

# owners manual

使用説明書

## ROTEL *hi fi*

STEREO CONTROL AMPLIFIER

# RC-980BX

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**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 rear panel.

# SAFETY INSTRUCTIONS



## • Explanation of Graphical Symbols



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert you 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 you to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

## EXCLUSIVE NOTE FOR U.K.

If your unit comes with a 2-core cable without a plug, make certain live and neutral leads are connected to the proper terminals. Check that the terminals are screwed down firmly and no loose strands of wire are present.

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

BLUE: NEUTRAL

BROWN: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with 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 BLUE or BLACK. The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or colour BROWN or RED.

1. Read Instructions— All the safety and operating instructions should be read before the appliance is operated.
2. Retain Instructions — The safety and operating instructions should be retained for future reference.
3. Head Warnings — All warnings on the appliance and in the operating instructions should be adhered to.
4. Follow Instructions — All operating and other instructions should be followed.
5. Water and Moisture — The appliance should not be used near water — for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.
6. Carts and Stands — The appliance should be used only with a cart or stand that is recommended by the manufacturer.
7. Wall or Ceiling Mounting — The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
8. Ventilation — The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
9. Heat — The appliance should be situated away from heat sources such as radiators, stoves, or other appliances that produce heat.
10. Power Sources — The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
11. Power-Cord Protection — Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
12. Cleaning — The appliance should be cleaned only as recommended by the manufacturer.
13. Nonuse Periods — The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
14. Object and Liquid Entry — Care should be taken so that objects do not fall into and liquids not spilled into the inside of the appliance.
15. Damage Requiring Service — The appliance should be serviced by qualified service personnel when:
  - A. The power-supply cord or the plug has been damaged; or
  - B. Objects have fallen, or liquid has been spilled into the appliance; or
  - C. The appliance has been exposed to rain; or
  - D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
  - E. The appliance has been dropped, or the cabinet damaged.
16. Servicing — The user should not attempt to service the appliance beyond those means described in the operating instructions. All other servicing should be referred to qualified service personnel.
17. Grounding or Polarization — The precautions that should be taken so that the grounding or polarization means of an appliance is not defeated.

# STEREO CONTROL AMPLIFIER RC-980BX

# ENGLISH

## 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.

## BEFORE ENJOYMENT/POWER SUPPLY

Follow the instructions below for maximum safety:

### 1. Connecting and removing AC cord

Be sure to connect or disconnect the AC line cord only after turning off the power switch to prevent possible shock noise or damage to the speakers.

### 2. 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.

### 3. 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.

### 4. 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.

### 5. If the unit gets wet

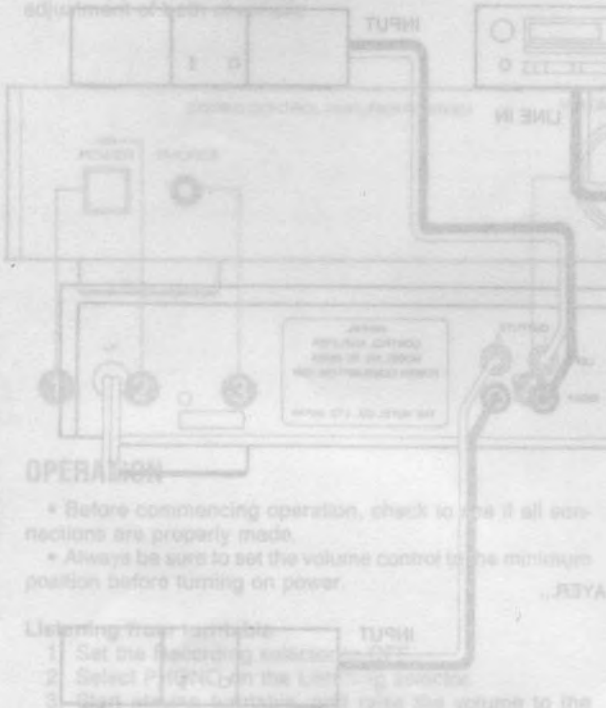
If the unit should get wet, immediately disconnect the AC cord, and consult your dealer or a qualified electrician.

### 6. Cleaning and maintenance

Do not use chemicals such as benzene or thinners on the front panel. Always use a soft, dry cloth to clean the unit.

### 7. Owner's manual

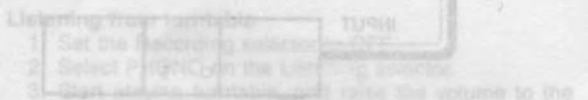
Keep the owner's manual near the unit, and record the serial number (found on the rear panel) on the cover.



**Caution (applicable to the U.S.A., Canada, Hong Kong, and Southeast Asia):** On the rear panel of the RC-980BX are two sets of AC outlet through which power is supplied to audio equipment (turntable, CD player, tuner, cassette deck, etc.) you use in conjunction with the RC-980BX. Each AC outlet is the switched type, turned on or off upon switching on or off the power in the RC-980BX and has rating of 400 watts maximum. Do not attempt to connect equipment whose power consumption exceeds the rating of these AC outlets. Never connect a power amplifier to these AC outlets.

## OPERATION

- Before commencing operation, check to see if all connections are properly made.
- Always be sure to set the volume control to the minimum position before turning on power.



### Playing a compact disc

1. Set the Recording selector to OFF.
2. Select CD on the Listening selector.
3. Start playing the compact disc and raise the volume to the desired level.

### Radio broadcast reception

1. Set the Recording selector to OFF.
2. Select TUNER on the Listening selector.
3. Tune in the desired station on the tuner and raise the volume to the desired level.

### Playing back tape deck

1. Set the Recording selector to OFF.
2. Set Listening selector to TAPE 1 or TAPE 2 position.

## CONNECTING COMPONENTS

Connect all necessary audio components to the rear panel of the unit, using RCA pin cords. See the illustration for properly completed connections. When connecting RCA pin cords, be sure that L (left) and R (right) markings on each component are matched correctly. Connect the grounding wire of the turntable to the terminal marked GND on the amplifier.

### PHONO MM/MC Selector

The unit has a built-in MC head amplifier. This selector is used to receive MM (moving magnet) or MC (moving coil) phono cartridge signal with an appropriate gain. In MC position, the built-in MC head amplifier is activated. When your turntable uses an MC cartridge, set the selector to MC position. When MM cartridge is used, set the selector to MM position.

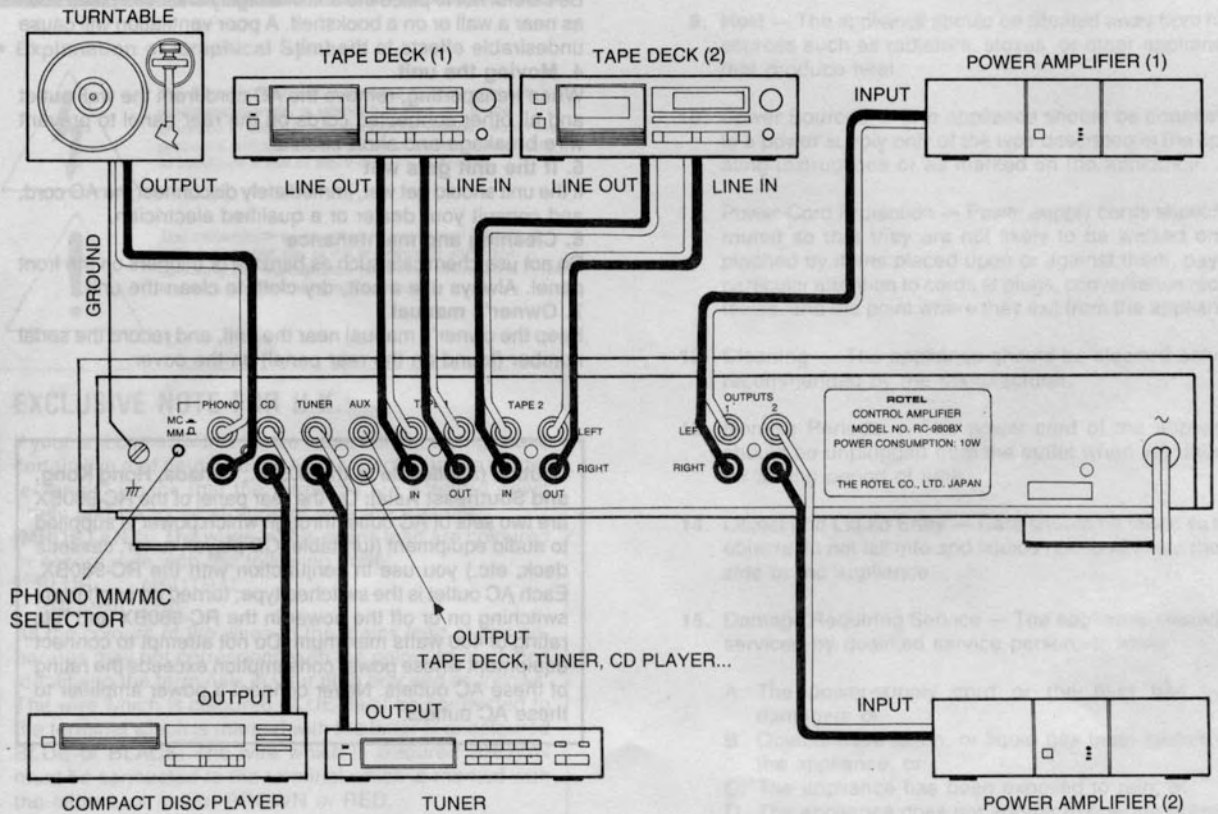
**NOTE 1:** When using an MC cartridge of a high output type, however, set this selector to the MM position.

**NOTE 2:** Be sure that the volume control is turned down to its lowest level and that the power is off before using this switch.

### Using Two OUTPUT Terminals

The RC-980BX is equipped with two sets of output terminals in parallel (OUTPUT 1, OUTPUT 2). In most cases, one of these terminals is used to connect a power amplifier.

When using a bi-amp speaker system, however, both of these terminals are used. Use one of the terminals for output to a lower frequency range power amplifier and the other for output to a higher frequency range power amplifier.



## SWITCHES AND CONTROLS

### (1) Power Button

Depress this button to turn on the power in the unit. Press the button a second time to release it and to cut off the power.

### (2) Power Indicator

Glowes when power is turned on with the power button.

### (3) Headphones jack

To monitor the sound from headphones without using the power amplifier, connect the headphones here. The headphone volume can be adjusted with the Volume Control of this unit. This unit is not equipped with a headphones switch because of the design policy of obtaining the best possible tone quality. Therefore, the sound from speakers cannot be cut by connecting the headphones, unless the power amplifier and the speaker system are disconnected from this unit. For private listening through headphones, either turn off the power switch of the power amplifier or unplug the cables connecting this unit to the power amplifier.

### (4) Volume Control

Used to regulate the volume level. Turn clockwise to increase the volume, and counterclockwise to reduce it. This is a dual concentric knob which permits either separate or combined adjustment of both channels.

### (5) Recording Selector

The Recording Selector is used to select the signal to be recorded on the tape deck.

In the OFF position, no signal will be output through the TAPE 1 or 2 OUT terminal on the rear panel. Keep this selector in the OFF position when not making any recordings so that the RC-980BX can output the highest possible sound quality to the power amplifier.

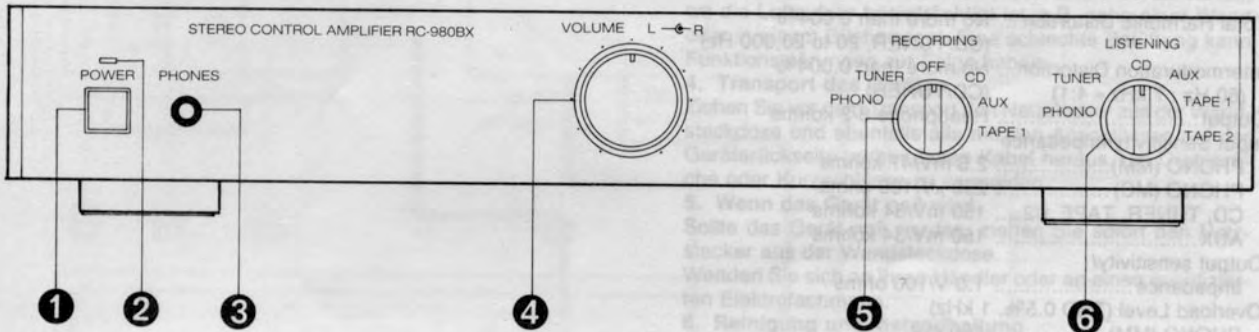
The PHONO position is used when recording analog records onto tape. Signals from the turntable are output through the TAPE 1 or 2 OUT terminal.

The TUNER, CD, and AUX positions are used in the same way, directing signals from their respective sources to the tape deck through the TAPE 1 or 2 OUT terminal.

The TAPE 1 position is used for tape-to-tape recording when signals from tape deck 1 are to be recorded onto tape deck 2 through the TAPE 2 OUT terminal.

### (6) Listening Selector

The Listening Selector is used to select from among a number of audio components connected to the input terminals on the RC-980BX's rear panel. To listen to an analog record, set this selector to the PHONO position; for AM or FM broadcasts, use the TUNER position; when listening to a Compact Disc, the CD position; for a device connected to the AUX terminal, the AUX position; or for listening to a tape, choose between TAPE 1 or TAPE 2 depending on which deck you wish to use.



## OPERATION

- Before commencing operation, check to see if all connections are properly made.
- Always be sure to set the volume control to the minimum position before turning on power.

### Listening from turntable

1. Set the Recording selector to OFF.
2. Select PHONO on the Listening selector.
3. Start playing turntable, and raise the volume to the desired level.

### Playing a compact disc

1. Set the Recording selector to OFF.
2. Select CD on the Listening selector.
3. Start playing the compact disc and raise the volume to the desired level.

### Radio broadcast reception

1. Set the Recording selector to OFF.
2. Select TUNER on the Listening selector.
3. Tune in the desired station on the tuner and raise the volume to the desired level.

### Playing back tape deck

1. Set the Recording Selector to OFF.
2. Set Listening selector to TAPE 1 or TAPE 2 position

according to the tape deck you are going to play back.

3. Start playback.
4. Raise the volume to the desired level.

### Recording or Dubbing Program Sources

Signals from audio components connected to the input terminals on the RC-980BX's rear panel can be output through the TAPE OUT terminal. Simply play the program source you wish to record, set the tape deck connected to the TAPE OUT terminal to its record mode, and the deck will record the program onto tape. The Recording Selector is used to select the program source to be recorded. To listen to the sound while it is being recorded, set the Listening Selector to the same position as the Recording Selector. However, if you wish to listen to another source during recording, set the Listening Selector to the position for that source.

If tape decks are connected to both TAPE 1 and TAPE 2 terminals, it is possible to dub the contents of a tape loaded in the deck connected to TAPE 1 onto a tape loaded in the deck connected to TAPE 2. In this case, set the Recording Selector to TAPE 1, playback the tape in the TAPE 1 deck, and start up the recording function of the TAPE 2 deck.

While program sources are being recorded or dubbed, the level of signals output through TAPE OUT is always fixed, bypassing any effects of the volume control.

## 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 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.

## SPECIFICATIONS

Total Harmonic Distortion ...	No more than 0.004% (CD/TUNER, 20 to 20,000 Hz)
Intermodulation Distortion... (60 Hz : 7 kHz = 4:1)	No more than 0.004% (CD/TUNER)
Output.....	Headphone 8-2 kohms
Input Sensitivity/Impedance	
PHONO (MM).....	2.5 mV/47 kohms
PHONO (MC).....	250 $\mu$ V/100 ohms
CD, TUNER, TAPE 1/2....	150 mV/34 kohms
AUX.....	150 mV/34 kohms
Output sensitivity/ Impedance .....	1.0 V/100 ohms
Overload Level (THD 0.5%, 1 kHz)	
PHONO (MM).....	160 mV
PHONO (MC).....	16 mV
CD, TUNER, TAPE 1/2....	5V
AUX.....	5V
Frequency Response	
PHONO .....	20 to 20,000 Hz, $\pm$ 0.2 dB (RIAA STD)
CD, TUNER, TAPE 1/2....	4 to 100,000 Hz, + 0.5 dB, - 3 dB
AUX.....	4 to 100,000 Hz, + 0.5 dB, - 3 dB
Signal-to-Noise Ratio (IHF A network)	
PHONO (MM).....	75 dB
PHONO (MC).....	70 dB
CD, TUNER, TAPE 1/2....	100 dB
AUX.....	100 dB
Power Requirement .....	120 V/60 Hz, 220 V/50 Hz, 240 V/50 Hz, 100 V/50 Hz-60 Hz (depending on destinations)
Power Consumption .....	10 watts
Dimensions (overall) .....	440 (W) x 70 (H) x 325 (D) mm 17-5/16" x 2-3/4" x 17-13/16"
Weight (net).....	4.1 kg/9.02 lbs.

- Specifications and design subject to possible modification without notice.