

# RLC-900

POWER LINE CONDITIONER

ROTEL LINE CONDITIONER RLC-900



## Owner's Manual



## CAUTION

**RISK OF ELECTRIC SHOCK  
DO NOT OPEN**



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

### **APPLICABLE FOR USA, CANADA OR WHERE APPROVED FOR THE USAGE**

**CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT. INSERT FULLY.**

**ATTENTION: POUR EVITER LES CHOCs ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.**



**This symbol is to alert the user to the presence of uninsulated dangerous voltages inside the product's enclosure that may constitute a risk of electric shock.**



**This symbol is to alert the user to important operating and maintenance (service) instructions in this manual and literature accompanying the product.**

### **WARNING:**

**There are no user serviceable parts inside. Refer all servicing to qualified service personnel.**

### **WARNING:**

**To reduce the risk of fire or electrical shock, do not expose the unit to moisture or water. Do not allow foreign objects to get into the enclosure. If the unit is exposed to moisture, or a foreign object gets into the enclosure, immediately disconnect the power cord from the wall. Take the unit to a qualified service person for inspection and necessary repairs.**

Read all the instructions before connecting or operating the unit. Keep this manual so you can refer to these safety instructions.

Heed all warnings and safety information in these instructions and on the product itself. Follow all operating instructions.

Clean the unit only with a dry cloth or a vacuum cleaner.

Keep the ventilation inlets on the unit unobstructed. For example, do not place the unit on a bed, sofa, rug, or similar surface that could block the ventilation slots. If the unit is placed in a bookcase or cabinet, there must be sufficient clearance around the unit and ventilation of the cabinet to allow proper cooling.

Keep the unit away from radiators, heat registers, stoves, or any other appliance that produces heat.

**The unit must be connected to a power supply only of the type and voltage specified on the rear panel of the unit.**

Connect the unit to the power outlet only with the supplied 2-pin polarized power supply cable or an exact equivalent. Do not modify the supplied cable in any way. Do not attempt to defeat grounding and/or polarization provisions. The cable should be connected to a 2-pin polarized wall outlet, matching the wide blade of the plug to the wide slot of the receptacle. Do not use extension cords.

Do not route the power cord where it will be crushed, pinched, bent at severe angles, exposed to heat, or damaged in any way. Pay particular attention to the power cord at the plug and where it exits the back of the unit.

The power cord should be unplugged from the wall outlet if the unit is to be left unused for a long period of time.

Immediately stop using the unit and have it inspected and/or serviced by a qualified service agency if:

- The power supply cord or plug has been damaged.
- Objects have fallen, or liquid has been spilled, into the unit.
- The unit has been exposed to rain.
- The unit shows signs of improper operation
- The unit has been dropped or damaged in any way

Place the unit on a fixed, level surface strong enough to support its weight. Do not place the unit on a moveable cart that could tip over.



# ROTEL POWER LINE CONDITIONER RLC-900

Figure 1: Controls and Connections

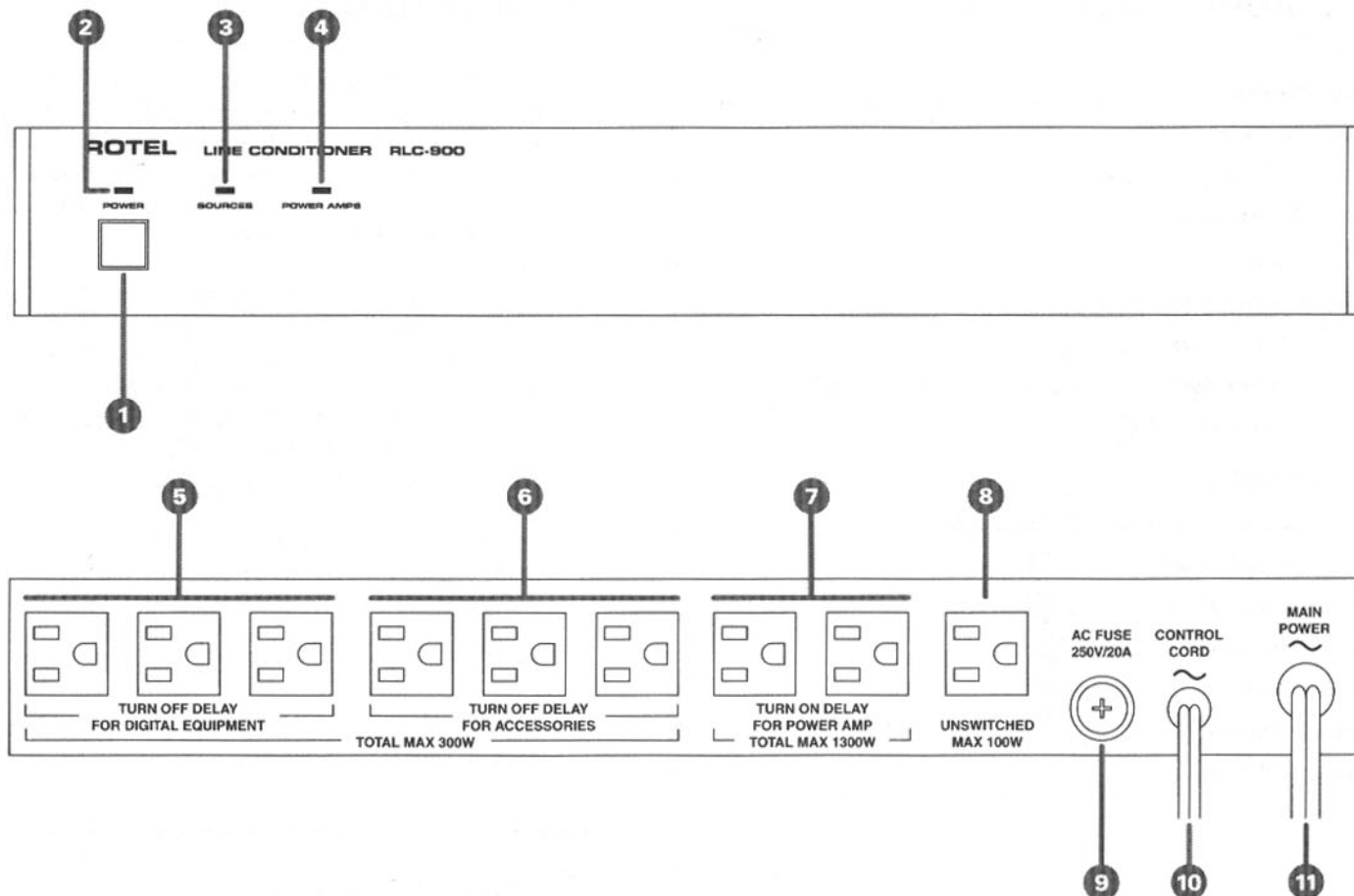
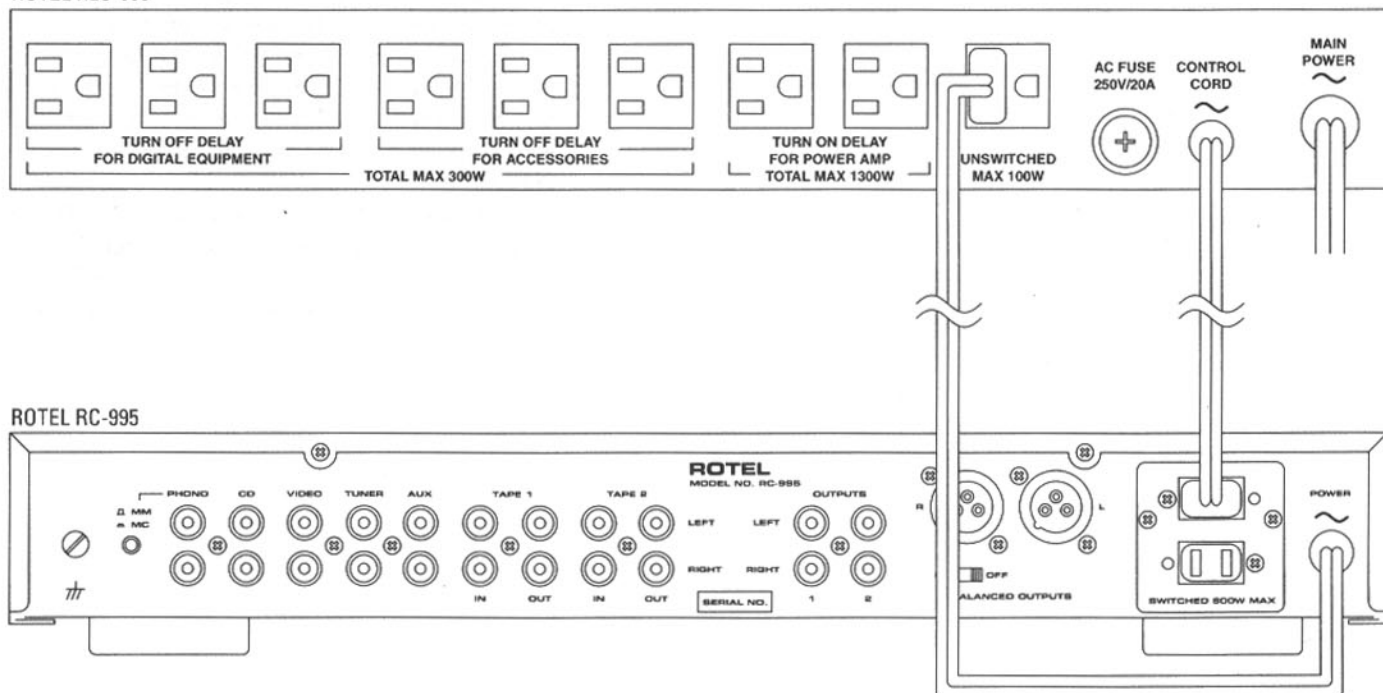


Figure 2: Control Cord Connection

ROTEL RLC-900



## Contents (circled numbers refer to illustration)

About Rotel	1
Getting Started	1
A Few Precautions	2
Placement	2
Cables	2
Power Input and Control	2
Main Power Input 11	2
Power Switch 1 and Power Indicator 2	2
Control Cord 10	2
Power Outlets	3
Digital Equipment Outlets 5	3
Accessories Outlets 6	3
Power Amp Outlets 7	3
Unswitched Outlet 8	3
Power Indicators 3 and 4	3
Power Fuse 9	3
Troubleshooting	3

## About Rotel

A family whose passionate interest in music led them to manufacture high fidelity components of uncompromising quality founded Rotel over 30 years ago. Through the years that passion has remained undiminished and the family goal of providing exceptional value for audiophiles and music lovers, regardless of their budget, is shared by all Rotel employees.

The engineers work as a close team, listening to, and fine tuning each new product until it reaches their exacting musical standards. They are free to choose components from around the world in order to make that product the best they can. You are likely to find capacitors from the United Kingdom and Germany, semi conductors from Japan or the United States, while toroidal power transformers are manufactured in Rotel's own factory.

Rotel's reputation for excellence has been earned through hundreds of good reviews and awards from the most respected reviewers in the industry, who listen to music every day. Their comments keep the company true to its goal – the pursuit of equipment that is musical, reliable and affordable.

All of us at Rotel thank you for buying this product and hope it will bring you many hours of enjoyment.

## Getting Started

Thank you for purchasing the Rotel RLC-900 Power Line Conditioner. We are confident that the RLC-900 will enhance the performance of your audio system for years to come.

The RLC-900 solves several problems that are common in multi-components systems. The power control features of the RLC-900 make it easy to turn on and off all the components in the system. Grouped by type (digital source, analog source and power amplifier), the switched outlets are turned on and off sequentially to minimize system turn-on and turn-off thumps. The power outlets are also heavily filtered to minimize the potentially damaging effects of extreme power line spikes. The RLC-900 also ensures efficient component operation by isolating them from performance-robbing lower level surges, RFI, and EMI. The RLC-900 is proof that Rotel's Balanced Design approach extends to your whole system.

## A Few Precautions

Please read this manual carefully. It provides complete information on how to incorporate the RLC-900 into your system as well as general information that will help you get the greatest benefit from it. Keep this manual for future reference. Please contact your authorized Rotel dealer for answers to any questions you might have. In addition, all of us at Rotel welcome your questions and comments.

This Power Line Conditioner is adjusted to work on the local AC mains. Check the voltage rating on the rear panel near the Rotel label to be certain it is correct for the voltage in your area. If in doubt, consult your dealer.

Do not use an extension cord or power strip to provide power to the RLC-900. Plug it directly into a wall outlet.

When unplugging the RLC-900, or any other electrical device, do not pull on the power cord. Grasp to power cord plug and pull it straight out of the wall.

Do not plug an extension cord into the RLC-900 to provide extra outlets. If the system requires more than 9 outlets, use the accessory outlets on the preamplifier or another component in the system. Under no circumstances should the total power requirements of the components plugged into the RLC-900 exceed the rated wattage figures printed below the power outlets. If in doubt, consult your Rotel dealer.

Be certain to make all power and audio connections in the system before turning the RLC-900 on for the first time.

Save the RLC-900 shipping carton and all enclosed packing material for future use. Shipping or moving the RLC-900 in anything other than the original packing material may result in severe damage.

Fill out and send in the owner's registration card packed with the RLC-900. Also be sure to keep the original sales receipt. It is your best record of the date of purchase, which you will need in the event warranty service is ever required.

## Placement

Like all electrical components, the RLC-900 can be affected by its environment and can affect other components. Do not place the RLC-900 on top of other components, and do not place other components on top of it. This will minimize chance that the other components will pick up hum or interference.

Do not place the RLC-900 where it will be exposed to direct sunlight, excessive dust, humidity or moisture, heat or cold.

We recommend installing the RLC-900 in furniture designed to house audio components. Such furniture is designed to reduce or suppress vibration, which can adversely affect sound quality. Ask your authorized Rotel dealer for advice about component furniture and proper installation of audio components.

## Cables

Be sure to keep the power cords, digital signal cables and regular audio signal cables in your installation away from each other. This will minimize the chance of the regular audio signal cables picking up noise or interference from the power cords or digital cables. Using only high quality, shielded cables will also help to prevent noise or interference from degrading the sound quality of your system. If you have any questions see your authorized Rotel dealer for advice about the best cable to use with your system

# Power Input and Control

## Main Power Input 11

Plug on the Main Power cord directly into a wall power outlet. Do not use extension cords or power strips. The outlet must be capable of providing 15 amps of current.

## Power Switch 1 and Power Indicator 2

Push in the power switch 1 to activate the RLC-900. If power has been applied to the Control Cord the Power Indicator 2 will light and power will be available from the outlets on the rear panel.

## Control Cord 10

Power must be applied to the Control Cord in order to activate the power outlets on the rear panel. This feature allows you to use a switched outlet on another component, typically a preamplifier, to turn on the power to the rest of the system. See Figure 2. If you do not want to use this feature the Control Cord must be plugged into the Unswitched Outlet 8 on the RLC-900 rear panel.



## Power Outlets

The RLC-900 has 9 AC outlets on the rear panel. One is an unswitched outlet. The other eight outlets are switched on and off by the RLC-900. The switched outlets are turned on and off in a sequence that minimizes the change of potentially damaging noise being produced.

The outlets on the RLC-900 will accept 2 or 3 prong AC plugs (in North America) and are capable of switching a maximum of 15 amperes.

## Digital Equipment Outlets 5

Many audio components use digital circuits. These include CD players, digital/analog converters, CD transports, digital radio tuners and digital recorders. All of these products can produce noise in their AC power lines. To prevent this noise from affecting the analog components in the system, the RLC-900 has a separate internal ground for the Digital Equipment power outlets. Plug your CD player, and any other components that have digital circuits, into these outlets.

Power is applied to the Digital Equipment outlets as soon as the RLC-900 is activated. When the system is turned off there is a delay of approximately 10 seconds before power to these outlets is turned off.

## Accessories Outlets 6

Components that do not have digital circuitry, such as cassette decks and analog tuners, should be plugged into the Accessories outlets. Like the Digital Equipment outlets, power is applied to these outlets as soon as the RLC-900 is activated. When the system is turned off there is a delay of approximately 10 seconds before power to the Accessories outlets is turned off.

**NOTE:** The total power required for all the components connected to the Digital Equipment and Accessories power outlets must not exceed 300 watts.

## Power Amp Outlets 7

These outlets are designed to provide power for the power amplifier(s) in your system. The power to these outlets will be turned on about 10 seconds after the RLC-900 is activated. This delay is designed to ensure that all low level signal devices, such as preamps, tuners, CD players, etc., will be on and stabilized before power is supplied to the power amplifier(s). The power to these outlets is turned off immediately when the RLC-900 is turned off. This ensures that the power amp is shut off and has drained its power supply before the rest of the components in the system are turned off.

**NOTE:** The total power required for the amplifier(s) connected to the Power Amp power outlets must not exceed 1300 watts.

## Unswitched Outlet 8

The unswitched outlet may be used in one of two ways. If the Control Cord of the RLC-900 is **not** connected to a switch outlet of another component, typically a preamplifier, it must be connected to the Unswitched outlet. Otherwise the RLC-900 will not deliver power to its other power outlets. If the Control Cord of the RLC-900 is connected to a switch outlet of another component the unswitched outlet may be used to supply power to another component that should always be powered.

**NOTE:** Do not connect a component that requires more than 100 watts to the Unswitched outlet.

## Power Indicators 3 and 4

When the power to the Digital Equipment and Accessories outlets is turned on the Sources Power Indicator 3 is lit. When the power to the Power Amp outlets is turned on the Power Amp Power Indicator 4 is lit.

## Power Fuse 9

If the components connected to the RLC-900 draw more power than it can safely deliver, or if there is a short circuit in one of the power lines of one of the components, the power fuse will blow. If this occurs, replace the fuse with **exactly** the same type of fuse. Using a different fuse can be extremely dangerous.

## Troubleshooting

Most difficulties are the result of incorrect connections, or improper control settings. The Main Power Indicator should be lit whenever the RLC-900 is plugged into the wall power outlet, the Main Power Switch is pushed in, and AC power is applied to the Control Cord either another component, or by plugging it into the Unswitched outlet of the RLC-900. If it does not light, test the power outlet that the Main Power cord of the RLC-900 is plugged into with another electrical device, such as a lamp. Be sure the power outlet being used is not controlled by a switch that has been turned off.

# RLC-900

POWER LINE CONDITIONER

**The Rotel Co. Ltd.**

10-10 Shinsen-Cho

Shibuya-Ku

Tokyo 150-0045

Japan

Phone: +81-3-5458-5325

Fax: +81-3-5458-5310

**Rotel of America**

54 Concord Street

North Reading, MA 01864-2699

USA

Phone: +1 978-664-3820

Fax: +1 978-664-4109

**Rotel Europe**

Meadow Road

Worthing, West Sussex BN11 2RX

England

Phone: +44 1903-524-813

Fax: +44 1903-524-831

**Rotel Deutschland**

Kleine Heide 12

D-33790 Halle/Westf.

Germany

Phone: +49 5201-87170

Fax: +49 5201-73370

ROTEL\_hifi

ROTEL\_hifi

ROTEL\_hifi

ROTEL\_hifi

ROTEL\_hifi

ROTEL\_hifi

ROTEL\_hifi

ROTEL\_hifi

ROTEL\_hifi

ROTEL\_hifi

ROTEL\_hifi

ROTEL\_hifi

ROTEL\_hifi

ROTEL\_hifi

ROTEL\_hifi

ROTEL\_hifi

ROTEL\_hifi

ROTEL\_hifi

ROTEL\_hifi

ROTEL\_hifi

This Power Line Conditioner provides the option for automatic power on/off operation. This mode is located on the back panel marked **12 V Trigger**.

### 12V Trigger Input

Use of 12 volt trigger system requires a connection between the Power Line Conditioner 3.5 mm socket marked 12 volt trigger **IN** and a pre-amp or processor socket marked 12 volt trigger **OUT**. A 3.5 mm mono jack to a 3.5 mm jack is required to make the connection. The power function cannot work unless a connecting wire is used.

### 12V Trigger Output

Another component may be automatically switched On and Off using this system when it is connected via a 3.5 mm mono jack to 3.5 mm jack to the back of the Power Line Conditioner. From the **OUT** socket connect the lead to another **IN** socket of the other component.

This TRIGGER INPUT accepts any control signal (AC or DC) ranging from 3 volts to 30 volts.

