ROTEL hifi

STEREO CONTROL AMPLIFIER

RB-890

owners manual

使用説明書

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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

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.

- **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.

ENGLISH

STEREO POWER AMPLIFIER RB-890

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. Use a wall outlet for power supply
Be sure to connect the AC line cord to a household wall outlet. Be certain that the outlet voltage matches the electrical rating of the unit, found on the rear panel name plate.

2. 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.

3. Ventilate the unit well
Never block any ventilation holes at the top and bottom of the unit. Be sure also to provide ample ventilation space around the unit. Poor ventilation may result in damage due to excessive heat.

4. 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.

5. 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.

6. 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.

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

8. 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.

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

EXCLUSIVE NOTE FOR U.K.

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SPEAKERS

Use speaker systems with impedance ratings of 4-16 ohms. Before hooking up your speaker system, be sure to check its impedance, which should be indicated either on the back of the speaker, or in the speaker instruction manual.

HOOKING UP SPEAKERS

Connect the speaker leads of the right-hand speaker to "+" and "−" of terminals of "R", and the speaker leads of the left-hand speaker to "+" and "−" of "L". Make sure each "+" speaker lead is connected to "+" terminal, and "−" lead to the "−" terminal.
Strip 1.0cm (3/8") of the polyvinyl chloride insulation from the end of each speaker lead. Twist the exposed strands tightly, and secure the end with a touch of solder.
To connect speaker lead to the speaker terminal of the amplifier, rotate the speaker terminal knob counterclockwise to loosen, insert the stripped end of the lead, and firmly tighten the knob onto the lead.

CONNECTING PREAMPLIFIER

Using RCA pin cords, connect preamplifier output terminal "L" (left) with the RB-890's INPUT terminal "L", and the preamplifier output terminal "R" (right) with the RB-890's INPUT terminal "R".

When using the unit as a monaural power amplifier (BTL connection)

Connect " + " speaker lead to " + " terminal of "L", and " – " lead to " + " terminal of "R".
Strip 1.0 cm (3/8") of the polyvinyl chloride insulation from the end of each speaker lead.
Twist the exposed strands tightly, and secure the end with a touch of solder.

To connect speaker lead to the speaker terminal of the amplifier, rotate the speaker terminal knob counterclockwise to loosen, insert the stripped end of the lead, and firmly tighten the knob onto the lead.
Locate STEREO/BRIDGED MONO selector on the rear panel, and set it to BRIDGED MONO position. In this mode, the INPUT terminal "L" (left) of the RB-890 becomes a monaural input terminal. To this terminal, connect preamplifier output terminal "L" (left) or "R" (right), using a pin cord. The RB-890's INPUT terminal "L" is not used.
Caution: In BTL connection, the potential level of the RB-890 "BRIDGED-" (" + " terminal of "R") speaker terminal is not identical with ground. When using the unit as a monaural power amplifier in that connection, connect speaker system to the speaker terminals directly. Do not attempt to set a speaker selector unit, etc., nor connect speaker leads to another leads, other terminal or other metal part.

SWITCH AND INDICATORS

(1) Power Button

Press the upper part of this button to turn on the power in the unit. Press the lower part to cut off the power.

(2) Power Indicator

Glows when power is turned on with the power button.

(3) Protection Indicator

The indicator normally lights for several seconds upon turning on the power. When the indicator goes off, it means the unit is in the normal operating state.
The indicator glows when abnormally high temperature is built up inside the unit. In such a case, the indicator will remain on until the temperature inside the unit drops to a normal level. When the indicator goes off, it indicates the unit has returned to the normal operating state.

OPERATION

• Before commencing operation, check to see if all connections are properly made.

• Before turning on the power in the unit, always be sure to turn down the preamplifier volume control to minimum.

1. Turn on the preamplifier.
2. Turn on the RB-890.
3. Reproduce a desired source, and raise the volume level on the preamplifier.

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.

PROTECTION CIRCUIT

The RB-890 incorporates thermal protector to prevent accident or damage. If for some reason the protection circuit is activated, there will be a sudden cut-off of sound from the speakers, and the protection indicator will light up.
If no sound is produced, the reason may be due to the functioning of the protection circuit. First, turn off the power and disconnect the plug from the electrical outlet. Then locate and remedy the cause of the trouble. When the thermal protector is activated, the unit will start functioning automatically after the temperature is lowered again.
If the protection circuit is activated again despite taking the above action, cut off the power supply from your entire audio system and consult your dealer or a qualified electrician.
Note: The protection circuit will normally operate to prevent a popping noise from being generated upon turning on the power. No sound is produced for several seconds after turn-on.

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 an area where the power supply voltage is different, consult your dealer.

SPECIFICATIONS

Continuous Power Output	160 watts* per channel, min. RMS both channels driven into 8 ohms from 20 to 20,000 Hz with no more than 0.03% total harmonic distortion.
Rated power output (BTL connection)	360Watts(mono) min.RMS driven into 8 ohms from 20 to 20,000 Hz with no more than 0.03% total harmonic distortion
DIN Power Output	280 watts per channel (1 kHz, 4 ohms, 1% THD)
Total Harmonic Distortion (20 to 20,000 Hz)	No more than 0.03% (continuous rated power output) No more than 0.03% (continuous 1/2 rated power output) No more than 0.03% (1 watt per channel power output, 8 ohms)
Intermodulation Distortion (60 Hz : 7 kHz = 4 : 1)	No more than 0.03% (continuous rated power output) No more than 0.03% (continuous 1/2 rated power output) No more than 0.03% (1 watt per channel power output, 8 ohms)
Output: Speaker	4-16 ohms
Damping Factor	380 (20 to 20,000 Hz, 8 ohms)
Input Sensitivity/Impedance	1.0V/22 kohms
Frequency Response	15 to 130,000 Hz, +0 dB, −1.0 dB
Signal-to-Noise Ratio (IHF, A network)	120 dB
Power Requirement	120V/60 Hz, 220V/50 Hz, 240V/50 Hz, or 120, 220, 240V/50-60 Hz (depending on destinations)
Power Consumption	800 watts
Dimensions (overall)	430 (W) x 109 (H) x 349 (D) mm 16-15/16″ x 4-11/16″ x 16-15/16″
Weight (net)	13.0 kg/28.7 lbs.

• Specifications and design subject to possible modification without notice.
• *Measured pursuant to the Federal Trade Commission's Trade Regulation Rule on Power Claims for Amplifiers (applicable to the U.S.A. only).