevent accidental damage to the unit or speakers, a protection circuit is installed in the unit. If the unit suddenly stops operating, a blown fuse may be the cause. Accordingly, carry out the following check,

1. Turn off the unit.
2. Open the fuse box on the rear panel and check the two fuses: one is for the left channel and the other for the right channel circuit.
3. The blown fuse may be due to a short-circuited speaker cable or an overload resulting from the use of a low impedance speaker. Check the speaker cables, its connection and speaker impedance. Correct the cause of the trouble if any.
4. Replace the blown fuse with a new one and close the fuse box. If the fuse blows again despite taking the above action, cut off the power supply from your entire audio system and consult your dealer of a qualified electrician.

HUM AND NOISE

In any high fidelity installation, hum may be caused by the interconnection of a turntable, tuner and amplifier, and speakers as the result of wiring, different grounding or locations of components.

If hum is experienced with your unit, disconnect everything but the speakers from the unit.
Plug in the turntable and if hum or howling appears, move the turntable away from the speakers as much as possible.
Note hum may also be induced by defective cable connections or by running the cables too close to a strong AC field.
When your unit picks up noise during the reception of broadcasts, causes are mostly due to external objects such as fluorescent lamps and house appliances using motor or thermostat, or others that may induce the noise.
Either relocating the unit away from the noise sources or using an improved outdoor antenna may readily solve the problem.
In the event you cannot find the cause, consult your dealer or a qualified electrician.

VOLTAGE SELECTION

Not available for U.K., Canada and Scandinavia

The unit is a variable voltage equipment that can run on 120V, 220V or 240V power supply. Your unit should already be preset at the proper voltage for use in your area. However, if you move to another area where the power supply voltage is different, the voltage setting can be manually changed.

BE SURE THAT YOUR UNIT IS NOT CONNECTED TO THE POWER SOURCE BEFORE ATTEMPTING TO MAKE THIS CHANGE.

To check the voltage setting, remove the name plate on the rear panel and locate the VOLTAGE SELECTOR. Use a screwdriver to turn the voltage selector to the required voltage.
SPECIFICATIONS
AMPLIFIER SECTION

Continuous Power Output.... 40 watts* per channel, min. RMS at 8 ohms from 20 to 20,000Hz with no more than 0.08% total harmonic distortion

Total Harmonic Distortion.  No more than 0.08% (continuous rated power output)
(20 to 20,000Hz, from AUX) No more than 0.05% (1 watt per channel power output)

Intermodulation Distortion.  No more than 0.08% (continuous rated power output)
(60Hz : 7kHz = 4 : 1) No more than 0.05% (1 watt per channel power output)

Damping Factor.................. 50 (20 to 20,000Hz, 8 ohms)

Input Sensitivity/Impedance
- PHONO (MM) ................. 2.5mV/47 kohms
- PHONO (MC) .................. 0.2mV/30 ohms
- TUNER, AUX, TAPE ........... 150mV/33 kohms

Overload Level (1kHz, 0.1% THD)
- PHONO (MM) ................. 160mV
- PHONO (MC) .................. 14mV
- TUNER, AUX, TAPE .......... Not less than 5V

Phono Equalization (MM) ....  ±0.3dB (30 to 15,000Hz)

Hum & Noise (IHF, A network)
- PHONO (MAG) ............... 80dB
- TUNER, AUX, TAPE .......... 95dB

Tone Control
- Bass ..................... ±10dB (50Hz)
- Treble ................... ±8dB (15kHz)

Subsonic Filter .......... 0.6dB/oct. (20Hz)
Loudness Contour .......... +8.5dB (100Hz), +3.0dB (10kHz)
(volume set at -40dB position)

MISCELLANEOUS

Power Requirement ........ 120V/60Hz, 220V/50Hz, 240V/50Hz
120, 220, 240V/50 – 60Hz

Power Consumption ....... 300 watts

Dimensions (Overall) ... 330 (W) x 94 (H) x 281 (D) mm/
16-15/16” x 3-11/16” x 11-1/16”

Weight (Net) ............. 7.4kg/16.3 lbs.

*Measured pursuant to the Federal Trade Commission's Trade Regulation Rule on Power Claims for Amplifiers (applicable to the U.S.A. only)

Note: Specifications and design subject to possible modification without prior notice.