# ROTEL®



RKB-850 / RKB-8100 RKB-D850 / RKB-D8100

Eight Channel Power Amplifiers 多声道后置放大器

### **Important Safety Instructions**

#### **Notice**

The RS232 connection should be handled by authorized persons only.

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

WARNING: To reduce the risk of fire or electric shock, do not expose the unit to moisture or water. Do not expose the unit to dripping or splashing. Do not place objects filled with liquids, such as vases, on the unit. 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 component.

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 enclosure only with a dry cloth or a vacuum cleaner.

Do not use this unit near water.

You must allow a minimum 10 cm or 4 inches of unobstructed clearance around the back of the unit.



Do not place the unit on a bed, sofa, rug, or similar surface that could block the ventilation openings. If the unit is placed in a bookcase or cabinet, there must be ventilation of the cabinet to allow proper cooling.

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

WARNING: The rear panel power cord connector is the mains power disconnect device. The device must be located in an open area that allows access to the cord connector.

The unit must be connected to a power supply only of the type and voltage specified on the side panel. (USA: 120 V/60Hz, EC: 230V/50Hz)

Connect the component to the power outlet only with the supplied power supply cable or an exact equivalent. Do not modify the supplied cable. A polarized plug has two blades, with one wider than the other. A grounding plug has two blades plus a third grounding prong. These are provided for your safety. Do not defeat grounding and/or polarization safety provisions. If the supplied plug does not fit your outlet, please consult an electrician for replacement of the obsolete outlet. Do not use extension cords.

The main plug of the power cordset is a disconnect device of the apparatus. In order to completely disconnect the apparatus from the supply mains, the main plug of the power cordset should be unplugged from the mains (AC) outlet. The power LED indicator will not be lit up to show the power cord is unplugged. The disconnect device shall remain readily operable.

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

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

This apparatus shall be connected to a main socket outlet with a protective earth connection.

Use only accessories specified by the manufacturer.

Use only with a cart, stand, rack, bracket or shelf system recommended by Rotel. Use caution when moving the unit in a stand or rack to avoid injury from a tip-over.



Use Class 2 wiring for speaker connections to ensure proper installation and minimize the risk of electrical shock.

Immediately stop using the component 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.



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

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADI 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.



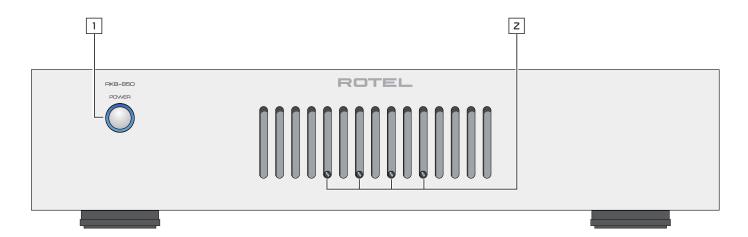
Rotel products are designed to comply with international directives on the Restriction of Hazardous Substances (RoHS) in electrical and electronic equipment and the disposal of Waste Electrical and Electronic Equipment (WEEE). The crossed wheelie bin symbol indicates compliance and that the products must be appropriately recycled or processed in accordance with these directives.

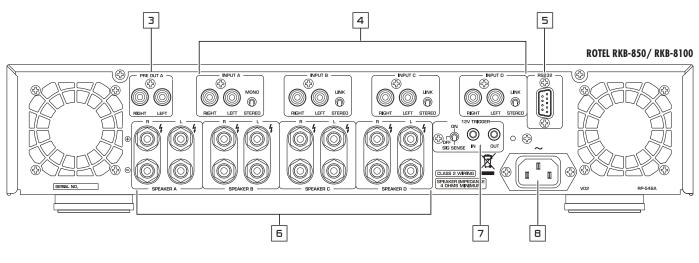


Figure 1: Controls and Connections Figure 1: Commandes et branchements Bedienelemente und Anschlüsse Figure 1:

Figura 1: Controles y Conexiones
Afbeelding 1: Bedieningselementen en aansluitingen
Figura 1: Controlli e connessioni
Figur 1: Kontroller och kontakter

Рисунок 1: Органы управления и разъемы





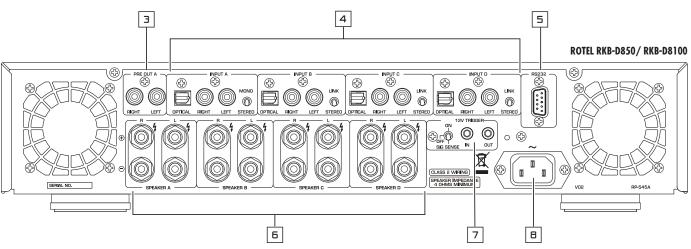
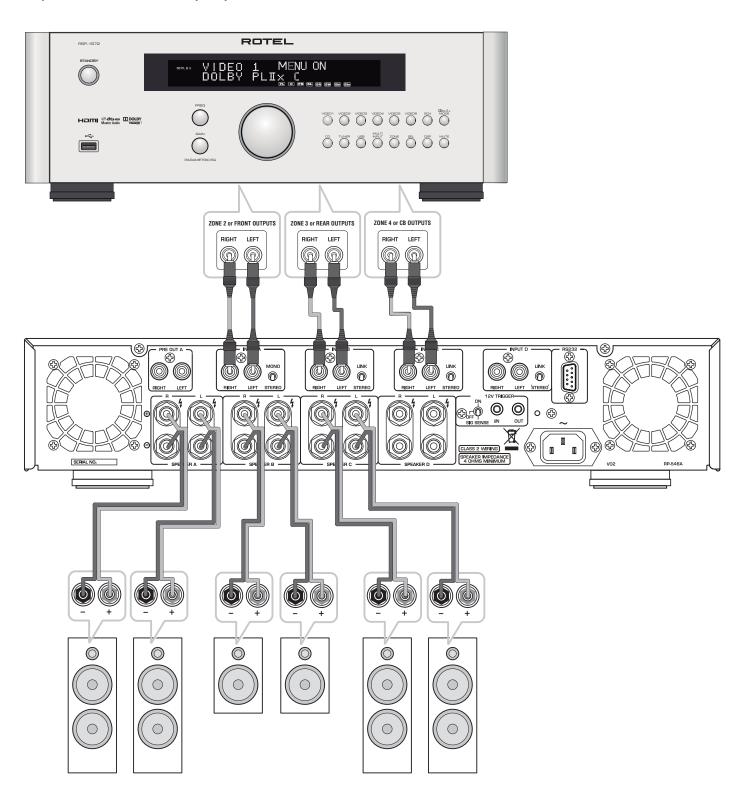


Figure 2: Figure 2: Figure 2: Figura 2: Afbeelding 2: Figura 2: Hook-up Illustration Schéma de raccordement Anschlussdiagramm Ilustración del Conexionado Aansluiten Afbeelding Collegamento ingressi ed uscite Anslutningar

Figur 2:

Рисунок 2: Подсоединение -пример



#### **Important Notes**

#### When making connections be sure to:

- ✓ Turn off all the components in the system before hooking up any components, including loudspeakers.
- ✓ Turn off all components in the system before changing any of the connections to the system.

#### It is also recommended that you:

✓ Turn the volume control of the amplifier all the way down before the amplifier is turned on or off.

### Remarques importantes

#### Pendant les branchements, assurez-vous que :

- ✓ Tous les maillons sont éteints avant leur branchement, quels qu'ils soient, y compris les enceintes acoustiques.
- ✓ Éteignez tous les maillons avant de modifier quoi que ce soit au niveau de leurs branchements, quels qu'ils soient.

### Il est également recommandé de :

✓ Toujours baissez le niveau sonore via le contrôle de volume, avant d'allumer ou d'éteindre l'amplificateur.

### Wichtige Hinweise

#### Achten Sie beim Herstellen der Verbindungen auf Folgendes:

- ✓ Schalten Sie alle Komponenten im System ab, bevor Sie Geräte (einschließlich Lautsprecher) anschließen.
- ✓ Schalten Sie **alle** Komponenten im System ab, **bevor** Sie Anschlüsse im System verändern.

#### Ferner empfehlen wir, dass

✓ Sie die Lautstärke herunterdrehen, **bevor** Sie die Endstufe **ein-** oder **ab**schalten.

### **Notas Importantes**

#### Cuando realice las conexiones, asegúrese de que:

- ✓ Desactiva todos los componentes del equipo, cajas acústicas incluidas, antes de conectar cualquier nuevo componente en el mismo.
- ✓ Desactiva todos los componentes del equipo antes de cambiar cualquier conexión del mismo.

#### También le recomendamos que:

✔ Reduzca el nivel de volumen de su amplificador a cero antes de activarlo o desactivarlo.

### Héél belangrijk

#### Bij het maken van de verbindingen:

- 🗸 Zorg dat niet alleen de RKB versterkers, maar de **gehele** installatie uitstaat, als nog niet **alle** verbindingen gemaakt zijn.
- ✓ Zorg dat niet alleen de RKB versterkers, maar de gehele installatie ook uitstaat, als u verbindingen gaat wijzigen.

#### Wij raden u ook aan om

🗸 de volumeregelaar van de voorversterker geheel dicht te draaien (volkomen naar links) wanneer u uw eindversterker aan- of uitzet.

### Note importanti

### Quando effettuate i collegamenti assicuratevi di:

- ✓ Spegnere tutti i componenti del sistema prima di collegare qualsiasi componente, inclusi i diffusori.
- ✓ Spegnere tutti i componenti del sistema prima di modificare qualsiasi connessione nel sistema.

#### Vi raccomandiamo inoltre di:

Portare il volume a zero prima di accendere o spegnere l'amplificatore.

#### Viktigt

#### Tänk på följande när du gör anslutningar:

- ✓ Stäng av alla apparater i anläggningen innan du ansluter nya komponenter eller högtalare.
- ✓ Stäng av alla apparater i anläggningen innan du ändrar någon anslutning.

#### Vi rekommenderar också att du:

✓ Vrider ner volymen på förstärkaren helt och hållet innan förstärkaren slås på eller av.

### Важные замечания

#### Перед подсоединением:

- ✔ Выключите все компоненты, включая колонки.
- ✓ Выключите все компоненты в вашей системе, прежде чем что-то в ней менять.

#### Рекомендуется также:

Вывести громкость усилителя на минимум, перед тем как включать или выключать его.

### **Contents**

Important Safety Instructions
Figure 1: Controls and Connections
Figure 2: Hook-up Illustration
Important Notes
About Rotel
A Word About Watts
Getting Started
A Few Precautions
Placement
AC Power and Control
AC Power Input
POWER Switch and Power Indicator 1
Trigger Mode Selector 7
12V Trigger Input and Output 🔳
Protection Indicator 1
Signal Connections 234
RCA Inputs 4
Linking the Inputs 4
Mono Switch ▲
Input Level Controls 2
Preamp Output 3
Optical Inputs 4
Speaker Outputs
Speaker Selection
Speaker Wire Selection
Polarity and Phasing
Speaker Connections
RS232 Connector 5
Cooling Fans
Troubleshooting
Power Indicator Is Not Illuminated
No Sound
Power Indicator Is Blinking
Specifications 10

### **About Rotel**

Our story began over 50 years ago. Over the decades, we have received hundreds of awards for our products and satisfied hundreds of thousands of people who take their entertainment seriously – like you!

Rotel was founded by a family whose passionate interest in music led them to manufacture high-fidelity components of uncompromising quality. 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.

Rotel's 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, semiconductors from Japan or the United States, while toroidal power transformers are manufactured in Rotel's own factory.

We all have concerns about our environment. And, as more and more electronics are produced it is especially important for a manufacturer to do all it can to engineer products that have a minimum impact on the environment.

At Rotel, we are proud to do our part. We have reduced the lead content in our products by using special lead-free ROHS solder and components. Our engineers continually strive to improve power supply efficiency without compromise to quality. When in standby mode Rotel products use minimal power to meet global Standby Power Consumption requirements.

The Rotel factory is also doing their part to help the environment through constant improvements to product assembly methods for a cleaner and greener manufacturing processes.

All of us at Rotel thank you for buying this product. We are sure it will bring you many years of enjoyment.

### A Word About Watts

The RKB-850 and RKB-D850 power output is quoted as 50 watts for each channel, while the RKB-8100 and RKB-D8100 is 100 watts when all eight channels are operating together at full power.

Rotel has chosen to specify the power output in this way because, in Rotel's experience, it gives the truest value of the receiver or amplifier's power capability.

When comparing specifications for different products, you should be aware that power output is often specified in other ways, so you may not be comparing like with like. For example, the power output may be quoted with only one channel operating, giving a higher maximum figure.

A loudspeaker's impedance rating indicates the electrical resistance or load it offers when connected to the amplifier, usually 8 ohms or 4 ohms. The lower the impedance, the more power the speaker will need. In effect, a 4 ohm speaker will require twice as much power as an 8 ohm speaker.

However, Rotel amplifiers are designed to work into any speaker impedance between 8 and 4 ohms, and with all the channels working up to their full power. Because the Rotel design is optimized for use with all channels operating together, Rotel is able to specify the true power output for both channels.

This can be important for your enjoyment, too. When watching movies, it's nice to have the amplifier able to reproduce full power into all the channels at the same time, especially in the case of a volcano exploding!

### **Getting Started**

Thank you for purchasing the Rotel RKB Series Eight Channel Power Amplifier. When used in a high-quality music audio system, your Rotel product will provide years of musical enjoyment.

The RKB amplifiers are high-power amplifiers, providing the highest level of audio performance. A massive power supply, premium components, and Rotel's Balanced Design ensure superb sound quality. High current capability allow the amplifiers to drive the most demanding loudspeakers.

Be aware that the RKB amplifiers are capable of high levels of output power. Make sure that your speakers can handle the power of the amplifier. If in doubt about your speakers, ask your local Rotel audio dealer for advice.

These amplifiers are straightforward in their installation and operation. If you have experience with other stereo power amplifiers, you shouldn't find anything perplexing. Simply plug in the associated components and enjoy.

### A Few Precautions

**WARNING:** To avoid potential damage to your system, turn off ALL the components in the system when connecting or disconnecting the loudspeakers or any associated components. Do not turn the system components back on until you are sure all the connections are correct and secure. Pay particular attention to the speaker wires. There must be no loose strands that could contact the other speaker wires, or the chassis of the amplifier.

Please read this manual carefully. In addition to basic installation and operating instructions, it provides valuable information on various RKB amplifier system configurations as well as general information that will help you get optimum performance from your system. 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.

Save the RKB amplifier shipping carton and all enclosed packing material for future use. Shipping or moving the amplifiers in anything other than the original packing material may result in severe damage to your amplifier.

If included in the box please fill out and send in the owner's registration card. 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**

The RKB amplifiers generate heat as part of their normal operation. The heat sinks and ventilation openings in the amplifier are designed to dissipate this heat. The ventilation slots in the top and bottom covers must be open. When possible there should be 10 cm (4 inches) of clearance around the back side of the chassis. Reasonable airflow in the equipment rack is required to prevent the amplifier from overheating.

Remember the weight of the amplifier when you select an installation location. If you are not using the included rack ears make sure that the shelf or cabinet used can support the RKB. We recommend installing the unit 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.

### **AC Power and Control**

### AC Power Input 🔳

Your amplifier is configured at the factory for the proper AC voltage in the country where you purchased it, either 120 volts or 230 volts. The AC line configuration is noted on a label on the side panel.

**NOTE:** Should you move your unit to another country, it may be possible to reconfigure it for use on a different line voltage. Do not attempt to perform this conversion yourself. Opening the enclosure of the unit exposes you to dangerous voltages. Consult a qualified service person or the Rotel factory service department for information.

**NOTE:** Some products are intended for sale in more than one country and as such are supplied with more than one AC cord. Please only use the one appropriate for your country/region.

Because of its high power rating, the amplifier can draw considerable current. Therefore, it should be plugged directly into a wall outlet. The RKB amplifier must be plugged into a 3-pin polarized outlet. Do not use an extension cord. A heavy duty multi-tap power outlet strip may be used if it (and the wall outlet) is rated to handle the current demanded by the amplifier and all the other components connected to it.

Be sure the POWER SWITCH 1 on the front panel of the amplifier is turned off (in the "out" position). Then, connect the supplied power cord to the Power Connector 1 on the rear of the unit and the AC power outlet.

If you are going to be away from home for an extended period of time such as a month-long vacation, it is a sensible precaution to unplug your amplifier (as well as other audio and video components) while you are away.

### POWER Switch and Power Indicator 💷

The power switch is located on the front panel of your amplifier. To turn the amplifier on, push the switch in. The ring around the switch will light up and blink three times, indicating that the amplifier is turned on. To turn the amplifier off, push the button again and return it to the "out" position.

**NOTE:** Place the self adhesive ring over the light surrounding the power switch if the blue light is too bright.

### Trigger Mode Selector 🔽

The RKB amplifiers provide three different options for manual or automatic power operation. These modes are selectable using a three-position switch on the back panel as follows:

- With the switch in the OFF position, the amplifier is turned on or off
  manually using the front panel power switch. Also use this mode if
  you are using a switched AC outlet to control power to the amplifier.
- With the switch in the SIGNAL SENSE position, the amplifier turns on automatically when an audio signal is detected at the inputs. The amplifier will go into Signal Sense Standby mode and the front Power Indicator will dim after approximately 10 minutes without detecting an audio signal. The front panel POWER SWITCH overrides this function. It must be ON for the signal sensing function to operate. Turning the front panel power switch OFF turns the amplifier off, regardless of whether or not a signal is present.
- With the switch in the ON position, the amplifier is turned on automatically when a 12 volt trigger signal is present at the 3.5 mm jack of TRIGGER IN on the rear panel. The amplifier will go into standby mode and the front Power Indicator will dim if the +12 volt signal is not present. The front panel POWER SWITCH overrides this function. It must be ON for the +12V trigger to work. Turning the switch OFF turns the amplifier off, regardless of whether or not a trigger signal is present.

### 12V Trigger Input and Output 🗉

The jack labeled IN is for connecting the  $3.5 \, \text{mm}$  mono plug/cable carrying a +12 volt trigger signal to turn the amplifier on and off. To use this feature the toggle switch must be set to the ON position. This input accepts any control signal (AC or DC) ranging from 3 volts to 30 volts.

The jack labeled OUT is for connecting another 3.5mm mono plug/cable to provide a 12 volt trigger signal to other components. The 12 volt output signal is available whenever a +12 volt trigger signal is applied to the IN connector.

**NOTE:** The maximum current for the trigger out is 10mA.

### Protection Indicator 1

The RKB amplifiers feature thermal and over-current protection circuits that protect against potential damage in the event of extreme or faulty operating conditions.

Most likely, you will never see this protection circuitry in action. However, should a faulty condition arise, the amplifier will shut down and the Power Indicator on the front panel will be blinking.

If this happens, turn the amplifier off, let it cool down for several minutes, and attempt to identify and correct the problem. When you turn the amplifier back on, the protection circuit will automatically reset and the Power Indicator should light up, indicating that the amplifier is operating normal.

In most cases, the protection circuitry activates because of a fault condition such as shorted speaker wires, or inadequate ventilation leading to an overheating condition. In very rare cases, highly reactive or extremely low impedance speaker loads could cause the protection circuit to engage.

If the protection circuitry triggers repeatedly and you are unable to isolate and correct the faulty condition, contact your authorized Rotel dealer for assistance in troubleshooting.

## Signal Connections 234

See Figure 2

**NOTE:** To prevent loud noises that neither you nor your speakers will appreciate, make sure the system is turned off when you make any signal connections.

The RKB amplifier provides standard RCA type input connections as found on nearly all audio equipment.

In addition to the four groups of stereo inputs labeled INPUT A to INPUT D, there is also a pair of PREAMP OUTPUT connections for passing the signal connected to INPUT A to another audio component.

### RCA Inputs 4

There are two RCA inputs for each of the four pairs of amplifier channels. These RCA inputs accept audio signals from preamplifiers or surround sound processors. Select high quality audio interconnect cables for best performance.

For each pair of amplifier channels, connect the left channel output of your preamp to the LEFT INPUT on the amplifier. Connect the right channel of your preamp to the RIGHT INPUT. Make sure that the input switch to the right of the RCA inputs is in the STEREO position.

### Linking the Inputs **▲**

You can link the analog and digital inputs to other channels by moving the LINK/STEREO switch located next to the RCA inputs for Channel B, C and D to the LINK position. When this switch is set to LINK the analog and digital source of the preceding channel will be used for that channel. No source input is required for a channel with LINK enabled. For example when channel C is set to LINK the digital or analog source from channel B will be used.

**NOTE:** Both the analog and digital input source of INPUT A can be linked to INPUTS B, C and D.

### Mono Switch **④**

For the channel INPUT A, when the input switch is moved to the MONO position, the left and right RCA inputs are combined and provided to both speakers as a mono signal. Channels linked to INPUT A will also be MONO if the switch is moved to the MONO position.

### Input Level Controls 🗷

Four controls on the front panel, one for each channel, provide input level adjustments. These allow you to adjust the gain of the amplifier to match source components attached to the amplifier. The INPUT A level control changes the gain of the INPUT A channel; the INPUT B level control changes the INPUT B channel and so on. The controls are not labeled on the front, but when viewed from the front they are from left to right Input D,C,B,A, with input A on the farthest right. To adjust these controls, use a small, flat blade screwdriver. Turn the control clockwise to increase gain. Turn counterclockwise to reduce gain.

### Preamp Output 3

This pair of RCA connections can be used to pass unprocessed input signals to another audio component, for example to "daisy-chain" to another amplifier to drive additional speakers. The input signals connected to the INPUT A connectors is available on the Preamp Output connectors. This is typically used when the amplifier is part of a multi-room system.

**NOTE:** It is recommended to Daisy Chain a maximum of 8 RKB amplifiers.

NOTE: The MONO switch does not affect the Preamp Output.

### Optical Inputs 4

For RKB-D850 and RKB-D8100 Only

There is a digital input labeled OPTICAL for each channel. Connect the OPTICAL PCM outputs of your source component into these sockets. The digital signals will be decoded and played by the RKB-D850 or RKB-D8100. The RKB is capable of decoding PCM signals up to 24 bit, 192kHz.

**NOTE:** The OPTICAL input will automatically be selected whenever a digital signal is detected. Some source devices will continue to send a signal even when no audio is being transmitted. An example is some CD players will continue to send a signal even if the CD is paused or stopped. In some cases it may be required to power off the digital source device or even disconnect the Optical cable to switch back to the Analog RCA input.

### **Speaker Outputs**

See figure 2

The RKB amplifier has four pairs of speaker connectors, one for each amplifier channel. The eight speaker connectors may be used in many different configurations. The Hook-up Illustration, Figure 2, shows just one example, with the connections for a typical six-speaker system. Here, the remaining two channels are still available to power up to two more speakers as required.

### Speaker Selection

We recommend using loudspeakers with a nominal impedance of 4 ohms or higher with the RKB amplifiers. You should not drive more than one pair of speaker for each output channel. Driving more than one set of speakers from an output may damage the RKB amplifier. Speaker impedance ratings are less than precise. In practice, very few loudspeakers will present any problems for the RKB amplifiers. See your authorized Rotel dealer if you have any questions.

### Speaker Wire Selection

Use insulated two-conductor stranded wire to connect the RKB amplifier to the speakers. The size and quality of the wire can have an audible effect on the performance of the system. Standard speaker wire will work, but can result in lower output or diminished bass response, particularly over longer distances. In general, heavier wire will improve the sound. For best performance, you may want to consider special high-quality speaker cables. Your authorized Rotel dealer can help in the selection of cables for your system.

### **Polarity and Phasing**

The polarity – the positive/negative orientation of the connections – for every speaker and amplifier connection must be consistent so all the speakers will be in phase. If the polarity of one connection is reversed, bass output will be very weak and stereo imaging degraded. All wire is marked so you can identify the two conductors. There may be ribs or a stripe on the insulation of one conductor. The wire may have clear insulation with different color conductors (copper and silver). There may be polarity indications printed on the insulation. Identify the positive and negative conductors and be consistent with every speaker and amplifier connection.

### Speaker Connections

**NOTE:** The following text describes both binding post and plug-in connections. DO NOT use both connection methods in combination to connect multiple speakers.

Turn off all the components in the system before connecting the speakers. The RKB amplifier has a pair of two color coded binding posts for each channel. These connectors accept bare wire, connector lugs, or dual banana type connectors (except in the European Community countries where their use is not permitted).

Route the wire from the RKB amplifier to the speakers. Give yourself enough slack so you can move the components to allow access to the speaker connectors.

If you are using dual banana plugs, connect them to the wires and then plug into the backs of the binding posts. The thumbscrews of the binding posts should be screwed in all the way (clockwise).

If you are using terminal lugs, connect them to the wires. If you are attaching bare wires directly to the binding posts, separate the wire conductors and strip the insulation from the end of each conductor. Be careful not to cut into the wire strands. Unscrew (turn counterclockwise) the binding post. Place the connector lug or wire around the binding post shaft. Turn the binding post clockwise to clamp the connector lug or wire firmly in place.

**NOTE:** Be sure there are no loose wire strands that could touch adjacent wires or connectors.

### RS232 Connector 5

The RKB amplifier can be controlled via RS232 for integration with automation systems. The RS232 input accepts a standard straight DB-9 Male-to-Female cable.

For additional information on the connections, software, and operating codes for computer control of the RKB amplifier, contact your authorized Rotel dealer.

### **Cooling Fans**

The RKB amplifier includes 2 cooling fans to help exhaust the heat generated by the power supply and amplifier modules. These fans will operate at NORMAL speed when the RKB is powered on and not in STANDBY mode. The fans will automatic switch to HIGH SPEED mode when required by internal thermostat sensors.

**NOTE:** Depending on the installation location the cooling fans may need to be cleaned periodically to ensure proper ventilation. Please contact your authorized Rotel dealer for more information.

### **Troubleshooting**

Most difficulties in audio systems are the result of incorrect connections, or improper control settings. If you encounter problems, isolate the area of the difficulty, check the control settings, determine the cause of the fault and make the necessary changes. If you are unable to get sound from the RKB amplifier, refer to the suggestions for the following conditions:

### Power Indicator Is Not Illuminated

No main power to the RKB amplifier. Check AC power connections at the amplifier and the AC outlet. Check the front panel power switch. Make sure that it is set to the ON position. If using 12V trigger power-on, make sure that a trigger signal is present at rear panel 12V TRIGGER IN connector.

### No Sound

If the amplifier is getting AC power, but is producing no sound, check the POWER INDICATOR on the front panel. If blinking, see below. If not, check all of your connections and control settings on associated components.

### **Power Indicator Is Blinking**

The front panel POWER INDICATOR is blinking when the amplifier protection circuits have shut off the amplifier. Typically, this occurs only when the ventilation openings are blocked, when there is faulty speaker wiring, or after a period of extreme use. Turn off the system and wait for the amplifier to cool. Then push the front panel power switch in and out to reset the protection devices. If the problem is not corrected or reoccurs, there is a problem with the system or the amplifier itself.

Specifications	
RKB-850	
Continuous Power Output	
(20 Hz - 20k Hz, <0.1% THD, 8 ohms)	
Total Harmonic Distortion	
(20 Hz - 20k Hz, 8 ohms)	
Intermodulation Distortion	
(60 Hz : 7k Hz, 4:1)	
Damping Factor	
Input Impedance / Sensitivity	
Amplifier Gain	
Frequency Response	
Signal to Noise Ratio (IHF A)	
Crosstalk / Separation	
Speaker Impedance	
Power Requirements:	
USA:	
EC:	
Power Consumption	
BTU (4 ohms, 1/8th power)	
Dimensions $(W \times H \times D)$	
Front Panel Height	
Weight (net)	

50 watts / channel (8 ch driven)
< 0.08%
< 0.08%
> 150 100k ohms / 0.6 V 30 dB 20 Hz - 20k Hz, + 0 dB/ -1.4 dB 108 dB > 60 dB 4 ohms minimum
120 Volts, 60 Hz 230 Volts, 50 Hz 150 watts Idle: 40 watts Standby: < 0.5 watts 180 BTU/h 430 x 97 x 424 mm (17 x 3 <sup>7</sup> / <sub>8</sub> x 16 <sup>3</sup> / <sub>4</sub> ins)

2U (88.1 mm, 3 <sup>1</sup>/<sub>2</sub> ins)

Weight (net)	9.3 kg, 20.5 lbs.
RKB-D850	
Continuous Power Output	50 watts / channel (8 ch driven)
(20 Hz - 20k Hz, <0.1% THD, 8 ohms)	
Total Harmonic Distortion	< 0.08%
(20 Hz - 20k Hz, 8 ohms)	

(20 Hz - 20k Hz, 6 onms)	
Intermodulation Distortion	< 0.08%
(60 Hz : 7k Hz, 4:1)	
Damping Factor	> 150
Input Impedance / Sensitivity	50k ohms / 0.6V
Amplifier Gain	30 dB
Frequency Response	20 Hz - 20k Hz, + 0 dB/ - 1.4 dB
Signal to Noise Ratio (IHF A)	108 dB
Crosstalk / Separation	> 60 dB
Speaker Impedance	4 ohms minimum

Digital Section	
Signal to Noise Ratio (IHF A)	95 dB
Input Sensitivity	- 10 dBFS
Optical Digital Signals	SPDIF LPCM
	(up to 192k Hz 24 bit)
Power Requirements:	
USA:	120 Volts, 60 Hz

Power Requirements:	
USA:	120 Volts, 60 Hz
EC:	230 Volts, 50 Hz
Power Consumption	150 watts
	Idle: 45 watts
	Standby: < 0.5 watts
BTU (4 ohms, 1/8th power)	180 BTU/h
Dimensions $(W \times H \times D)$	$430 \times 97 \times 424 \text{ mm}$
	$(17 \times 3^{7}/_{8} \times 16^{3}/_{4} \text{ ins})$
Front Panel Height	2U (88.1 mm, 3 <sup>1</sup> / <sub>2</sub> ins)
Weight (net)	9.3 kg, 20.5 lbs.

All specifications are accurate at the time of printing.	
Rotel reserves the right to make improvements without not	tice.

### DVD 9100

KKB-0100	
Continuous Power Output	100 watts / channel (8 ch driven)
(20 Hz - 20k Hz, < 0.1% THD, 8 ohms)	
Total Harmonic Distortion	< 0.08%
(20 Hz - 20k Hz, 8 ohms)	
Intermodulation Distortion	< 0.08%
(60 Hz : 7k Hz, 4:1)	
Damping Factor	> 150
Input Impedance / Sensitivity	100k ohms / 0.9 V
Amplifier Gain	30 dB
Frequency Response	20 Hz - 20k Hz, + 0 dB / - 1.4 dB
Signal to Noise Ratio (IHF A)	108 dB
Crosstalk / Separation	> 60 dB
Speaker Impedance	4 ohms minimum
Power Requirements:	
USA:	120 Volts, 60 Hz
EC:	230 Volts, 50 Hz
Power Consumption	300 watts
	Idle: 75 watts
	Standby: < 0.5 watts
BTU (4 ohms, 1/8th power)	279 BTU/h
D1 1 (14/ 11 D1	100 07 101

	Idle: 75 watts
	Standby: < 0.5 watts
BTU (4 ohms, 1/8th power)	279 BTU/h
Dimensions $(W \times H \times D)$	430 x 97 x 424 mm
	$(17 \times 3^{7}/_{8} \times 16^{3}/_{4} \text{ ins})$
Front Panel Height	2U (88.1 mm, 3 <sup>1</sup> / <sub>2</sub> ins)
Weight (net)	9.6 kg, 21 lbs.

### RKB-D8100

ININD DO LOO	
Continuous Power Output	100 watts / channel (8 ch driven)
(20 Hz - 20k Hz, <0.1% THD, 8 ohms)	
Total Harmonic Distortion	< 0.08%
(20 Hz - 20k Hz, 8 ohms)	
Intermodulation Distortion	< 0.08%
(60 Hz : 7k Hz, 4:1)	
Damping Factor	> 150
Input Impedance / Sensitivity	50k ohms / 0.9 V
Amplifier Gain	30 dB
Frequency Response	20 Hz - 20k Hz, + 0 dB / - 1.4 dB
Signal to Noise Ratio (IHF A)	108 dB
Crosstalk / Separation	> 60 dB
Speaker Impedance	4 ohms minimum

Digital Section	
Signal to Noise Ratio (IHF A)	95 dB
Input Sensitivity	- 7 dBFS
Optical Digital Signals	SPDIF LPCM
	(up to 192k Hz 24 bit)
Power Requirements:	
USA:	120 Volts, 60 Hz
EC:	230 Volts, 50 Hz

Power Consumption	300 watts
	Idle: 80 watts
	Standby: < 0.5 watts
BTU (4 ohms, 1/8th power)	279 BTU/h
Dimensions $(W \times H \times D)$	430 x 97 x 424 mm
	$(17 \times 3^{7}/_{8} \times 16^{3}/_{4} \text{ ins})$
Front Panel Height	2U (88.1 mm, 3 <sup>1</sup> / <sub>2</sub> ins)
Weight (net)	9.6 kg, 21 lbs.

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中文

### 重要安全说明

注意:后板上的RS232接口只能由授权人士进行操作。

警告: 机内无客户可以维修的部件。请合资格 维修人员维修。

警告:为减少火灾或触电的危险,不要将本产品置于潮湿环境中或水中。不要将本产品置于滴水或溅水环境中。不要将含有液体的物件(例如花瓶)放在本产品上。不要让异物进入本产品外壳内。如果本产品进入潮湿环境中,或异物进入本产品内,立即从墙上拔掉电源线。将本产品送交合资格维修人员检查或进行必要的维修。

连接或操作之前,请阅读所有说明。

请保留本手册,以便可以参照这些安全说明。

请留意这些说明和产品上的所有警告或安全信 息。请遵从操作说明。

只能用干布或真空吸尘器清洁。

不要在接近水的地方使用本产品。

本产品周围最少应有10cm或4in.的间隙。



不要将本产品置于床上、沙发、垫子或类似的 物体上,以防堵塞通风口。如果将本装置放在 书柜或橱柜上,柜上应有通风口,以便于产品 的散热。

请将本产品远离辐射、热源、火炉或其它发热 器具。 警告:后面板上的电源线接头是主电源断开装置。应该将本机放在可拔插电源线接头的开放的地方。

只能将本产品连接到后面板指定的型号和电压的电源上。(美国: 120V/60Hz, 欧洲: 230V/50Hz,中国: 220V/50Hz)

只能用本产品提供的电源线或规格等同的电源 线将本产品连接到电源插座上。不得更改随本 产品提供的电源线。两极插头有两个插刀,其 中一个插刀比另一个宽。接地插头有两个插刀 和第三个接地插刀。这些都是为了您的安全。 不得违反接地和两极安全规定。如果随本产品 提供的插头与您的插座不匹配,请咨询电工更 换陈旧的插座。不要使用延长线。

电源电缆的主插头是本产品的断电装置。要将本产品从电源完全断开,应从主(交流)插座上拔下电源电缆的主插头。拔掉电源线后,待机指示灯熄灭。断路装置保持随时可操作状态。

不要使用变形的、收缩的、弯折的或损坏的电源线,不要将电源线置于热源附近。请特别留意插头处和本装置后面的电源线。

雷暴天气中或本装置长时间不使用时,应将电源线从墙上插头中拔出。

只能使用制造商指定的附件。

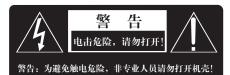
只能使用洛得推荐的机架、立架或 支架。在支架或机架上移动本装置 时,请小心避免翻侧。



使用2类电线连接音箱,以确保正确的安装及将 触电风险减至最低。

在下列情况下,立即停止使用本装置,并请合格维修机构检测和维修:

- 电源线或插头损坏
- 异物或液体进入进装置中
- 本装置遭受雨淋
- 本装置显示不正确操作的迹象
- 本装置跌落或以任何方式被损坏



#### 适用于美国、加拿大、或其它核准使用的地方。

小心: 避免触电, 请将宽片插头对准宽口插座。完全插人。

注意:为避免触电,请将插头最大(长)的那片(头)插人插座相应端口并插到底。



本标记用于提醒用户,本产品内有未绝缘的 危险电压,可能引致触电风险。



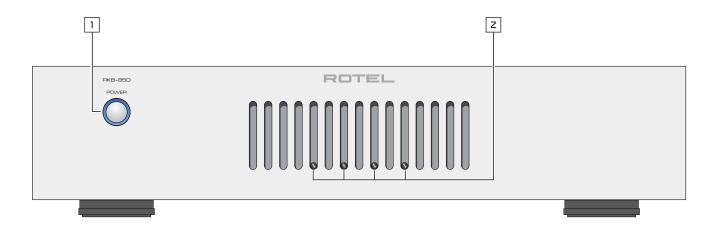
标记提醒用户遵从本手册及随附文件中的操 作和维护(维修)指引。

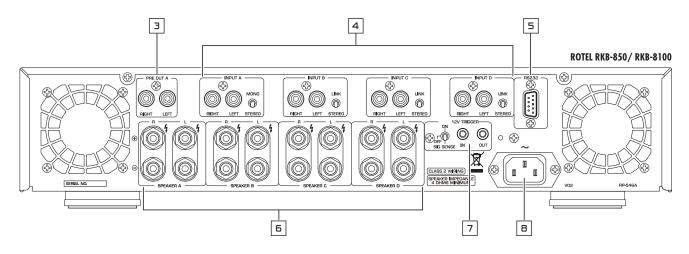


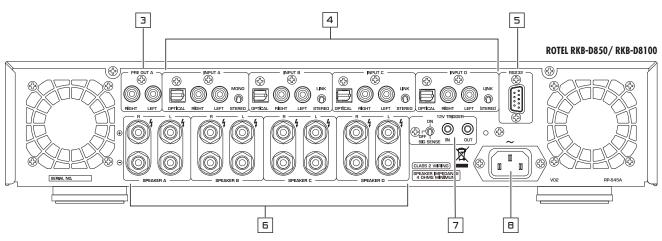
洛得产品符合电气和电子设备限制有害物质(RoHS)以及处理废旧电气和电子设备(WEEE)的国际指令。带叉形符号的轮式垃圾箱标志指合乎规定,且该产品应根据这些指令以适当的方法进行回收或处理。



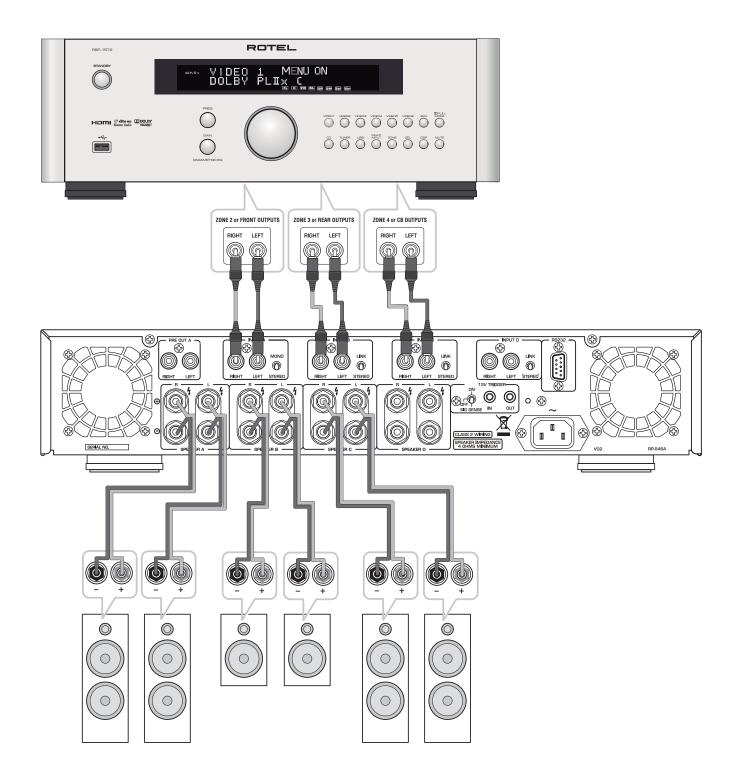
### 图1:控制和连接







### 图 2: 连接图



### 重要注意事项

### 进行连接时,请确保:

- ✔ 连接任何设备(包括音箱)之前,应关闭系统中所有设备的电源。
- ✔ 改变系统的任何连接之前,应关闭系统中所有设备的电源。

### 我们还建议您:

✔ 打开或关闭放大器之前,将放大器的音量控制调到最低。

### 目录

重要安全说明	11
图1:控制和连接	12
图2:连接图	13
重要注意事项	13
关于洛得	
功率简介	14
开始使用	
几点注意事项	15
放置	16
交流电源和控制	15
交流电源输入 🖪	15
电源开关和电源指示灯 🗓	15
触发模式选择开关 🖸	15
12V触发输入和输出 <b>B</b>	15
保护指示灯 🖸	15
信号连接 234	16
RCA输入 4	16
输入的链接 4	16
单声道开关 4	16
输入电平控制 🗷	16
前置放大器输出 ③	16
光纤输入 国	16
音箱输出	16
音箱选择	16
音箱线选择	16
极性和相位	16
音箱连接 👨	16
RS232 接口 5	
冷却风扇	17
故障排除	17
电源指示灯不亮	17
没有声音	17
电源指示灯闪烁	17
技术参数	17

### 关于洛得

洛得已有超过50年的历史。几十年来,我们的产品已赢得数百次奖项,满足了无数对娱乐有着严肃态度的人士-比如您。

洛得是一个家族公司,他们对音乐的激情让他们致力于制造高品质的高保 真音响设备。多年以来,这种激情丝毫未减,而为不同预算的高保真音响 发烧友和音乐爱好者提供超值产品的目标,是洛得所有雇员的共同追求。

洛得的工程师紧密协作,认真倾听并精确调谐每个新产品,直到其符合苛刻的音乐标准。他们从世界各地选择部件,以令其产品尽善尽美。您可能会发现英国和德国生产的电容器、日本和美国产的半导体,以及洛得自己工厂制造的环形功率变压器。

我们十分关注环境。随着越来越多的电子产品出现,制造商竭尽所能设计 对环境带来最低负面影响的产品就显得尤为重要。

在洛得,我们做到了这一点,我们对此深感自豪。通过使用特殊的无铅 ROHS焊料和部品,我们大大地降低了电子产品中的铅含量,同时,洛得 工程师一直努力在保证质量的前提下不断提高功率输出的效能。洛得产品 在待机模式下仅需运行最低功率,符合国际待机功耗标准。

洛得还不断地研发更加清洁、更加环保的制造工艺,为环保事业贡献自己的力量。

洛得全体同仁感谢您购买本产品。我们深信,本产品将为您带来数年的 美妙享受。

### 功率简介

当8个声道均以最大功率运作时,RKB-850和RKB-D850的额定功率输出为每声道50W,RKB-8100和RKB-D8100的额定功率输出为每声道100W。

洛得采用这种方式标注功率输出是由于,依照洛得的实践,它能传输给接 收器或功放器最真实的数值。

与其它产品的技术参数相比,您会发现它们通常以其它方式标注功率输出,所以您不能以这种方式进行比较。例如,它们提供的功率输出可能只是一个声道工作时的功率输出,从而给出一个更高的最大数值。

音箱的额定阻抗表示它们连接到放大器时提供的电阻或负荷,通常为 $8\Omega$ 或 $4\Omega$ 。阻抗越低,音箱需要的功率更高。实际上,一只阻抗为 $4\Omega$ 的音箱所需要的功率为 $8\Omega$ 音箱的两倍。

但是,洛得放大器的设计可使用阻抗介于 $8\Omega$ 和 $4\Omega$ 之间的任何音箱,所有声道均可以最大功率运作。基于对所有声道同时工作进行了设计优化,洛得能够对所有声道标定真实的功率输出。

这对顾客的娱乐感受是十分重要。观看电影时,特别是观看火山爆发这类场 景,拥有一台能够同时对所有声道进行全功率输出的功放器是美妙的享受。

### 开始使用

感谢您购买洛得RKB系列多声道后置放大器。配合高质量的音乐音频系统 使用,本装置可为您提供多年的音乐享受。

RKB系列放大器是高功率的后置放大器,提供最高水平的音质表现。大功率 电源、优质的元件以及洛得的平衡设计理念共同确保极其上乘的音质。大 电流输出能力使RKB系列放大器轻松驱动最为苛刻的音箱。 RKB系列放大器的输出功率非常大,请确保您的音箱可以承受其功率。如 对您的音箱存在疑问,请咨询当地洛得授权经销商。

RKB系列放大器的安装和操作都非常简单。如果您有使用其它立体声系统的经验,您会发现一切易如反掌。您只需要把相关组件连接起来即可开始享受完美音质。

### 几点注意事项

警告:要避免可能造成系统的损坏,进行连接或断开音箱或相关组件 之前应关闭所有系统组件。确保所有连接均正确和安全后再开启系统 组件。请特别注意音箱线。确保没有松开的线束与其它音箱的电线或 放大器的机架接触。

请仔细阅读本手册。本手册提供如何将RKB系列放大器连接到系统的完整资料,以及可帮助您获得最佳音响效果的全面资料。如果您遇到任何问题,请联络洛得授权经销商。另外,洛得全体同仁欢迎您提出问题或建议。

请保存好RKB系列放大器的包装箱和包装材料,以备日后使用。使用任何 非原始包装材料运输或移动你的放大器可能导致严重损坏。

包装中若有用户注册卡,请填写并寄回给我们。另请保留原始销售收据。 它是购买日期的最佳记录,您日后需要保修时会用到它。

### 放置

RKB系列放大器在正常工作过程中会产生热量。放大器中的散热器和通风口用于排出热量。上盖的通风口应该打开。为防止放大器过热,机身周围应有10cm(4in.)的间隙,且安装位置应有适度的气流通过。

选择安装地点时应考虑放大器的重量。若您不考虑使用随本放大器提供的侧耳,请确保机架或机柜能够承载本设备的重量。本公司建议将放大器安装在为安装音响器材设计的家具内。这些家具可以降低或减少可能对声音质量产生负面影响的振动。设备家具和音频设备的正确安装方法,请咨询洛得授权经销商。

### 交流电源和控制

### 交流电源输入 回

RKB系列放大器出厂时已设置为您购买本产品所在国家的交流电压 (美国: 120V/60Hz AC,或欧洲: 230V/50Hz AC,中国: 220V/50Hz AC)。交流电压配置标注在侧面板的标签上。

注意:如果将放大器带到另一个国家,可能需要重新设置以使用不同的电压。不要试图自行进行转换。打开放大器的外壳会有触电危险。请咨询合资格的维修人员或洛得工厂服务部门寻求帮助。

注意:有些产品出售于多个国家,因此提供了多条AC电源线,请选择一条适用于您国家/地区的电源线。

由于RKB系列放大器的高电源功率,它会产生大量电流。因此,应该将本设备直接插到墙上的插座。RKB系列放大器必须插入三极插座。不要使用延长线。如果大功率多插孔插线板(和墙插座)可以承受RKB系列放大器和所有插到上面的其它器材,则可以使用多插孔插线板。

请确保放大器前面板上的电源开关□已关闭(位于弹出的位置)。然后,将电源线连接到放大器背面的电源连接器 ■ 和交流电源插座上。

如果您将要离家较长时间,例如一个月,离开前请务必拔下放大器(和其它音频视频设备)的电源插头。

### 电源开关和电源指示灯 ①

要打开放大器的电源,将本开关按入。电源打开时,电源开关周围的指示灯会变亮并闪烁3下,表示放大器电源已打开。要关闭放大器,再次按下按键将其复位。

注意:如果蓝色光线太亮,请在电源按键周围贴上调光圈。

### 触发模式选择开关 🖸

RKB系列放大器提供3种不同的手动或自动开关机操作,这些模式可以通过 后面板的触发装置来选择。

- 触发开关置于OFF位置,可通过前面板的电源开关手动开/关机。如果 使用转换插座来控制放大器的电源开关,也可以使用这个模式。
- 触发开关置于SIGNAL SENSE(信号感应)位置,当输入端口检测到有 音频信号输入,放大器将自动开机,若大约10分钟后没有检测到音频信 号,放大器则进入信号感应待机模式且前面板的电源指示灯变暗。前面 板的电源开关优先于触发开机功能。电源开关必须置于开机位置信号感 应功能才能工作;将电源开关置于关机位置将切断放大器的电源,无论 是否检测到音频信号。
- 触发开关置于ON位置,当向后面板标注TRIGGER IN (触发输入)的 3.5毫米插孔施加12V触发信号,放大器将自动开机。失去该12V触发信号,放大器将进入待机模式且前面板的电源指示灯变暗。前面板的电源开关优先于触发开机功能。电源开关必须置于开机位置12V触发才能工作,将电源开关置于关机位置将切断放大器的电源,无论是否有触发信号存在。

### 12V触发输入和输出 回

标记为IN的插孔用于连接带有+12V触发信号的3.5毫米插头/电缆。要使用本功能,触发开关应设置到ON(开)位置。本输入接口接受3V至30V的任何控制信号(交流或直流)。

标记为OUT的插孔用于连接为其它设备提供12V触发信号的3.5毫米插头/电缆。向IN连接口施加+12V触发信号时,该接口提供12V输出信号。

注意: 触发输出的最大电流为10mA。

### 保护指示灯 🔟

在过度或错误操作的情况下,热保护电路和过流保护功能会保护RKB系列 放大器免受可能的损坏。

一般的正常操作不会激活此保护电路。但是,如果出现故障情况,放大器 将停止运作,前面板的保护指示灯将闪烁。

发生这种情况时,关闭放大器电源,让其冷却几分钟,并尝试确定及解 决该问题。重新打开放大器时,保护电路自动重置,电源指示灯点亮,表 示放大器运作正常。

大多数情况下,保护电路由于错误情况例如音箱电线短路或通风不畅引起 温度过高而激活。在极罕见的情况下,高度灵敏或太低的音箱阻抗负载可 能造成保护电路介入。

如果保护电路重复触发,而您无法确定和解决故障,请联络洛得授权经销商寻求帮助,解决问题。

### 信号连接 234

见图2

注意:要避免高噪声对您和音箱的影响,进行任何信号连接之前,应 关闭所有系统组件。

RKB系列放大器提供几乎所有音频设备上都有的RCA(非平衡)型连接。

除了设有4组标注INPUT A到INPUT D的立体声输入,还设有1对PREAMP OUTPUT (前置放大器输出)接口,可把INPUT A的信号转接到其他音频设备。

### RCA输入 4

RKB系列放大器提供4组,每组2个RCA输入。这些RCA输入接收来自前级功放或环绕声处理器的音频信号。选择优质的音频连接电缆将音频效果达到最佳。

将您的前置放大器的左声道输出连接到RKB系列放大器的LEFT INPUT, 将右声道输出连接到RIGHT INPUT。确认RCA输入右边的输入开关置于 STEREO(立体声)位置。

### 输入的链接 🗗

通过切换B、C、D声道里RCA输入旁边的LINK/STEREO开关至LINK(链接)位置,可把模拟和数字输入链接到其它声道。当该开关置于LINK位置,其它声道的模拟和数字源会应用于该声道,而该声道不一定需要源输入。例如,当C声道设为LINK,就可应用B声道的模拟或数字源。

注意: INPUT A的模拟和数字输入均可链接到 INPUT B、C和D。

### 单声道开关 🗗

标注 INPUT A的声道,当该开关置于MONO(单声道)位置,左、右RCA输入结合起来为音箱提供单声道信号。链接到 INPUT A的声道若其开关置于MONO位置其也会为MONO。

### 输入电平控制 ②

前面板设有4个控制旋钮,每声道1个,以调节输入电平,让您可根据与本放大器连接的音频设备不同而调节本放大器的增益。INPUT A的电平控制调节INPUT A声道的增益,INPUT B的电平控制调节INPUT B声道的增益,以此类推。前面板上从左往右,这些控制旋钮依次为Input D、C、B、A,位于前面板最右边的为 INPUT A。可用小而扁平的一字螺丝刀来旋动这些控制旋钮进行调节。顺时针旋转增加增益,逆时针旋转则减少增益。

### 前置放大器输出 🗿

这对RCA输出接口可将未经处理的输入信号转到其它音频设备,例如"daisychain(环形链接)"到其它放大器以驱动更多的音箱。连接到INPUT A的输入信号可应用到前置放大器输出,这是典型的当放大器用于多房间系统的用法。

注意: Daisy Chain (环形链接) 建议最多链接8个RKB系列放大器。

注意: MONO开关并不影响前置放大器输出功能。

### 光纤输人 亘

仅适用于RKB-D850和RKB-D8100

每个声道都有1个标注OPTICAL(光纤)的数字输入。把源设备的OPTICAL PCM输出连接到这些接口。RKB-D850或RKB-D8100放大器对数字信号进行解码并播放,可解码高达24位、192kHz的PCM信号。

注意:无论是否检测到数字信号,OPTICAL输入会自动选中。即使在没有音频在传送,一些源设备仍会不断地传输信号。例如即使CD被暂停或停止播放,一些CD播放机仍会不断地传输信号。有些情况可能需要重启数字源设备甚至断开光纤电缆,以切换回模拟RCA输入。

### 音箱输出

见图2

RKB系列放大器配备4对音箱接口,每个声道1对。这8个音箱接口可用于不同的连接设置。图2的连接图仅仅是其中一个例子,这是用于6个音箱的系统,其它2个声道还可按需要再连接2个音箱。

### 音箱选择

我们建议在RKB系列放大器上使用标称电阻为4Ω或以上的音箱。注意每个输出声道不要驱动多于1对音箱,因为驱动多对音箱可能会对放大器造成损坏。实际上,极少有音箱在与RKB系列放大器一同使用时会出现问题。如果有任何疑问,请咨询洛得授权经销商。

### 音箱线选择

使用绝缘的双导线连接放大器和音箱。电线的大小和质量可能会对系统的性能产生明显的效果。标准的音箱线也能用,但是可能会导致输出降低或减少低音响应,尤其是在距离较远的情况下。通常,重量更重的线会提升音质。为得到最佳效果,您可能需要考虑特别的高质量音箱电缆。洛得授权经销商可以帮助您为您的系统选择合适的电缆。

### 极性和相位

每个音箱的极性或连接的正/负(+/-)方向和放大器连接应一致,以确保所有音箱在相同相位上。如果一个连接接反,低音输出会非常微弱,立体声效果会降低。所有音箱线上均有标记,您可以区别两根导线。在一股导线的绝缘套上可能有小标签。电线绝缘套内的导线可能有不同颜色(铜或银)。绝缘上可能印有极性标记。找到正负导线,并确保每个音箱和放大器的连接一致。

### 音箱连接 6

注意:以下内容说明了接线柱和插人式连接的方法。不要混合使用两种接线方式连接多个音箱。

连接音箱前请关闭系统中所有设备的电源。RKB系列放大器后板上每个声道有1对以颜色区分的音箱接线柱。这些接线柱可以连接裸线、接线插片或双"香蕉"型接头(欧盟国家不允许使用)。

将电缆从放大器连接到音箱。要留有足够的余地,以便可以移动设备以连 接到音箱接线柱上。

如果您使用双香蕉型插头,先接到线上然后插到音箱接线柱后面。应拧紧 音箱接线柱上的套环(顺时针)。

如果使用接线插片,将其连接到电线上。如果您直接将裸线连接到音箱接 线柱上,请分开电线的导线,并自每根导线的端头将绝缘剥去。请小心不 要将导线切断。将音箱接线柱的套环拧开(逆时针方向)。将接线片或导 线绕在接线柱轴上,顺时针拧紧套环,固定接线插片或线头。

注意:请确保没有松开的线束与邻近的电线或导线接触。

### RS232接口 5

RKB系列放大器可通过RS232的控制与自动化系统进行集成。RS232输入使用标准的DB-9 插头电缆。

更多有关RKB系列放大器计算机控制的连接、软件和操作代码的资料,请 咨询洛得授权经销商。

### 冷却风扇

RKB系列放大器设有2个冷却风扇帮助对电源供应和放大器组件进行散热。当RKB系列放大器开机时,风扇会从STANDBY(待机)模式切换至NORMAL(一般)速度运转;按内部热敏传感器的需要风扇会自动切换至HIGH SPEED(高速)运转。

注意:根据放大器安装的位置不同,冷却风扇可能需要定期清洗以确保 适当的通风。更多信息,请咨询洛得授权经销商。

### 故障排除

音频系统的多数故障是由于错误连接或控制设置不正确引致。如果您遇到 问题,请屏蔽有问题的区域,检查控制器设置,确定故障原因并进行必要 的修正。如果放大器仍然没有声音,请参考以下状况的建议:

### 电源指示灯不亮

没有连接电源,请检查放大器和AC插座的电源连接。检查放大器前面板的电源开关,确保开关处于开(ON)的位置。若使用12V触发进行开机,请确保后板上的12V TRIGGER IN接口有触发信号输入。

### 没有声音

如果放大器已连接电源,但仍然没有声音,请检查前面板上的电源指示 灯。如果灯是闪烁的,请参阅下文。如果灯不亮,请检查关联设备的所 有连接和控制器设置。

### 电源指示灯闪烁

放大器的保护电路关闭放大器后,前面板的电源指示灯闪烁。通常,在通风口堵塞、音箱连接错误或长时间过度使用的情况下才会出现这种情况。 关闭系统,等待放大器冷却。然后按下并按出前面板上的电源开关重置保护装置。如果问题仍未得到解决或再次出现,则系统或放大器有故障。

### 技术参数

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连续功率输出 (20 Hz - 20k Hz, <0.1% THD, 8Ω) 总谐波失真 (20 Hz - 20k Hz, 8Ω) < 0.08% 互调失真(60 Hz:7k Hz, 4:1) < 0.08% 阻尼因数 > 150 输入阻抗/灵敏度 100kΩ / 0.6 V 增益 30 dB 20 Hz - 20k Hz, + 0 dB/ -1.4 dB 频率响应 108 dB 信噪比 (IHF A)  $> 60 \, dB$ 串音/间距 音箱阻抗 最低4 Ω 电源要求: 120 V, 60 Hz 美国 230 V, 50 Hz 欧洲 220 V, 50 Hz 中国 150 W 功率消耗 空转: 40 W 待机: < 0.5 W BTU (4Ω, 1/8功率) 180 BTU/h 尺寸(宽×高×深) 430 x 97 x 424 mm

### **RKB-D850**

前面板高度

重量(净重)

连续功率输出 50 W /声道 (驱动8声道) (20 Hz - 20k Hz, <0.1% THD, 8Ω) 总谐波失真 (20 Hz - 20k Hz, 8Ω) < 0.08% 互调失真(60 Hz: 7k Hz, 4:1) < 0.08% 阻尼因数 > 150 输入阻抗/灵敏度 50kΩ / 0.6 V 30 dB 増益 频率响应 20 Hz - 20k Hz, + 0 dB/ -1.4 dB 信噪比 (IHF A) 108 dB 串音/间距 > 60 dB音箱阻抗 最低4Ω

数字部分 信噪比(IHF A) 输入阻抗 光纤数字信号

电源要求: 美国 欧洲 中国 功率消耗

BTU (4Ω, 1/8功率) 尺寸(宽×高×深)

前面板高度 重量(净重) 50 W /声道 (驱动8声道)

 $(17 \times 3^{7}/_{8} \times 16^{3}/_{4} \text{ ins})$ 

2U (88.1 mm, 3 1/2 ins) 9.3 kg, 20.5 lbs.

95 dB

- 10 dBFS

SPDIF LPCM

120 V, 60 Hz

230 V. 50 Hz

220 V, 50 Hz

空转: 45 W

180 BTU/h

待机: < 0.5 W

430 x 97 x 424 mm

9.3 kg, 20.5 lbs.

 $(17 \times 3^{7})_{\circ} \times 16^{3}$ , ins)

2U (88.1 mm,  $3^{-1}/_{2}$  ins)

150 W

(高达192k Hz 24 bit)

#### RKB-8100

连续功率输出 (20 Hz - 20k Hz, <0.1% THD, 8Ω) 总谐波失真 (20 Hz - 20k Hz, 8Ω) < 0.08% 互调失真(60 Hz:7k Hz, 4:1) < 0.08% 阻尼因数 > 150 输入阻抗/灵敏度 增益 30 dB

频率响应 108 dB 信噪比 (IHF A) > 60 dB串音/间距 音箱阻抗 电源要求:

美国 欧洲 中国 功率消耗

BTU (4Ω, 1/8功率) 尺寸(宽×高×深)

前面板高度 重量(净重)

### 100 W /声道 (驱动8声道)

100kΩ / 0.9 V 20 Hz - 20k Hz, + 0 dB/ -1.4 dB 最低4Ω 120 V, 60 Hz 230 V, 50 Hz 220 V, 50 Hz

300 W 空转: 75 W 待机: < 0.5 W 279 BTU/h 430 x 97 x 424 mm  $(17 \times 3^{7}/_{8} \times 16^{3}/_{4} \text{ ins})$ 

2U (88.1 mm, 3 1/2 ins) 9.6 kg, 21 lbs.

### RKB-D8100

连续功率输出 100 W /声道 (驱动8声道) (20 Hz - 20k Hz, <0.1% THD, 8Ω) 总谐波失真 (20 Hz - 20k Hz, 8Ω) < 0.08% 互调失真(60 Hz:7k Hz, 4:1) < 0.08% 阻尼因数 > 150 输入阻抗/灵敏度 50kΩ / 0.9 V 增益 30 dB 频率响应 20 Hz - 20k Hz, + 0 dB/ -1.4 dB

信噪比 (IHF A) 108 dB  $> 60 \, dB$ 串音/间距 音箱阻抗 最低4 Ω

数字部分 信噪比(IHF A) 输入阻抗

光纤数字信号

电源要求: 美国

欧洲 中国 功率消耗

BTU (4Ω, 1/8功率) 尺寸(宽×高×深)

前面板高度

300 W 空转: 80 W 待机: < 0.5 W 279 BTU/h

95 dB

- 7 dBFS

SPDIF LPCM

120 V, 60 Hz

230 V. 50 Hz

220 V, 50 Hz

(高达192k Hz 24 bit)

430 x 97 x 424 mm  $(17 \times 3^{7})_{\circ} \times 16^{3}$  ins) 2U (88.1 mm, 3 1/2 ins)

重量 (净重) 9.6 kg, 21 lbs.

本手册印刷时所有参数均属精确。 洛得保留修改的权利, 恕不另行通知。

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