

ROTEL

Owner's manual
Manuel de l'utilisateur
Bedienungsanleitung
Manuale di istruzioni
Manual de instrucciones
Gebruiksaanwijzing

RA-1060

Stereo Integrated Amplifier
Amplificateur intégré stéréophonique
Stereo-Vollverstärker
L'Amplificatore di Controllo Stereo
Amplificador Integrado Estereofónico
Geïntegreerde Stereo Versterker





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 un-insulated 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.



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Cautions

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 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.

You must allow 10 cm or 4 inches of unobstructed clearance around 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.

The unit must be connected to a power supply only of the type and voltage specified on the rear panel. (USA: 115 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. Do not 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, 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 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

Précautions d'utilisation

L'éclair dans un triangle équilatéral indique la présence interne de tensions électriques élevées susceptibles de présenter des risques graves d'électrocution.

ATTENTION: Pour réduire le risque d'électrocution, ne pas retirer le capot. Il n'y a à l'intérieur aucune pièce susceptible d'être modifiée par l'utilisateur. En cas de problème, adressez-vous à un réparateur agréé.

Le point d'exclamation dans un triangle équilatéral indique à l'utilisateur la présence de conseils et d'informations importantes dans le manuel d'utilisation accompagnant l'appareil. Leur lecture est impérative.

ATTENTION: Il n'y a à l'intérieur aucune pièce susceptible d'être modifiée par l'utilisateur. Adressez-vous impérativement à une personne qualifiée.

Prenez garde à ce qu'aucun objet ou liquide ne tombe à l'intérieur de l'appareil par ses orifices de ventilation; Si l'appareil est exposé à l'humidité ou si un objet tombe à l'intérieur, couper immédiatement l'alimentation secteur de tous les appareils. Débrancher l'appareil des autres maillons, et adressez-vous immédiatement et uniquement à une personne qualifiée et agréée.

Tous les conseils de sécurité et d'installation doivent être lus avant de faire fonctionner l'appareil. Conservez soigneusement ce livret — Vous devez pouvoir le consulter à nouveau pour de futures références.

Tous les conseils de sécurité doivent être soigneusement respectés. Suivez les instructions. Respectez les procédures d'installation et de fonctionnement indiquées dans ce manuel.

L'appareil doit être nettoyé uniquement avec un chiffon sec ou un aspirateur.

L'appareil doit être placé de telle manière que sa propre ventilation puisse fonctionner, avec un espace minimum de 10 cm autour de lui. Par exemple, il ne doit pas être posé sur un fauteuil, un canapé, une couverture ou tout autre surface susceptible de boucher ses ouïes d'aération; ou placé dans un meuble empêchant la bonne circulation d'air autour des orifices d'aération.

Cet appareil doit être placé loin de toute source de chaleur, tels que radiateurs, chaudières, bouches de chaleur ou d'autres appareils (y compris amplificateurs de puissance) produisant de la chaleur.

Cet appareil doit être branché sur une prise d'alimentation secteur, d'une tension et d'un type conformes à ceux qui sont indiqués sur la face arrière de l'appareil. En Europe, 230 V/50 Hz.

Brancher l'appareil uniquement grâce au cordon secteur fourni, ou à un modèle équivalent. Ne pas tenter de modifier ou changer la prise. Notamment, ne pas tenter de supprimer la prise de terre si celle-ci est présente. Ne pas utiliser de cordon-rallonge. L'appareil doit être branché sur une prise murale deux broches.

Prendre garde à ce que ce cordon d'alimentation ne soit pas pincé, écrasé ou détérioré sur tout son trajet, à ce qu'il ne soit pas mis en contact avec une source de chaleur. Vérifier soigneusement la bonne qualité des contacts, à l'arrière de l'appareil comme dans la prise murale.

Si l'appareil ne doit pas être utilisé pendant une longue période, la prise secteur sera débranchée.

L'appareil doit être immédiatement éteint, débranché puis retourné au service après-vente agréé dans les cas suivants:

- Un objet est tombé, ou du liquide a coulé à l'intérieur de l'appareil.
- L'appareil a été exposé à la pluie.
- L'appareil ne fonctionne pas normalement, ou ses performances sont anormalement limitées.
- L'appareil est tombé, ou le coffret est endommagé.

Placer l'appareil sur une surface plane, solide et rigide. Ne jamais placer l'appareil sur une surface ou un support mobile pouvant basculer.

Sicherheits- und Warnhinweise

Bitte lesen Sie sich die Bedienungsanleitung vor Gebrauch des Gerätes genau durch. Sie enthält wichtige Sicherheitsvorschriften, die unbedingt zu beachten sind! Bewahren Sie die Bedienungsanleitung so auf, daß sie jederzeit zugänglich ist.

WARNUNG: Außer den in der Bedienungsanleitung beschriebenen Handgriffen sollten vom Bediener keine Arbeiten am Gerät vorgenommen werden. Das Gerät ist ausschließlich von einem qualifizierten Fachmann zu öffnen und zu reparieren.

WARNUNG: Dieses Gerät darf nur in trockenen Räumen betrieben werden. Um die Gefahr von Feuer oder eines elektrischen Schlags auszuschließen, dürfen keine Flüssigkeiten oder Fremdkörper in das Gerät gelangen. Sollte dieser Fall trotzdem einmal eintreten, trennen Sie das Gerät sofort vom Netz ab. Lassen Sie es von einem Fachmann prüfen und die notwendigen Reparaturarbeiten durchführen.

Befolgen Sie alle Warn- und Sicherheitshinweise in der Bedienungsanleitung und auf dem Gerät.

Dieses Gerät sollte, wie andere Elektrogeräte auch, nicht unbeaufsichtigt betrieben werden.

Ist das Gerät z.B. während des Transports über längere Zeit Kälte ausgesetzt worden, so warten Sie mit der Inbetriebnahme, bis es sich auf Raumtemperatur erwärmt hat und das Kondenswasser verdunstet ist.

Um das Gerät sollte ein Freiraum von 10 cm vorhanden sein. Stellen Sie es daher weder auf ein Bett, Sofa, Teppich oder ähnliche Oberflächen. Ferner sollte es nicht an einem Ort aufgestellt werden, an dem keine ausreichende Luftzufuhr gegeben ist, zum Beispiel in einem engen Regalfach oder in einem Einbauschrank.

Stellen Sie das Gerät nicht in die Nähe von Wärmequellen (Heizkörper, Wärmespeicher, Öfen oder sonstige wärmeerzeugende Geräte).

Bevor Sie das Gerät in Betrieb nehmen, prüfen Sie, ob die Betriebsspannung mit der örtlichen Netzspannung übereinstimmt. Die Betriebsspannung ist an der Rückseite des Gerätes angegeben.

Schließen Sie das Gerät nur mit dem dazugehörigen zweipoligen Netzkabel an die Wandsteckdose an. Modifizieren Sie das Netzkabel auf keinen Fall. Versuchen Sie nicht, die Erdungs- und/oder Polarisationsvorschriften zu umgehen. Das Netzkabel sollte an eine zweipolige Wandsteckdose angeschlossen werden. Verwenden Sie keine Verlängerungskabel.

Netzkabel sind so zu verlegen, daß sie nicht beschädigt werden können (z.B. durch Trittbelastung, Möbelstücke oder Erwärmung). Besondere Vorsicht ist dabei an den Steckern, Verteilern und den Anschlußstellen des Gerätes geboten.

Sollten Sie das Gerät für eine längere Zeit nicht in Betrieb nehmen, ziehen Sie den Netzstecker aus der Steckdose.

Schalten Sie das Gerät sofort aus und ziehen Sie geschultes Fachpersonal zu Rate, wenn:

- das Netzkabel oder der Stecker beschädigt sind,
- Gegenstände bzw. Flüssigkeit in das Gerät gelangt sind,
- das Gerät Regen ausgesetzt war,
- das Gerät nicht ordnungsgemäß funktioniert bzw. eine deutliche Leistungsminderung aufweist,
- das Gerät hingefallen ist bzw. beschädigt wurde.

Ziehen Sie den Netzstecker aus der Steckdose, bevor Sie mit der Reinigung des Gerätes beginnen. Reinigen Sie die Oberflächen des Gerätes nur mit einem weichen, trockenen Tuch. Verwenden Sie keine scharfen Reinigungs- oder Lösungsmittel. Vor der erneuten Inbetriebnahme des Gerätes ist sicherzustellen, daß an den Anschlußstellen keine Kurzschlüsse bestehen und alle Anschlüsse ordnungsgemäß sind.

Stellen Sie das Gerät waagrecht auf eine feste, ebene Unterlage. Es sollte weder auf beweglichen Unterlagen noch Wagen oder fahrbaren Untergestellen transportiert werden.

Cautele

ATTENZIONE: rischio di scossa elettrica, non aprire.

AVVERTENZA: per ridurre il rischio di scossa, non togliete il coperchio del cabinet. Non contiene parti utili per l'utente. Per l'assistenza fate riferimento a personale qualificato.

SPIEGAZIONE DEI SIMBOLI GRAFICI:

Il fulmine inserito in un triangolo vi avverte della presenza di materiale non isolato a "voltaggio elevato" all'interno del prodotto che può essere abbastanza potente da costituire pericolo di folgorazione.

Il punto esclamativo entro un triangolo equilatero vi avverte della presenza di istruzioni importanti per l'utilizzo e la manutenzione nel manuale che accompagna l'apparecchiatura.

ATTENZIONE: Non vi sono parti interne riparabili dall'utente. Per l'assistenza fate riferimento a personale qualificato.

ATTENZIONE: Per ridurre il rischio di incendio o di folgorazione, non esporre all'umidità o all'acqua. Evitare che oggetti estranei cadano all'interno del cabinet. Se l'apparecchio è stato esposto all'umidità o un oggetto estraneo è caduto all'interno del cabinet, staccare il cordone di alimentazione dalla presa di rete. Portare l'apparecchio ad un centro di assistenza qualificato per i necessari controlli e riparazioni.

Leggere attentamente tutte le istruzioni prima di collegare l'apparecchio alla rete di alimentazione. Conservate questo manuale per ogni riferimento futuro alle istruzioni di sicurezza.

Seguire attentamente tutte le avvertenze e le operazioni per il funzionamento.

Pulire l'unità solamente con un panno asciutto o con un piccolo aspirapolvere.

Lasciate uno spazio libero di 10cm intorno all'unità. L'apparecchiatura non dovrebbe essere posta su un letto, divano, tappeto, o posti che possano bloccare le aperture di ventilazione. Se l'apparecchio è posizionato in una libreria o in un cabinet, fate in modo che ci sia abbastanza spazio attorno all'unità per consentire un'adeguata ventilazione e raffreddamento.

L'unità dovrebbe essere posta lontano da fonti di calore come caloriferi, termostati, stufe, o altri apparecchi che producano calore

L'apparecchiatura dovrebbe essere collegata solamente a una sorgente elettrica del tipo descritto nelle istruzioni o indicato sul pannello posteriore dell'apparecchiatura.

Collegate l'unità alla presa di alimentazione solo con il cavo a due poli polarizzato che viene fornito o con un equivalente. Non cercate di eliminare la massa o di manomettere le polarizzazioni. Il cavo dovrebbe essere collegato ad un'uscita a muro polarizzata a due poli collegando la lamella piatta della spina nella fessura più ampia. Non usate prolunghie

Non far passare il cavo di alimentazione dove potrebbe essere schiacciato, pizzicato, piegato ad angoli acuti, esposto al calore o danneggiato in alcun modo. Fate particolare attenzione al cavo di alimentazione all'altezza della spina e nel punto in cui esce dalla parte posteriore dell'apparecchio.

Il cordone di alimentazione dovrebbe essere scollegato quando l'apparecchiatura è inutilizzata per un periodo piuttosto lungo.

L'apparecchiatura dovrebbe essere subito disattivata e data a personale qualificato quando:

- Il cavo di alimentazione o la spina sono stati danneggiati
- Oggetti sono caduti, o del liquido è stato versato nell'apparecchio
- L'apparecchiatura è stata esposta alla pioggia
- L'apparecchiatura non sembra funzionare in modo normale
- L'apparecchiatura è caduta, o è stata in qualche modo danneggiata

Posizionate l'unità su una superficie piana abbastanza resistente da sopportare il suo peso. Non posizionatela su un carrello che potrebbe ribaltarsi.

Precaución

Para reducir el riesgo de recibir una descarga eléctrica, no quitar la cubierta superior. No hay componentes manipulables por el usuario en el interior del aparato. Cualquier operación de mantenimiento debe ser llevada a cabo por personal cualificado.



Este símbolo es para alertar al usuario sobre la presencia de tensiones peligrosas no aisladas en el interior del aparato susceptibles de constituir un riesgo de electrocución.



Este símbolo es para alertar al usuario sobre la presencia de instrucciones importantes relacionadas con el funcionamiento y el mantenimiento (servicio) tanto en este manual como en la literatura que acompaña al producto.

ADVERTENCIA: No hay componentes manipulables por el usuario en el interior del aparato. Cualquier operación de mantenimiento debe ser llevada a cabo por personal cualificado.

ADVERTENCIA: Para reducir el riesgo de que se produzca un incendio o una descarga eléctrica, no exponga el RA-1060 al agua o la humedad. No permita que ningún objeto extraño penetre en el interior del aparato. Si el aparato está expuesto a la humedad o algún objeto extraño penetra en su interior, desconecte inmediatamente el cable de alimentación de la red eléctrica. En caso de que fuera necesario, envíe el aparato a un especialista cualificado para su inspección y posterior reparación.

Para reducir el riesgo de que se produzca un incendio o una descarga eléctrica, no exponga el RA-1060 al agua o la humedad. No permita que ningún objeto extraño penetre en el interior del aparato. Si el aparato está expuesto a la humedad o algún objeto extraño penetra en su interior, desconecte inmediatamente el cable de alimentación de la red eléctrica. En caso de que fuera necesario, envíe el aparato a un especialista cualificado para su inspección y posterior reparación.

Lea todas las instrucciones del presente manual antes de conectar o hacer funcionar el RA-1060. Conserve este manual cerca de usted para el caso de que necesite revisar las instrucciones de seguridad que se indican a continuación.

Tenga siempre en mente las advertencias y la información relativa a seguridad que figuran tanto en estas instrucciones como en el propio aparato. Siga al pie de letra todas las instrucciones relacionadas con el funcionamiento del mismo.

Limpie el RA-1060 únicamente con una gamuza seca o un aspirador.

Mantenga siempre despejadas las ranuras destinadas a la ventilación del aparato. Por ejemplo, no coloque nunca el RA-1060 en una cama, un sofá, una alfombra o una superficie similar susceptible de bloquear las ranuras de ventilación. Si el RA-1060 está ubicado en la estantería de una librería o un mueble, debe haber suficiente espacio a su alrededor y ventilación en el mueble para permitir una refrigeración adecuada.

Mantenga el RA-1060 alejado de radiadores, estufas, cocinas o de cualquier otra instalación que produzca calor.

El RA-1060 debe ser conectado únicamente a una fuente de alimentación del tipo y la tensión especificados en su panel posterior (115 V/60 Hz para EE.UU. y 230 V/50 Hz para la Comunidad Europea).

Conecte el RA-1060 a una toma de corriente eléctrica únicamente a través del cable de alimentación de dos clavijas polarizado suministrado de serie o un equivalente exacto del mismo. No modifique de ningún modo dicho cable. No intente desactivar los terminales destinados a la conexión a tierra o polarización. El cable debería ser conectado a una toma de corriente eléctrica de dos terminales que se adapten perfectamente a las clavijas del cable de alimentación del RA-1060. No utilice ningún tipo de cable de extensión.

No coloque el cable de alimentación en lugares en que pueda ser aplastado, pinchado, doblado en ángulos críticos, expuesto al calor o dañado de algún modo. Preste particular atención al punto de unión entre el cable y la toma de corriente y también a la ubicación de esta última en el panel posterior del aparato.

El cable de alimentación debería desconectarse de la red eléctrica cuando el aparato no vaya a ser utilizado durante un largo período de tiempo (como por ejemplo durante las vacaciones de verano).

Desconecte inmediatamente el RA-1060 y envíelo a un servicio técnico cualificado para su inspección/repelación si:

- El cable de alimentación o alguna clavija del mismo ha sido dañado.
- Han caído objetos o se ha derramado líquido en el interior del aparato.
- El aparato ha sido expuesto a la lluvia.
- El aparato muestra signos de funcionamiento inadecuado.
- El aparato ha sido golpeado o dañado de algún modo.

Nederlands

WAARSCHUWING: Om het risico op elektrische schokken of brand te vermijden: zorg dat het apparaat niet nat wordt. Verwijder de kast niet: er bevinden zich in het apparaat geen bedieningsorganen. Indien nodig waarschuw een bevoegd technicus!

EEN LAATSTE WAARSCHUWING: Om het risico op elektrische schokken te voorkomen: laat het apparaat gesloten. Iedere reparatie dient door een gekwalificeerde technicus verricht te worden.

Lees de gehele gebruiksaanwijzing. Voordat u met het apparaat gaat werken is het van groot belang dat u weet hoe u ermee om moet gaan en dat zo veilig mogelijk. Bewaar deze gebruiksaanwijzing op een plek, die u zich na verloop van tijd nog weet te herinneren.

De waarschuwingen op het apparaat en in de gebruiksaanwijzing zijn belangrijk, sla ze niet in de wind.

Als het apparaat vuil wordt, stof het dan af met een zachte droge doek, of maak gebruik van een stofzuiger. Gebruik nooit een oplosmiddel van welke soort dan ook.

Het apparaat moet dusdanig gebruikt worden, dat een behoorlijke koeling niet in het gedrang komt. Voorbeeldjes: Gebruik het apparaat niet op: bed, sofa, plaid of andere onregelmatige oppervlakken, waardoor de ventilatiegaten geblokkeerd zouden kunnen worden. Ook het inbouwen in een te kleine ruimte kan een voldoende koeling in de weg staan.

Het apparaat moet verre gehouden worden van warmtebronnen zoals: radiatoren en kachels, maar ook versterkers.

Het apparaat mag alleen aangesloten worden op het voltage zoals aangegeven op de achterkant, in dit geval 220 - 240 Volts 50 Hz.

Het apparaat dient alleen aangesloten te worden met de bijgeleverde netkabel, of een soortgelijke.

Maatregelen dienen genomen te worden, die de aarding en polarisatie van het apparaat niet te niet doen. Gebruik vooral geen verlengsnoeren.

De lichtnetkabel dient zo neergelegd te worden, dat er niet op getrapt kan worden of geklemd kan worden door scherpe voorwerpen. Vooral de aansluitpunten zijn belangrijk: de aansluiting in de wandcontactdoos en daar waar de kabel het apparaat binnengaat.

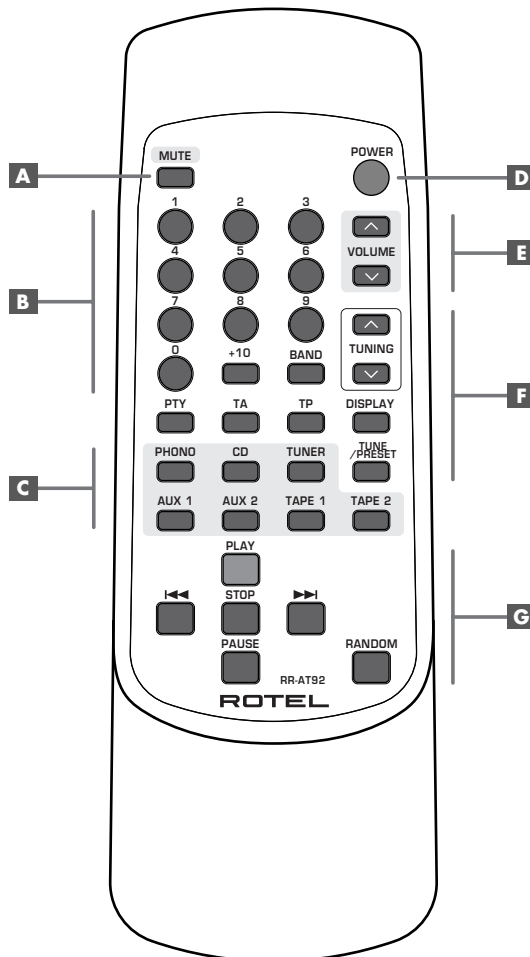
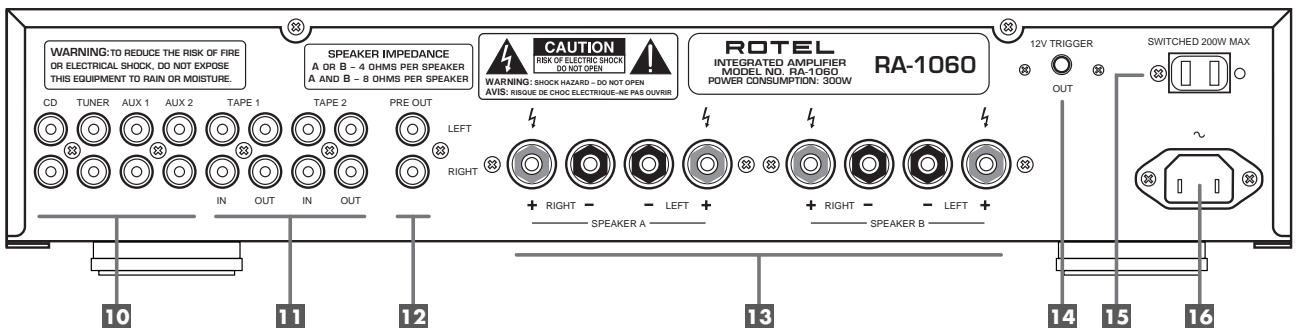
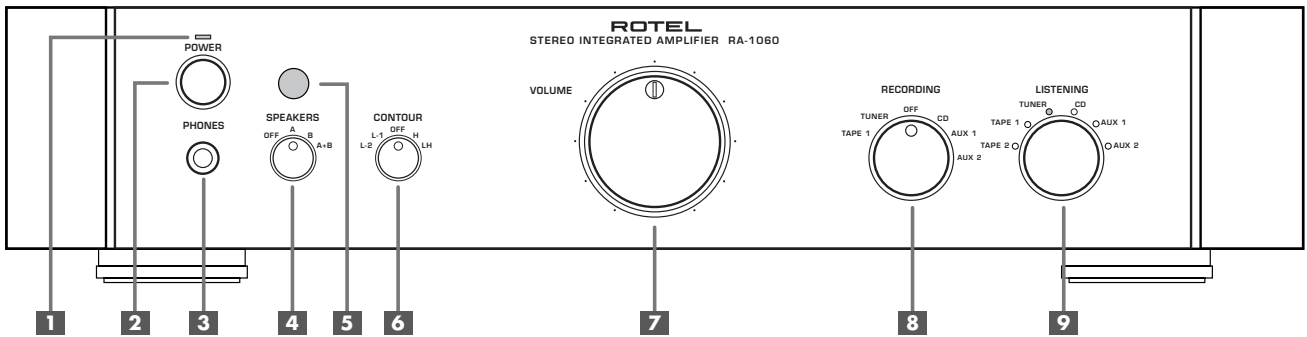
Wanneer het apparaat voor langere tijd niet in gebruik is, dient de lichtnetkabel uit het lichtnet verwijderd te zijn.

Het apparaat zal in service gegeven moeten worden wanneer één van de volgende situaties zich voordoet:

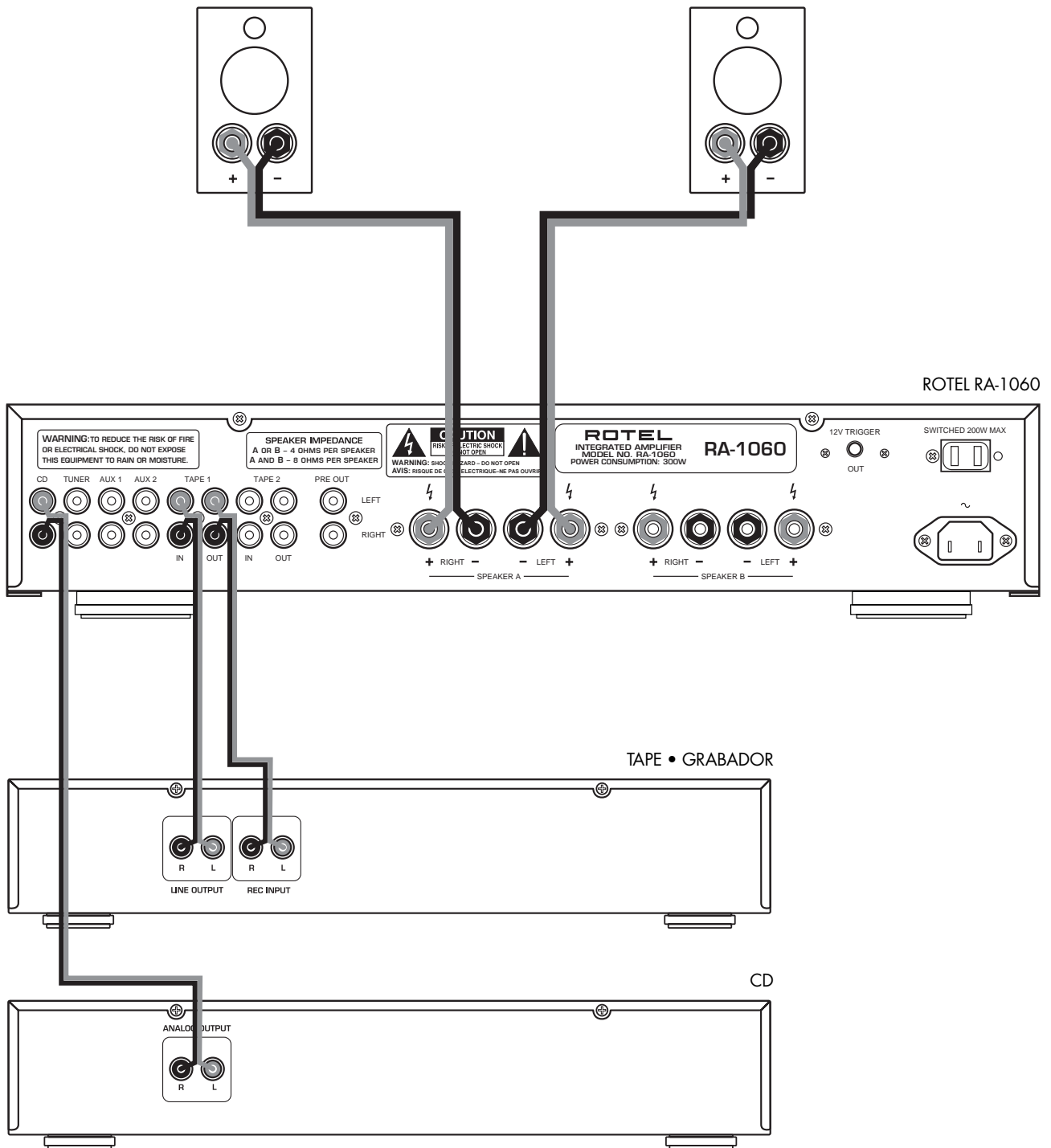
- Wanneer het netsnoer en/of steker beschadigd zijn.
- Wanneer er toch voorwerpen/vloeistof in het apparaat terecht zijn gekomen.
- Als het apparaat in de regen heeft gestaan.
- Als het apparaat niet normaal functioneert of een duidelijk afwijkend gedrag vertoont..
- Wanneer het apparaat gevallen is en/of de kast beschadigd is.

Plaats het apparaat op een vaste, vlakke en stevige ondergrond. Plaats hem niet op een verrijdbare wagen die gemakkelijk om kan vallen.

1: Controls and Connections • Commandes et branchements • Bedienelemente und Anschlüsse • Controlli e collegamenti • Controles y Conexiones • De bedieningsorganen en aansluitpunten



2: Connections • Branchements • Anschlußdiagramm • Collegamenti Conexiones • De in- en uitgaansverbindingen



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About Rotel

A family whose passionate interest in music led them to manufacture high fidelity components of uncompromising quality founded Rotel 40 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 years of enjoyment.

Getting Started

Thank you for purchasing the Rotel RA-1060 Stereo Integrated Amplifier. When used in a high-quality music audio system, it will provide years of musical enjoyment.

The RA-1060 is a full featured, high performance component. All aspects of the design have been optimized to retain the full dynamic range and subtle nuances of your music. The RA-1060 has a highly regulated power supply incorporating a Rotel custom-designed toroidal power transformer and custom-made slit foil capacitors. This low impedance power supply has ample power reserves, which enables the RA-1060 to easily reproduce the most demanding audio signals. This type of design is more expensive to manufacture, but it is better for the music.

The printed circuit boards are designed with Symmetrical Circuit Traces. This insures that the precise timing of the music is maintained

and faithfully recreated. The RA-1060 circuitry uses metal film resistors and polystyrene or polypropylene capacitors in important signal paths. All aspects of this design have been examined to ensure the most faithful music reproduction.

In addition the RA-1060 has independent input signal selectors for listening and recording. They allow you to listen to one signal source while recording another.

The main functions of the RA-1060 are easy to install and use. If you have experience with other stereo systems, you shouldn't find anything perplexing. Simply plug in the associated components and enjoy.

Unpacking

Carefully remove the RA-1060, the remote control, and accessories from the shipping carton. Save the shipping carton and all enclosed packing material for future use. Shipping or moving the unit in anything other than the original packing material may result in severe damage.

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 audio components that handle low-level signals, the RA-1060 can be affected by its environment. Avoid placing the RA-1060 on top of other components. Also avoid routing audio signal cables near power cords. This will minimize the chance it will pick up hum or interference.

The RA-1060 generates heat as part of its normal operation. The heat sinks and ventilation openings in the amplifier are designed to dissipate this heat. The ventilation slots in the top cover must be open. There should be 10 cm (4 inches) of clearance around the chassis, and reasonable airflow through the installation location, to prevent the amplifier from overheating.

Remember the weight of the amplifier when you select an installation location. Make sure that the shelf or cabinet can support it. We recommend installing the RA-1060 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.

The RA-1060 is supplied with an RR-AT92 remote control and must be placed where the infrared signal from the remote can reach the front panel Remote Sensor.

Cables

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

Remote Control

The RA-1060 includes an RR-AT92 remote control that operates many of the controls of the RA-1060. In addition, the remote operates basic features of some Rotel CD players, DVD players, and AM/FM tuners.

Audio Controls **A C D E**

The RR-AT92 duplicates the basic audio functions of the RA-1060 front panel. When a function is available on both the front panel and the remote, a number (see front panel illustration) and a letter (see remote control illustration) are shown in the instructions. For example, to change the volume level, you can either turn the control **7** on the front panel or use the buttons **E** on the remote. When only one identifier appears, that control is available only on the front panel or the remote, but not both.

CD Functions **B G**

The PLAY, STOP, PAUSE, TRACK +/-, RANDOM buttons, and NUMERIC keys (0-10) operate many Rotel CD players after the CD button on the remote has been pressed.

DVD Functions **G**

The PLAY, STOP, PAUSE, and TRACK +/-, buttons operate Rotel DVD players, after the AUX1 button on the remote has been pressed.

Tuner Functions **B F**

The BAND, TUNING, and additional tuning feature buttons operate Rotel tuners, after the TUNER button on the remote has been pressed.

By default, the RR-AT92 operates the Rotel RT-955 tuner. Alternatively, the remote can be reprogrammed to operate the RT-940AX tuner. This programming only needs to be done once:

To program for the RT-940AX: press the POWER button and the 2 button simultaneously.

To program for the RT-955: press the POWER button and the 1 button simultaneously.

Remote Sensor **5**

The remote sensor receives infrared signals from the remote control. Do not cover or block the sensor. It must be unobstructed or the remote control will not work properly.

The operation of the remote sensor can also be affected if it is exposed to bright sunlight or certain types of lighting (such as halogen lights) that emit infrared light. In addition remote control functions may not work reliably if the batteries in the RR-AT92 are weak.

NOTE: To use the remote, aim it at the remote sensor on the front panel of the RA-1060.

Remote Control Batteries

Two UM-4/AAA size batteries (supplied) must be installed before the remote control can be used. To install the batteries, remove the cover on the back of the RR-AT92. Install the batteries as shown in the illustration in the battery well. Test the control for proper operation, then replace the cover. When the batteries become weak the remote control won't operate the RA-1060 consistently. Installing fresh batteries should eliminate the problem.

NOTE: Remove the batteries from the remote if it will not be used for a long period of time. Do not leave run down batteries in the remote control; they can leak corrosive chemicals which will damage the unit.

Speaker Outputs

See Figure 2

The RA-1060 has two sets of speaker outputs, labeled SPEAKER A and SPEAKER B. The speaker outputs are controlled by the switch on the front panel.

Speaker Impedance

If only one set of speakers will be used at any given time, the speakers may have an impedance as low as 4 ohms. If there are times when both the A and B speakers will be used, all the speakers should have an impedance of 8 ohms or more. Speaker impedance ratings are less than precise. In practice, very few loudspeakers will present any problems for the RA-1060. See your authorized Rotel dealer if you have any questions.

Speaker Wire

Use insulated two-conductor stranded wire to connect the RA-1060 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 13

Turn off all the components in the system before connecting the speakers. The RA-1060 has color-coded speaker connectors on the back panel. These connectors accept bare wire, or connector lugs. (In non-EC markets, the connectors also accept dual banana plugs.)

Route the wire from the RA-1060 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 thumbscrews. Place the connector lug or wire around the binding post shaft. Turn the thumbscrews 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.

Signal Connections

The RA-1060 has line level inputs for source components, connections for audio tape decks, and preamp output connections to send signals to an external power amplifier.

NOTE: To prevent loud, potentially damaging, noises, make sure the system is turned off when you make any signal connections.

Line Level Inputs 10

See Figure 2

The RA-1060 has four pair of conventional RCA input connectors for line level components such as CD players, video cassette recorders, tuners, Laser Disc players, or DVD players. These inputs are labeled CD, TUNER, AUX 1, and AUX 2.

The left and right channels are clearly labeled and should be connected to the corresponding channels of the source component. The left RCA connectors are white, the right con-

nectors are red. Use high quality RCA cables for connecting input source components to the RA-1060. Ask your authorized Rotel dealer for advice about cables.

Recorder Connections 11

See Figure 2

Tape inputs and outputs can be connected to any record/playback device that accepts standard line level analog input and output signals. Typically that will be a conventional tape recorder. There are two sets of tape connections on the back panel, labelled TAPE 1 and TAPE 2.

When connecting a recorder to the RA-1060, the **outputs** of the recorder must be connected to the tape **inputs** of the RA-1060. Similarly the tape **outputs** of the RA-1060 must be connected to the **inputs** of the recorder. Be sure to connect the left and right channels of each device to the proper channels on the associated components. Use high quality connecting cables to prevent loss of sound quality.

NOTE: The tape inputs can also be used for standard playback-only source components, omitting the output connections.

Preamp Outputs 12

The RA-1060 has a pair of preamp outputs that can send a variable gain signal to an external power amp or signal processor. The preamp outputs are standard RCA-type output connectors, compatible with the inputs of most power amplifiers. Use high quality cables and be sure to connect the left and right channel outputs of the RA-1060 to the correct channels of the amplifier.

AC Power and Control

AC Power Input 16

Because of its relatively high power rating, the RA-1060 can draw considerable current. Therefore, it should be plugged directly into a 2-pin polarized wall 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 RA-1060 and all the other components connected to it.

Your RA-1060 is configured at the factory for the proper AC line voltage in the country where you purchased it (USA: 115 volts/60Hz AC or CE: 230 volts/50 Hz AC). The AC line configuration is noted on a decal on the back panel. Plug the supplied cord into the AC INPUT receptacle on the back of the unit.

NOTE: Should you move your RA-1060 to another country, it is possible to reconfigure your amplifier for use on a different line voltage. Do not attempt to perform this conversion yourself. Opening the enclosure of the RA-1060 exposes you to dangerous voltages. Consult a qualified service person or the Rotel factory service department for information.

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 audio and video components while you are away.

POWER Button **2** **D** Power Indicator **1**

Press the front panel POWER button, to turn the RA-1060 on. The power indicator light is illuminated when the RA-1060 is on. Press POWER button again to turn the RA-1060 off.

Once the RA-1060 has been turned on with the front panel button, it can be switched between normal operating mode and standby mode with the POWER button on the RR-AT92 remote control.

Auxiliary Power Outlet **15** (North American version)

The RA-1060 has a switched outlet on the back panel. Power is available from this outlet when the RA-1060 is turned on. This outlet can provide up to 200 watts and is appropriate for supplying power to signal sources, such as CD players, tuners, or tape decks. It should not be used for power amplifiers. Connecting components that will draw more than 200 watts to these outputs could damage the RA-1060.

NOTE: Do not connect a power amplifier to the auxiliary power outlet on the RA-1060. Power amplifiers often draw more power than this outlet can provide.

12V TRIGGER Connection **14**

Several Rotel amplifiers can be turned on and off using a 12 volt signal, provided by the 12V TRIGGER connection. When the RA-1060 is activated, a 12 volt DC signal appears at this connector and will turn on an amplifier. When the RA-1060 is turned off, the trigger signal is interrupted and the external amplifier will be turned off.

Audio Controls

The following controls are used to operate the RA-1060.

VOLUME Control **7** **E**

Turn the front panel VOLUME control clockwise to increase the volume, or counterclockwise to decrease the volume. Alternatively, press the VOL buttons on the remote control to adjust the volume up or down

CONTOUR Selector **6**

Instead of conventional tone controls, the RA-1060 has a front-panel CONTOUR control which selects one of five available settings. Each setting provides a fixed frequency contour as follows:

OFF: the tone contour circuits are bypassed to ensure the purest possible sound.

L-1: moderate increase in bass frequencies (typically +3dB @ 100Hz).

L-2: more increase in bass frequencies (typically +4dB @ 100Hz).

H: moderate increase in high frequencies (+3dB @ 10kHz).

LH: combination of L-2 bass and H high frequency increases.

LISTENING Selector **9** **C**

The setting of the LISTENING selector controls which of the input signals goes to the main outputs and onto the power amplifier—or, more simply, which source is heard. Turn the front panel control to the source you want to hear, or press the corresponding button on the RR-AT92 remote.

RECORDING Selector **8**

The RA-1060 can record from any input source (except TAPE 2) to a recorder connected to TAPE 1 or TAPE 2 outputs. To select an input source for recording, turn the RECORDING control on the front-panel to the desired source.

This selection is independent of the source selected for listening. While recording, you may still select a different source using the LISTENING selector.

If you have a three-head recorder or a DAT recorder that allows simultaneous read and write operation, you can monitor your recording by setting the LISTENING switch to the TAPE 1 or TAPE 2 position.

NOTE: If you select TAPE 1 with the RECORDING control, the recording signal will only be available at the TAPE 2 recording outputs, not the TAPE 1 outputs. To dub a tape, select TAPE 1 and record to the tape deck connected to the TAPE 2 outputs.

MUTE Button **A**

To temporarily mute the sound of the system press the MUTE button on the RR-AT92 remote. Press the button again to return the sound volume to the original level. The LED in the volume control will flash when the unit is muted.

PHONES Output **3**

The PHONES output allows you to connect headphones for private listening. This output accepts standard stereo phone (1/4") plugs. If your headphones have another type of plug, such as a 1/8" mini-plug, you will need an adapter plug. Contact your authorized Rotel dealer, to get the correct adapter plug.

NOTE: Plugging in headphones does not cut off the signal to the speakers. If desired, use the SPEAKERS selector to turn off the signal to the speakers for private listening.

SPEAKERS Selector 4

A four-position rotary switch on the front panel determines which set of speakers, if any, is active. Set the SPEAKER selector as follows:

OFF: No speakers will be heard. Use this position when listening to headphones.

A: The speakers connected to the SPEAKER A terminals will be heard.

B: The speakers connected to the SPEAKER B terminals will be heard.

A+B: The speakers connected to both the SPEAKER A and SPEAKER B terminals will be heard.

Protection Circuit

A thermal protection circuit protects the amplifier against potential damage in the event of extreme or faulty operating conditions. Unlike many designs, the RA-1060's protection circuit is independent of the audio signal and has no impact on sonic performance. Instead, the protection circuit monitors the temperature of the output devices and shuts down the amplifier if temperatures exceed safe limits.

Should a faulty condition arise, the amplifier will stop playing. 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.

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 RA-1060 refer to the suggestions for the following conditions:

Power Indicator Is Not Lit

The power indicator should be lit whenever the RA-1060 is plugged into the wall power outlet and the POWER switch is pushed in. If it does not light, test the power outlet 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.

Fuse Replacement

If another electrical device works when plugged into the power outlet, but the power indicator still will not light when the RA-1060 is plugged into the wall outlet, it indicates that the internal power fuse may have blown. If you believe this has happened, contact your authorized Rotel dealer to get the fuse replaced.

No Sound

Check the signal source to see if it is functioning properly. Make sure the cables from the signal source to the RA-1060 inputs are connected properly. Be sure the LISTENING selector is set to the proper input. Be sure the SPEAKERS selector is set to the proper position. Check the wiring between the RA-1060 and the speakers.

Specifications

Continuous Power Output

60 watts/channel (20-20 kHz, < 0.03%, 8 ohms)

Total Harmonic Distortion (20Hz-20kHz)

< 0.03% at rated power, 1/2 power, or 1 watt

Intermodulation Distortion

(60 Hz : 7 kHz, 4:1)

< 0.03% at rated power, 1/2 power or 1 watt

Frequency Response (all inputs)

10Hz-100kHz, +1, -3dB

Damping Factor (20-20,000 Hz, 8 ohms)

150

Input Sensitivity / Impedance

160 mV / 33 kOhms

Input Overload

5 V

Preamplifier Output / Impedance

1V / 470 ohms

Signal to Noise Ratio (IHF "A" weighted)

>95 dB

Power Requirements

USA: 115 Volts, 60 Hz

EC: 230 Volts, 50 Hz

Power Consumption

300 Watts

Dimensions (W x H x D)

430 x 92 x 355 mm

17 x 5⁵/₈ x 14 inches

Weight (net)

7.8 kg, 17.2 lbs.

All specifications are accurate at the time of printing.

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