

# **ROTEL** *hi-fi*

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## **RKC-950**

**KARAOKE MIXER PREAMPLIFIER**



# ***OWNER'S MANUAL***

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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.

**WARNING:**  
To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

	<b>CAUTION</b> 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 the user 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 the user to the presence of important operating and maintenance instructions in the literature accompanying the appliance.



## SAFETY INSTRUCTIONS

- 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. Heed Warnings** - All warnings on the appliance and in the operating instructions should be adhered to.
- 4. Follow Instructions** - All operating and use instructions should be followed.
- 5. Water and Moisture** - The appliance should not be used near water - for example, near a bathtub, 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.
- 6A.** An appliance and cart combination should be moved with care. Quick stops, excessive force and uneven surfaces may cause the appliance and cart combination to overturn.
- 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 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, heat registers, stoves or other appliances (including amplifiers) 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. Grounding or Polarization** - The precautions that should be taken so that the grounding or polarization means of an appliance is not defeated.
- 12. 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 and plugs, convenience receptacles and the point where they exit from the appliance.
- 13. Cleaning** - The appliance should be cleaned only as recommended by the manufacturer.
- 14. Nonuse Periods** - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
- 15. Object and Liquid Entry** - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through the openings.
- 16. Damage Requiring Service** - The appliance should be serviced by qualified factory-authorized service personnel when:
  - The power-supply cord or the plug has been damaged; or
  - Objects have fallen, or liquid has been spilled into the appliance; or
  - The appliance has been exposed to rain; or
  - The appliance does not appear to operate normally or exhibits a marked change in performance; or
  - The appliance has been dropped, or the enclosure damaged.
- 17. Servicing** - The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified factory-authorized service personnel.



## A WORD FROM ALL OF US AT ROTEL

We thank you for purchasing our RKC 950 Karaoke Microphone Mixer Preamplifier. We have been designing and manufacturing high quality, high performance audio electronics for more than 30 years. While it may seem unusual for Rotel to be making a Karaoke microphone mixer preamplifier, this is a natural extension of our love of music. Our passion for good sound and enjoyment of music is well known and we feel that the RKC 950 will be a source of enjoyment for many years to come.

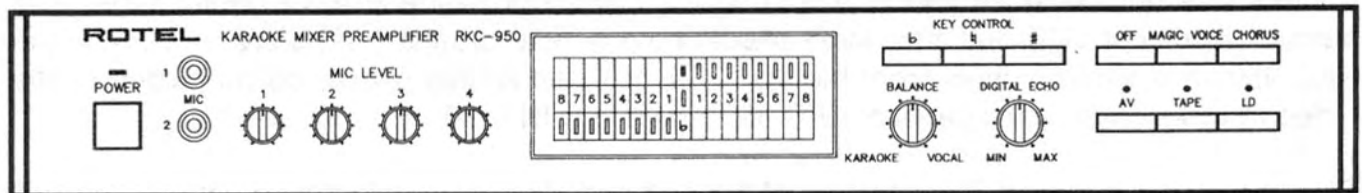
Rotel is committed to making quality products to enhance your life. We designed this set to be durable, reliable and to have high fidelity sound. These are high quality designs and will provide you with years of service. Reading this owner's manual will help ensure that the RKC 950 is set up for the best performance possible. We appreciate being a part of your life.

## INSTALLATION

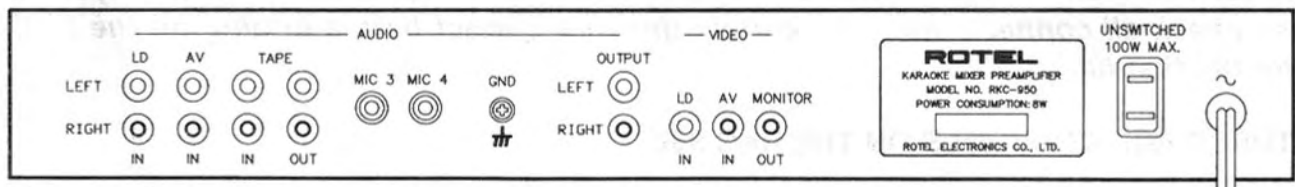
Please place the Mixer Preamplifier in a **dry** level place. It should be in a location where it will not be wet, hot or subject to vibrations. *Do not place it on top of the amplifier as the heat from the amplifier may adversely affect performance of the mixer preamplifier. The mixer preamplifier may also block the cooling vents of an amplifier if placed on top and cause the amplifier to overheat. This will shorten the service life of both the amplifier and the RKC 950. Please install the amplifier away from the RKC 950.*

There are **NO** user serviceable parts inside this Karaoke Mixer Preamplifier. **Do not remove the cover as this will expose you to hazardous voltages and the possibility of electrical shock.** This may also damage the circuits of the RKC 950 and could void your warranty.

## PREPARING THE KARAOKE MIXER PREAMPLIFIER FOR USE



Above is an illustration of the RKC 950 Mixer Preamplifier front panel, showing Power switch, and Microphone input jacks, Mic Level 1-4, Display, Key Control, Balance, Digital Echo, Input selectors for AV, Tape, LD and function buttons for Magic Voice, Chorus and defeat (Off).



Above is an illustration of the back panel of the RKC 950 showing the input jacks for Audio (LD, AV, Tape IN and OUT), microphone input jacks (Mic 3 & 4), Ground (GND), main outputs for audio (OUTPUT) and inputs (IN) for video (Video LD, AV), and video output (OUT) for video (Monitor).

## CONNECTING THE RKC 950 TO YOUR MICROPHONES OR WIRELESS MICROPHONE RECEIVER (RKW 950 AND RKM 950)

The RKC 950 has two input jacks (INPUT 1 & 2) for microphones on the front panel. These should be used for microphones with a standard microphone plug on the connecting cable, or the connecting cables from the RKW 950 Wireless Microphone Receiver. RKC 950 also has two input jacks (INPUT 3 & 4) on the back panel for connection to the RKW 950 (recommended) or regular microphones.

***Please make all connections while the power is OFF.*** When you are ready to begin using the RKC 950 push the Power switch IN and the power will turn ON and the indicator light will glow. Push it in a second time and the power will go OFF and the indicator light will be extinguished.

**NOTE:** If you use the RKC 950 with another brand of microphone you should read the owner's manual for your mics before connecting them to the RKC 950.

## CONNECTING OTHER COMPONENTS TO THE RKC 950

We have included Input jacks for a Laser Disk player (LD), a Video Cassette Recorder (AV) and a Tape recorder on the back panel of the RKC 950.

The Tape jacks may be used with an analog cassette deck, a Digital Audio Tape (DAT) recorder, a Compact Disc (CDR) recorder, a Mini Disc (MD) recorder, a Digital Compact Cassette (DCC) recorder, a Reel to Reel recorder or even a Hi Fi VCR used as an audio recorder. The TAPE IN jacks on the RKC 950 are to receive signals **from** the OUTPUT or TAPE OUT jacks on the recorder of your choice. The TAPE OUT jacks on the RKC 950 are for connection **to** the INPUT or TAPE IN jacks on your recorder.

Connect the outputs **from** your Laser Disc audio outputs **to** the AUDIO LD IN jacks. The outputs **from** your VCR audio out jacks should be connected **to** the AUDIO AV IN jacks on the RKC 950. The Video outputs **from** the LD, VCR or Video source should be connected **to** the Video IN jacks on the back panel of RKC 950 labeled LD IN or AV IN.

*Please observe the correct connection of the Left and Right channels during set up. The Left (L) channel connections are WHITE, the Right (R) channel connections are RED and Video connections (whether IN or OUT) are YELLOW.*

The AUDIO OUTPUT connections on the RKC 950 are for the preamplifier output (OUTPUT LEFT and RIGHT) and there is a Video Out(put) to a TV (MONITOR) or video monitor.

***Incorrect connections will result in poor performance or no sound from the system. Please check all connections to be certain they are correct before turning on the RKC 950 for the first time.***

## FEATURES AND CONTROLS ON THE RKC 950

**Microphone Inputs** on the front and back panels allow you to use as many as four (4) mics with the RKC 950. The sensitivity of *each* Mic input jack is controllable by an individual **Mic Level** control. This will make it possible to control the relative volume of as many as four microphones and to match the levels of different brands of microphones.

The **Key Control** will allow you to make the sound change in pitch from Sharp to Flat by using the digital effects in the RKC 950. This is mixable with the **Digital Echo** control and is adjustable from **Min**(imum) to **Max**(imum) effect levels. The Display on the front panel will give a visual indication of the effects' level in use. The **Balance** control will allow you to mix the **Vocal** and **Karaoke** effects for the most pleasant sound. As everyone will wish to adjust the sound for their own voice, this control will be an easy way to personalize your singing.

The **Off, Magic Voice** and the **Chorus** settings will allow you to defeat the effects (**Off**), to "sweeten" the sound of your voice (**Magic Voice**) with the controls or add the sound of a "backing group" (**Chorus**) singing along with you. All of these controls will be more easily understood if you adjust them and listen to the effects on your voice while reading this section. The adjustments should provide enough control for everyone to enjoy singing through the RKC 950.

The **AV, Tape** and **LD** function buttons are provided to allow you to choose between the inputs on the rear panel for music and video and control the Video OUT signal **to** the Monitor. *These signals are then mixed with the sound of your voice and the digital effects that you choose.*

***Thank you for choosing our RKC 950 Karaoke Mixer Preamplifier. Enjoy the music !***

#### **ADDITIONAL DATA FOR THE NORTH AMERICAN MODEL:**

The North American version of the RKC 950 has an unswitched AC outlet on the back panel. This is a convenient way to supply AC power to the RKC 950 Wireless Microphone Receiver.

***The rated wattage for this outlet is 100 watts and a power amplifier should not be plugged into this outlet. A power amplifier will overload this outlet and possibly cause damage to the RKC 950.***

## SPECIFICATIONS

### RKC 950 KARAOKE MIXER PREAMPLIFIER

Inputs for microphones	4, individually adjustable sensitivity
Input impedance for Mics	47 kohms
Inputs for other sources:	
Audio	3 (LD, AV, Tape)
Video	2 (LD, AV)
Input impedance for Audio sources	47 kohms
Input impedance for Video sources	75 ohms
Audio outputs	2 (Tape Out, Audio Output)
Video outputs	1 (MONITOR)
Output voltage for Video	1 volt peak to peak @ 75 ohms
Output voltage for Audio (rated)	1 volt
Output impedance for Audio	1.5 kohms
Frequency response:	
Audio	5 Hz to 16 kHz (-3db)
Video	5 Hz to 10 MHz (-3db)
Total harmonic distortion (THD)	No more than 0.15%
Power requirement	115 volts AC 50/60Hz 230 volts AC 50/60Hz
Power consumption	8 watts
Weight	5.5 kg / 12.1 lbs
Dimensions	440 (w) x 73 (h) x 325 (d) mm 17-3/8" (w) x 2-7/8" (h) x 12-7/8" (d)

All specifications are accurate at the time of printing. Rotel reserves the right to incorporate improvements without notice.