



# **AIIMKII**

Stereo Integrated Amplifier
Amplificateur Stéréo Intégré
Stereo-Vollverstärker
Amplificatore Integrato Estereofonico
Geïntegreerde stereoversterker
Amplificatore integrato stereo
Integrerad Stereoförstärkare
Интегрированный стерео усилитель

Owner's Manual
Manuel d'utilisation
Bedienungsanleitung
Manual de Instrucciones
Gebruikershandleiding
Manuale di istruzioni
Instruktionsbok
Инструкция пользователя

## **Important Safety Instructions**

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 these instructions.

Keep these instructions.

Heed all warnings.

Follow all instructions.

Do not use this apparatus near water.

Clean only with dry cloth.

Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

Only use attachments/accessories specified by the manufacturer.

Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use with caution when moving the cart/apparatus combination to avoid injury from tip-over.

Unplug this apparatus during lightning storms or when unused for long periods of time.

Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

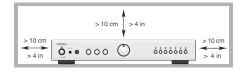
The apparatus should be used in non tropical climate.

The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, table-cloths, curtains, etc.

No naked flame sources, such as lighted candles, should be placed on the apparatus.

Touching uninsulated terminals or wiring may result in an unpleasant sensation.

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





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 rear 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. Do not use extension cords.

The mains plug is the disconnect of the unit. In order to completely disconnect the unit from the supply mains, remove the main plug from the unit and the AC power outlet. This is the only way to completely remove mains power

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

The batteries in the remote control should not be exposed to excessive temperature such as sunshine, fire or other heat sources. Batteries should be recycled or disposed as per state and local guidelines.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following to conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This product shall be connected to a MAINS socket outlet with a protective earthing connection.

The MAINS plug or an appliance coupler is used as the disconnect device, the socket-outlet shall be installed near the equipment and shall be easily accessible.



#### CAUTION RISK OF ELECTRIC SHOCK



WARNING: SHOCK HAZARD-DO NOT OPEN AVIS:RISQUE DE CHOC ÉLECTRIQUE-NE PAS OUVRIR

## 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.



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.



This symbol means that this unit is double insulated. An earth connection is not required.



Figure 1: Controls and Connections

Commandes et branchements

Bedienelemente und Anschlüsse

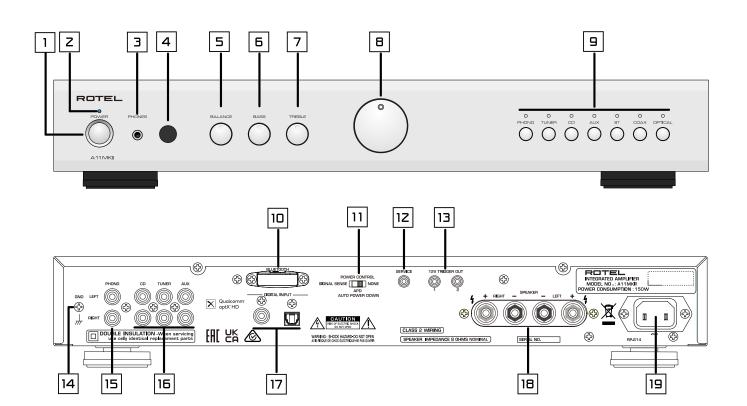
Controles y Conexiones

De bedieningsorganen en de aansluitingen

Controlli e collegamenti

Kontroller och anslutningar

Органы управления и разъемы



1: Power Button

Activate the unit or put it into standby mode.

- Z: Power Indicator
- 3: Headphone Output
  Connect headphones for private listening.
- 4: Remote Sensor Receives IR commands from the remote control.

5 6 7

Balance / Bass / Treble Buttons Audio Control Buttons.

B: Volume Knob
Adjust the volume output level.

- 9: Source Button Selects the input signal source.
- ©: Bluetooth Antenna Use for wireless streaming via Bluetooth
- 11: Power Control Slider

  Make the unit go to standby mode or automatically turn off when there is no signal or operation.
- Z: Service Port Factory use only service connection.
- 13: 12V Trigger Output
  Send a 12V trigger signal when powered on.

- [14]: Ground Connector Connect with a "ground" wire from the turntable.
- 15: Phono Input Connect to a turntable.
- 15: CD / Tuner / Aux Inputs Analog "line level" inputs
- 7: Digital Signal Inputs
  Connect to coaxial or optical PCM outputs of the source component.
- 18: Speaker Connectors
- 19: AC Power Input

Figure 2: RR-AX1402 Remote Control Télécommande infrarouge RR AX1402 Fernbedienung RR-AX1402 Mando a Distancia RR-AX1402

Afstandsbediening RR-AX1402 Telecomando RR-AX1402 RR-AX1402 fjärrkontroll Пульт ДУ RR-AX1402

**(G):** SOURCE Buttons Selects the input signal source.

#### (H): Numeric Buttons

Allows direct access to a track when used with a Rotel CD Player or Preset Station Recall when used with a Rotel Tuner.

#### (1): **| < < / >**

TUNE + and - Buttons

Control the previous track and next track, or previous staion and next station. (Available when used with a Rotel CD Player or Tuner)

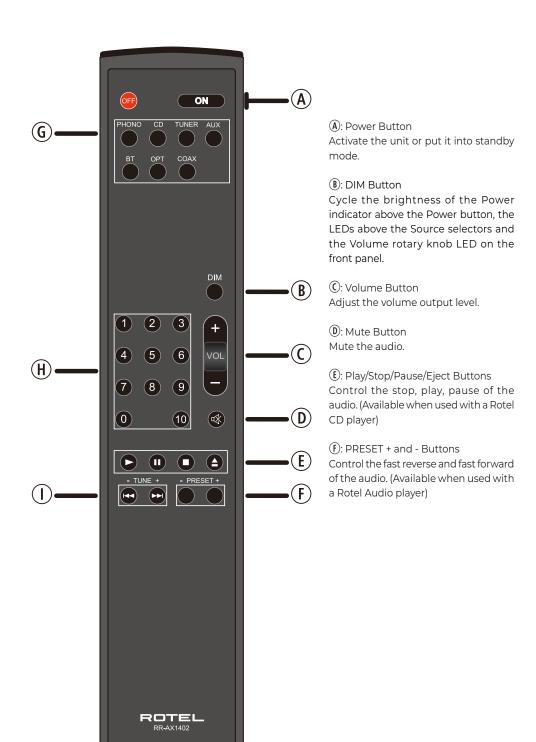
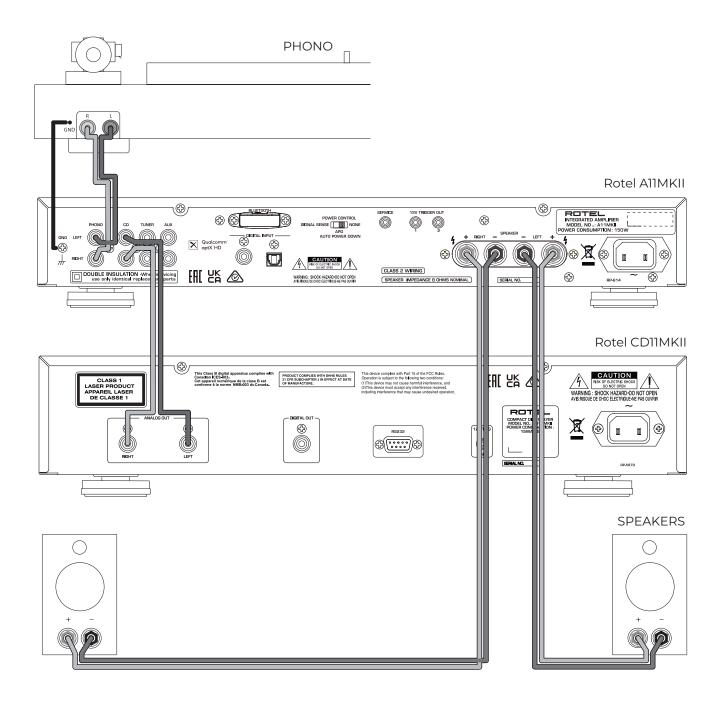


Figure 3: Preamp Input and Speaker Output Connections
Branchements en entrées et sorties enceintes acoustiques
Anschlüsse für Vorverstärkereingang und Lautsprecherausgang
Conexiones de Entrada al Preamplificador y de Salida a las Cajas Acústicas
De aansluitingen voor de voorversterker en de luidsprekers
Collegamenti ingresso preamp ed uscita per diffusori
Anslutningar för förförstärkare och högtalare
Подсоединение источников сигнала и акустических систем



#### **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 abschalten.

### **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 AllMKII, maar de **gehele** installatie uitstaat, als nog niet **alle** verbindingen gemaakt zijn.
- ✓ Zorg dat niet alleen de AIIMKII, 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 komponenter i anläggningen innan du ansluter nya komponenter, inklusive högtalare.
- ✓ Stäng av alla komponenter i anläggningen innan du ändrar någon anslutning i anläggningen.

#### Vi rekommenderar också föjlande:

✓ Vrid 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	2
Figure 1: Controls and Connections	3
Figure 2: RR-AX1402 Remote Control	4
Figure 3: Signal Input and Speaker Output Connection	5
Important Notes	6
About Rotel	7
Getting Started	8
A Few Precautions	8
Placement	8
Cables	8
The RR-AX1402 Remote Control	8
Remote Control Batteries	8
Buttons	8
AC Power and Control	8
AC Power Input	8
Power Switch 1. and Power Indicator 2	9
12V Trigger Out 13	9
Input Signal Connections	9
Phono Input 🗈 and Ground Connection 🗵	9
Line Level Inputs 🗉	9
Digital Inputs 🗹	9
Speaker Outputs	9
Speaker Wire Selection	9
Polarity and Phasing	9
Speaker Connection	9
IR Remote Sensor 4	. 10
Headphone Output 3	
aptX™ HD Bluetooth Conection   □	
Power Control III	. 10
SERVICE Connector 🗵	
Audio Controls	
Volume Control ®©	10
Balance Control 5	10
Bass and Treble Controls 6 7	10
Source Input Seletor 96	10
LED Dimmer Control ®	. 10
Protection Circuit	
Troubleshooting	11
Power Indicator Is Not Illuminated	11
Fuse Replacement	11
No Sound	11
Cannot Connect via Bluetooth	11
Specifications	11

## **About Rotel**

Our story began over 60 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.

## **Getting Started**

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

The amplifier 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 unit has a highly regulated power supply incorporating a Rotel custom-designed toroidal power transformer. This low impedance power supply has ample power reserves, which enables the unit 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 (PCB) are designed with Symmetrical Circuit Traces. This insures that the precise timing of the music is maintained and faithfully recreated. The 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.

The main functions of the AllMKII 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.

#### 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. It provides information on how to incorporate the unit into your system as well as information that will help you get optimum sound performance. 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 unit 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 to your amplifier.

If included in the box please complete the owner's registration card or register online. Also be sure to keep the original sales receipt. It is your best record of the date of purchase, which you will need in the event warranty service is ever required.

#### **Placement**

Like all audio components that handle low level signals, the amplifier can be affected by its environment. Avoid placing the unit 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 unit 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 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.

The AllMKII is supplied with an RR-AX1402 remote control and must be placed where the infrared signal from the remote can reach the front panel Remote Sensor.

#### **Cables**

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

## The RR-AX1402 Remote Control

Some functions can be done with either the front panel controls, or the supplied RR-AX1402 remote control. When these operations are described, the square call out numbers refer to the main unit, while the encircled letters refer to the remote control.

#### **Remote Control Batteries**

Two 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-AX1402. 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 AIIMKII consistently. Installing fresh batteries should eliminate the problem.

#### **Buttons**

The remote control can be used to operate the basic functions of Rotel tuners and CD players. Remote control buttons labeled C(E)G(H)C can be used to operate CD or Tuner functions in your system. To activate CD and Tuner controls simply press the CD or TUNER source buttons on the remote control. Pressing any other source button on the remote control deactivates these functions.

## **AC Power and Control**

#### **AC Power Input** 9

Your unit is configured at the factory for the proper AC line voltage in the country where you purchased it (either 120 volts AC or 230 volts AC with a line frequency of either 50 Hz or 60 Hz). The AC line configuration is noted on a decal on the back panel.

**NOTE:** Should you move your amplifier to another country, it is 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.

The unit does not draw high levels of current from the power outlet. However, it should be plugged directly into a polarized wall outlet using the supplied cable or other compatible cable as recommended by your authorized Rotel dealer. Do not use an extension cord. A heavy duty multi-tap power outlet strip may be used if it (and the wall outlet) can handle the current demanded by the unit and all the other components connected to it.

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 1 (a) and Power Indicator 2

Press the front panel Power Switch button, to turn the unit on. The Power Indicator light is illuminated when the unit is on. Press Power Switch button again to turn the unit off.

When the power switch is in the ON position, the remote control ON and OFF buttons (A) may be used to activate the AllMKII or put it into the standby mode. In Standby mode the Indicator light is red.

See the "12V Trigger Out" section for more information on ways you may be able to turn on and off other components in your system along with the unit.

#### 12V Trigger Out 🗉

Some audio components can be turned on automatically when they receive a 12V turn on "signal". The two 12V Trigger Outputs of the amplifier provide the required signal. Connect compatible components to the amplifier with a conventional 3.5mm mini plug cable. When the unit is turned off, the trigger signal is interrupted, and the components controlled by it are turned off.

## **Input Signal Connections**

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.

### Phono Input is and Ground Connection is

Plug the cable from the turntable into the appropriate left and right phono inputs. If the turntable has a "ground" wire, connect it to the screw terminal to the left of the Phono inputs. It will help prevent hum and noise.

#### 

The CD, Tuner, and Aux inputs of the amplifier are "line level" inputs. These are for connecting components such as CD players or other audio playback devices with an analog audio output.

The Left and Right channels are labeled and should be connected to the corresponding channels of the source component. The Left connectors are white, the Right connectors are red. Use high quality RCA cables for connecting input source components to the unit. Ask your authorized Rotel dealer for advice about cables.

### Digital Signal Inputs 17

There is one set of digital inputs for COAXIAL and OPTICAL respectively. Connect the COAXIAL or OPTICAL outputs of your source component into these sockets. The digital signals will be decoded and played by the amplifier. The unit is capable of decoding PCM signals up to 24 bit, 192kHz.

## 

See Figure 3

### **Speaker Wire Selection**

Use insulated two-conductor stranded wire to connect the unit 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 Connection**

**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 unit has color-coded binding post type speaker connectors on the back panel (except in European Community countries where their use is not permitted). These connectors accept bare wire, connector lugs, or dual banana type connectors.

Route the wire from the unit 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.

## IR Remote Sensor 4

This remote sensor window receives IR commands from the remote control. Please do not block this sensor.

## Headphone Output 3

The headphone output allows you to connect headphones for private listening. This output accepts a standard 3.5 mm (1/8") mini stereo headphone connector. Plugging in a set of headphones will mute the signal to the speaker outputs.

**NOTE:** Because the sensitivity of speakers and headphones can vary widely, always reduce the volume level before connecting or disconnecting headphones.

## aptX<sup>™</sup> HD Bluetooth Connection <sup>□</sup>

The Bluetooth Antenna on the back panel is for wireless streaming via Bluetooth, from your device (i.e. mobile phones, tablets or computers). From your device, look for "Rotel Bluetooth" and connect to it. Connection is normally automatic, but if prompted for a password, please enter "0000" on your device. The amplifier supports both traditional Bluetooth, AAC and aptX<sup>TM</sup> HD Bluetooth audio streaming.

## Power Control 11

Power Control could make the ATIMKII go to standby mode or automatically turn off when there is no signal or operation to the ATIMKII.

When the slider is set to the SIGNAL SENSE position, the AllMKII will check if a digital signal is present on the currently selected Signal Sense input. If there is no digital audio detected for 10 minutes, the unit will enter Signal Sense Power Mode. When in Signal Sense Power Mode and the unit detects digital audio, the unit will automatically power on.

When the slider on the APD (AUTO POWER DOWN) position, the AIIMKII will automatically power off to standby mode if there is no audio signal for 20 minnutes. The auto power off timer will be restarted if changes are made to the volume, source or playback.

To disable above functions, push the slider to the NONE position.

**NOTE:** When the AllMKII enters standby mode via the remote control, the Signal Sense function will not operate until the unit detects the audio has stopped for the minimum 10 minute time-out period. This prevents the unit from immediately powering back on if there is still active audio playing.

**NOTE:** When the SIGNAL SENSE function is activated the ATIMKII will consume additional power in Signal Sense Power mode.

## **SERVICE Connector** 12

The SERVICE connector is for use by Authorized Service Centers only.

## **Audio Controls**

#### Volume Control ® ©

Turn the controls clockwise to increase the volume, or counter clockwise to decrease the volume. From the remote control press the volume + or - button 0 to turn the volume up or down. Press the 4 button 0 to completely mute the volume.

#### Balance Control 5

The Balance Control adjusts the left-to-right balance of the sound output. Normally the control should be left in the center position. In some situations, typically when the main listening position is not ideally centered between the speakers, it may be necessary to adjust the control to achieve proper left-to-right balance. Turning the Balance rotary knob counter-clockwise shifts the sound balance to the left. Turning the Balance rotary knob clockwise shifts the sound balance to the right.

### Bass and Treble Controls 5 7

Turn the Bass/Treble rotary knobs  $\boxed{5}$   $\boxed{7}$  clockwise to increase the bass or treble output. Turn the Bass/Treble rotary knobs  $\boxed{5}$   $\boxed{7}$  counterclockwise to decrease the bass or treble output.

A properly setup high-performance audio system produces the most natural sound with little or no adjustment of the tone controls. Use these controls sparingly. Be particularly careful when turning the controls up (clockwise). This increases the power output in the bass or treble range, increasing the load on the amplifier and speakers.

**NOTE:** The Bass and Treble controls circuits are bypassed to ensure the purest possible sound, which is defaulted. Turn the Bass/Treble rotary knob if you want to adjust the Controls.

### Source Input Selector 96

Press the corresponding input button on the front panel g or remote control G to select the desired listening source.

## **LED Dimmer Control ®**

To change the brightness of the Power indicator above the Power button, the LEDs above the Source selectors and the Volume rotary knob LED on the front panel, press the DIM B button on the remote control.

## **Protection Circuit**

The unit has both thermal and over-current protection circuitry that protects the amplifier against damage in the event of extreme or faulty operating conditions. The protection circuits are independent of the audio signal and have no impact on sonic performance. Instead, the protection circuits monitor the temperature of the output devices and shut down the amplifier if temperatures exceed safe limits.

Most likely, you will never see this protection circuitry in action. However, should a faulty condition arise, the amplifier will stop playing and the POWER indicator 2 on the front panel will turn red.

If this happens, turn the amplifier off. Let it cool down for several minutes, and attempt to identify and correct the problem that caused the protection circuitry to engage. When you turn the amplifier back on, the protection circuit will automatically reset and the POWER indicator should be blue, indicating that the amplifier is operating normally.

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.

## **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 unit, refer to the suggestions for the following conditions:

### Power Indicator Is Not Illuminated

The Power Indicator should be illuminated whenever the unit is plugged into the wall power outlet and the Power button 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 of the unit does not light when plugged into the same outlet and the Power Switch is pushed in, 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 unit inputs are connected properly. Be sure the Listening Selector is set to the proper input. Check the wiring between the unit and the speakers.

#### Cannot Connect via Bluetooth

If you cannot pair your Bluetooth enabled device to the unit, delete the memory of the previous connection on your device. On your device this is often listed as "Forget this Device". Then try to make the connection again.

## **Specifications**

Power Output 50 watts/ch (8 ohms) 62 watts/ch (4 ohms)

**Total Harmonic Distortion** (20 Hz - 20k Hz) < 0.03% **Intermodulation Distortion** (60 Hz : 7k Hz, 4:1) < 0.03%

Frequency Response

 Phono input
 20 Hz - 20k Hz, -0.5 dB, +0.3 dB

 Line Level Inputs
 10 Hz - 100k Hz, -0.5 dB, +0.05 dB

120

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

Input Sensitivity / Impedance

Phono input 1.6 mV / 43k ohms Line Level Inputs 130 mV / 45k ohms

Input Overload

Phono input 50 mV Line Level Inputs 4 V

**Tone Controls - Bass / Treble** ± 6 dB at 100 Hz / 10k Hz

Signal to Noise Ratio (IHF "A" weighted)

 Phono input
 85 dB

 Line Level Inputs
 90 dB (Max)

 Line Level Inputs
 95 dB (Min)

**Digital Section** 

Frequency Response 20 Hz – 20k Hz, -0.15 dB,+0 dB

Input Sensitivity / Impedance -20 dBFS / 75 ohms

Digital InputsSPDIF LPCM (up to 192k Hz 24 bit)Digital to Analog ConverterTexas Instruments PCM5102A

384k Hz 32 bit

Power Requirements 120 V, 60 Hz (USA)

230 V, 50 Hz (Europe)

Power Consumption 150 Watts

Standby Power Consumption

Normal < 0.5 watts

 BTU (4 ohms, 1/8 power)
 450 BTU/h

 Dimensions (W, H, D)
 430 x 73 x 347 mm

17" x 2 <sup>7</sup>/8" x 13 <sup>5</sup>/8"

 Panel Height
 60 mm / 2 ³/s".

 Weight (net)
 6.8 kg, 15 lbs.

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

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