

ROTEL

Owner's Manual

RX-1052 AM/FM Stereo Receiver






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.



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.

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.

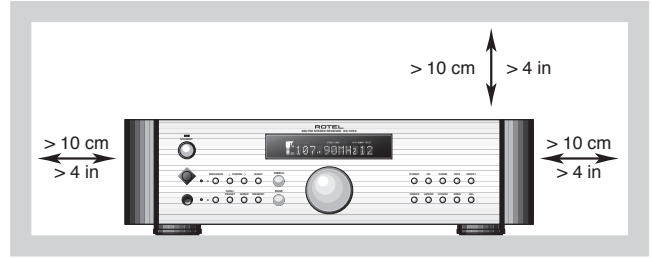
This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

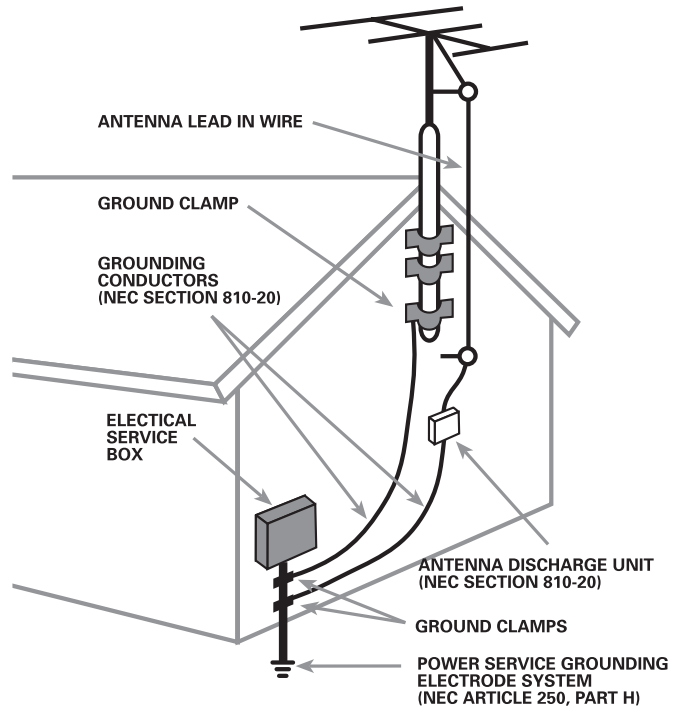
 **This symbol means that this unit is double insulated. An earth or ground connection is not required.**



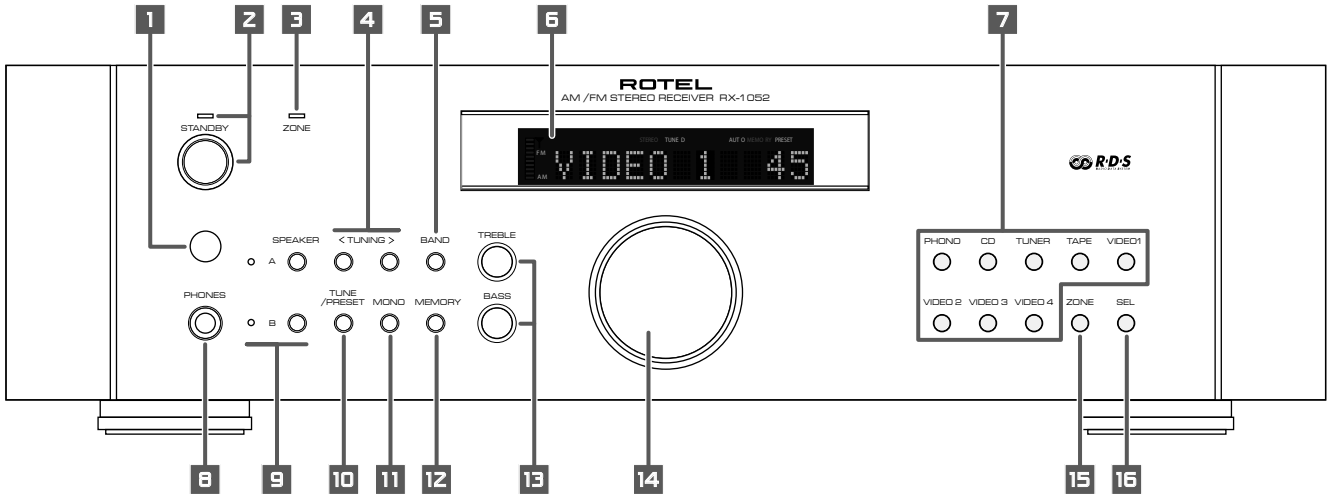
 Rotel products are designed to comply with international directives on the Restriction of Hazardous Substances (RoHS) in electrical and electronic equipment and the disposal of Waste Electrical and Electronic Equipment (WEEE). The crossed wheeled bin symbol indicates compliance and that the products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



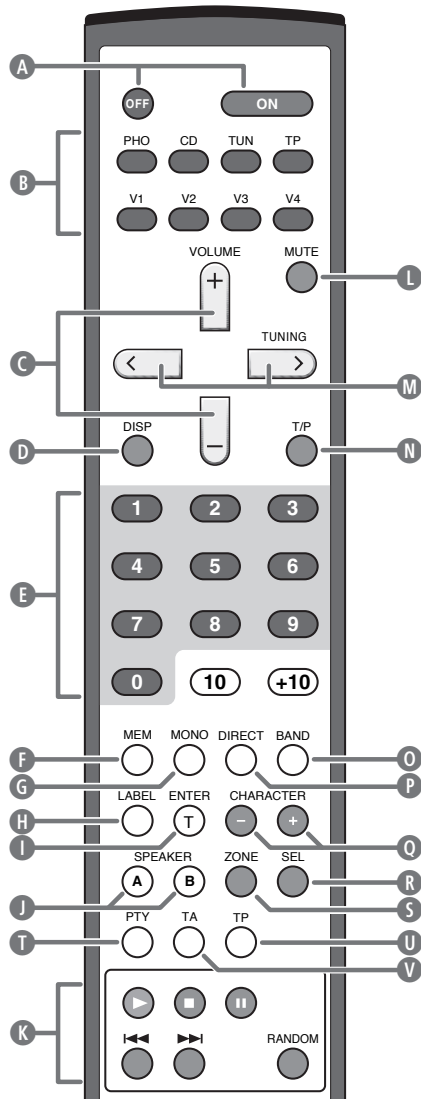
ANTENNA GROUNDING ACCORDING TO NATIONAL ELECTRICAL CODE INSTRUCTIONS SECTION 810: "RADIO AND TELEVISION EQUIPMENT"



1: Front Panel Controls



2: RR-AT96 Remote Control



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.

WARNING: The master power switch is located on the rear panel. The unit must be located in the open area allowing unobstructed access to this power switch.

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 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: 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 defeat grounding and/or polarization safety provisions. 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. 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 stand-by LED indicator will not be lit up to show the power cord is unplugged.

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.

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

Notice

The **COMPUTER I/O connection** should be handled by authorized person only.

FCC Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna. (TV, radio, etc.)
- Increase the separation between the equipment and receiver
- Connect the equipment to an outlet on circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for additional help.

Caution

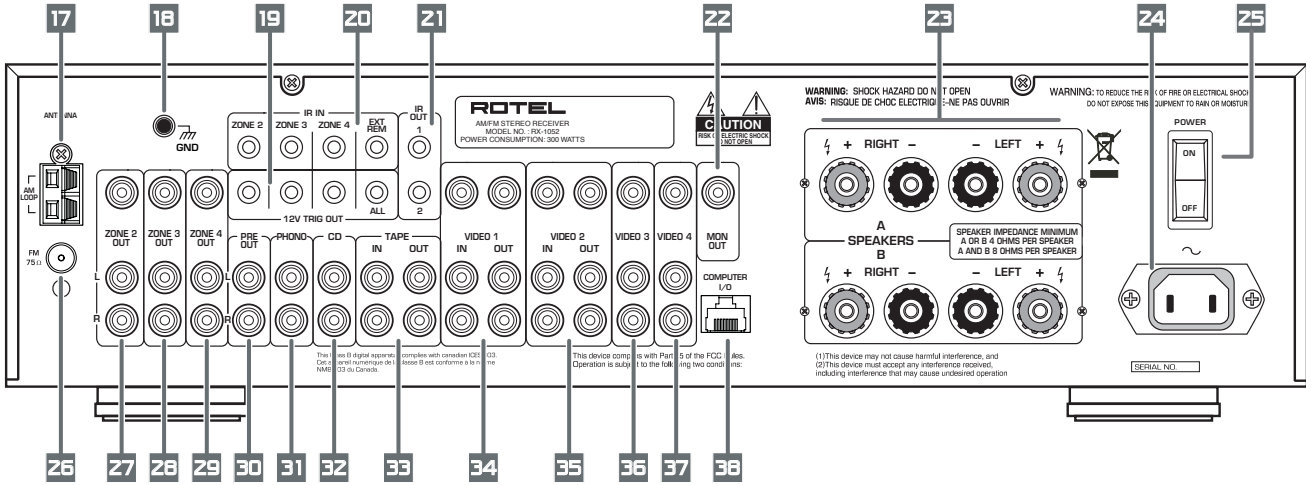
This device complies with part 15 of the FCC Rules operation is subject to the following to conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE TO CATV SYSTEM INSTALLER: Call the CATV system or antenna installer's attention to Article 820-40 of the NEC. This provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical. See installation diagram.

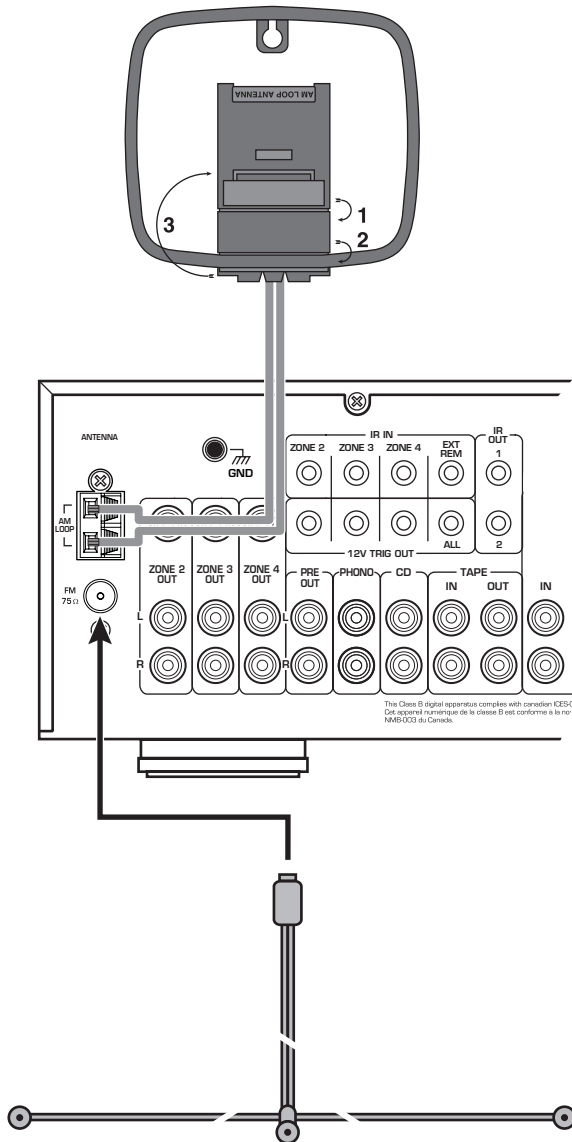
NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against interference in a residential installation. This equipment generates and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause interference to radio or TV communications. There is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the unit and the television tuner.
- Connect the unit to an AC power outlet on a different electrical circuit.
- Consult your authorized Rotel retailer for assistance.

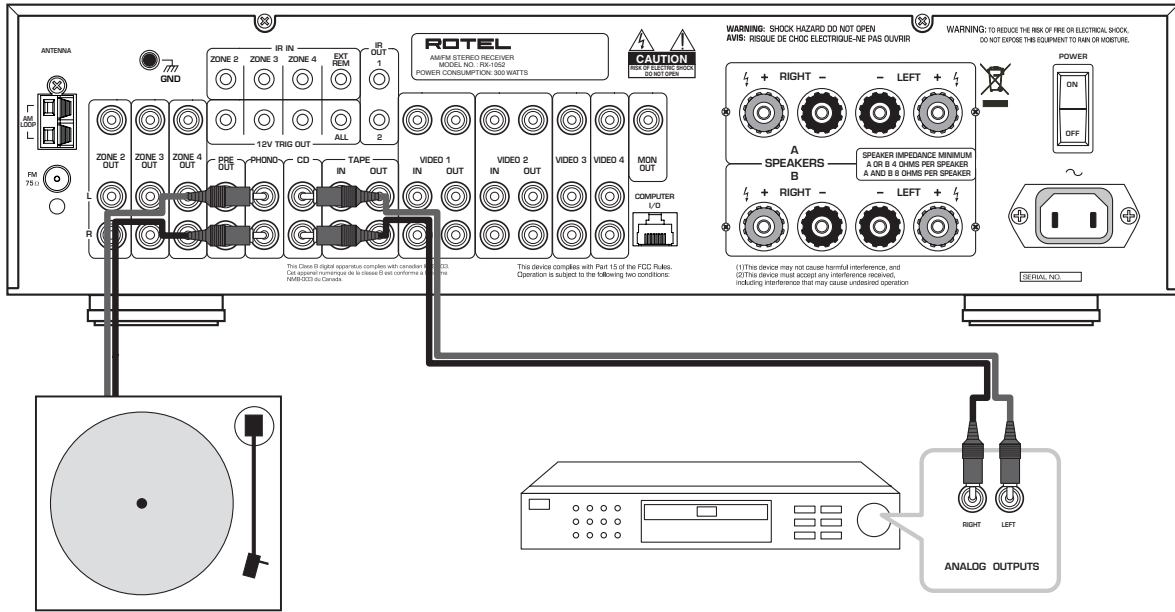
3: Rear Panel Connections



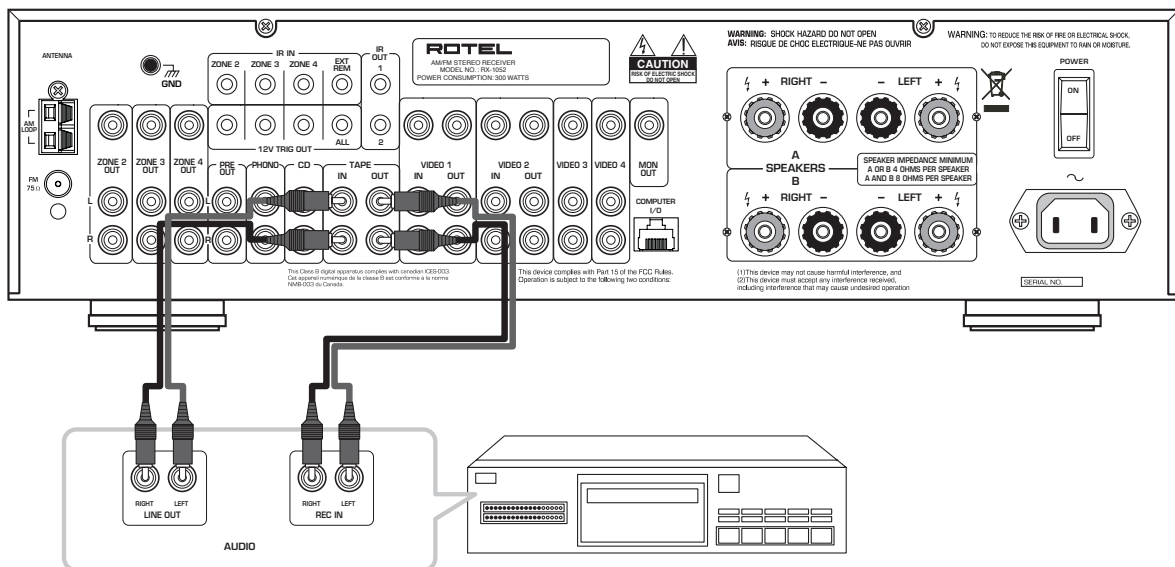
4: Antenna Connections



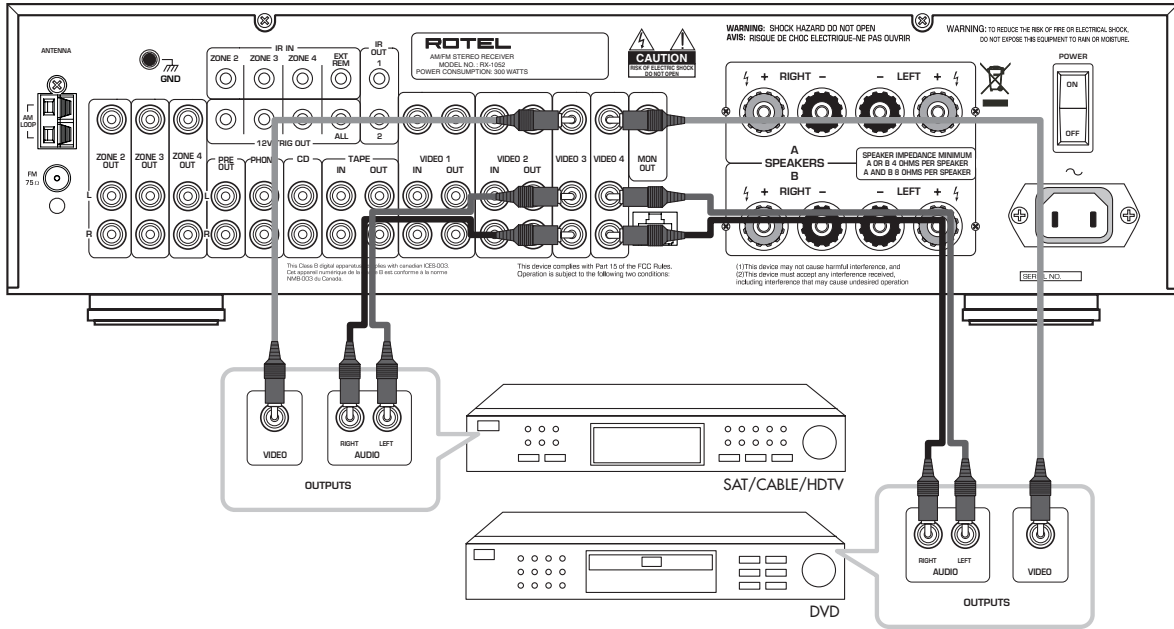
6: CD and Phono



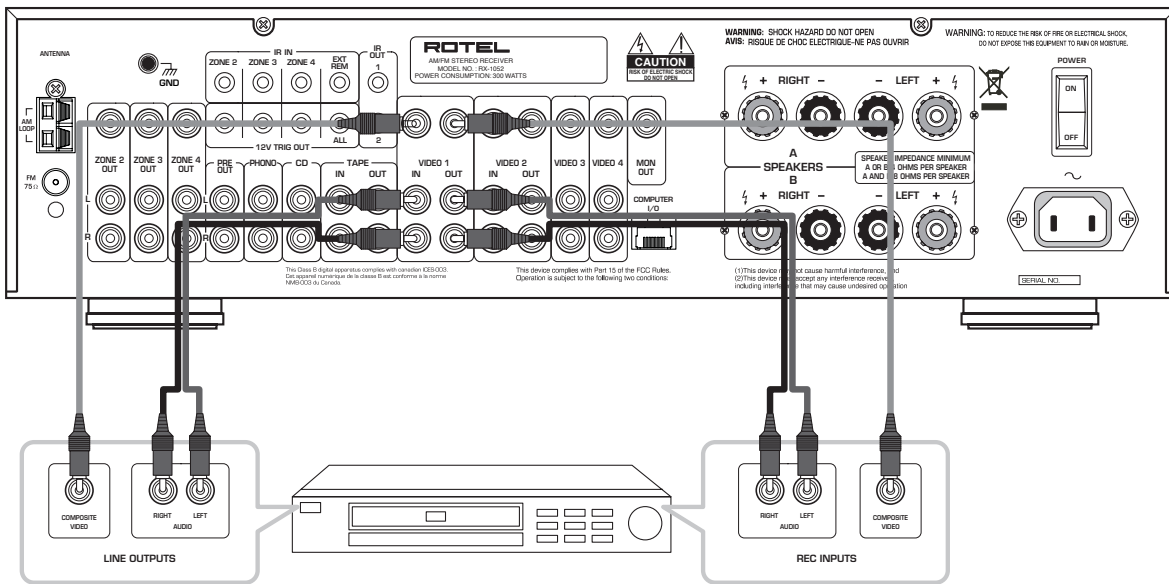
7: Tape



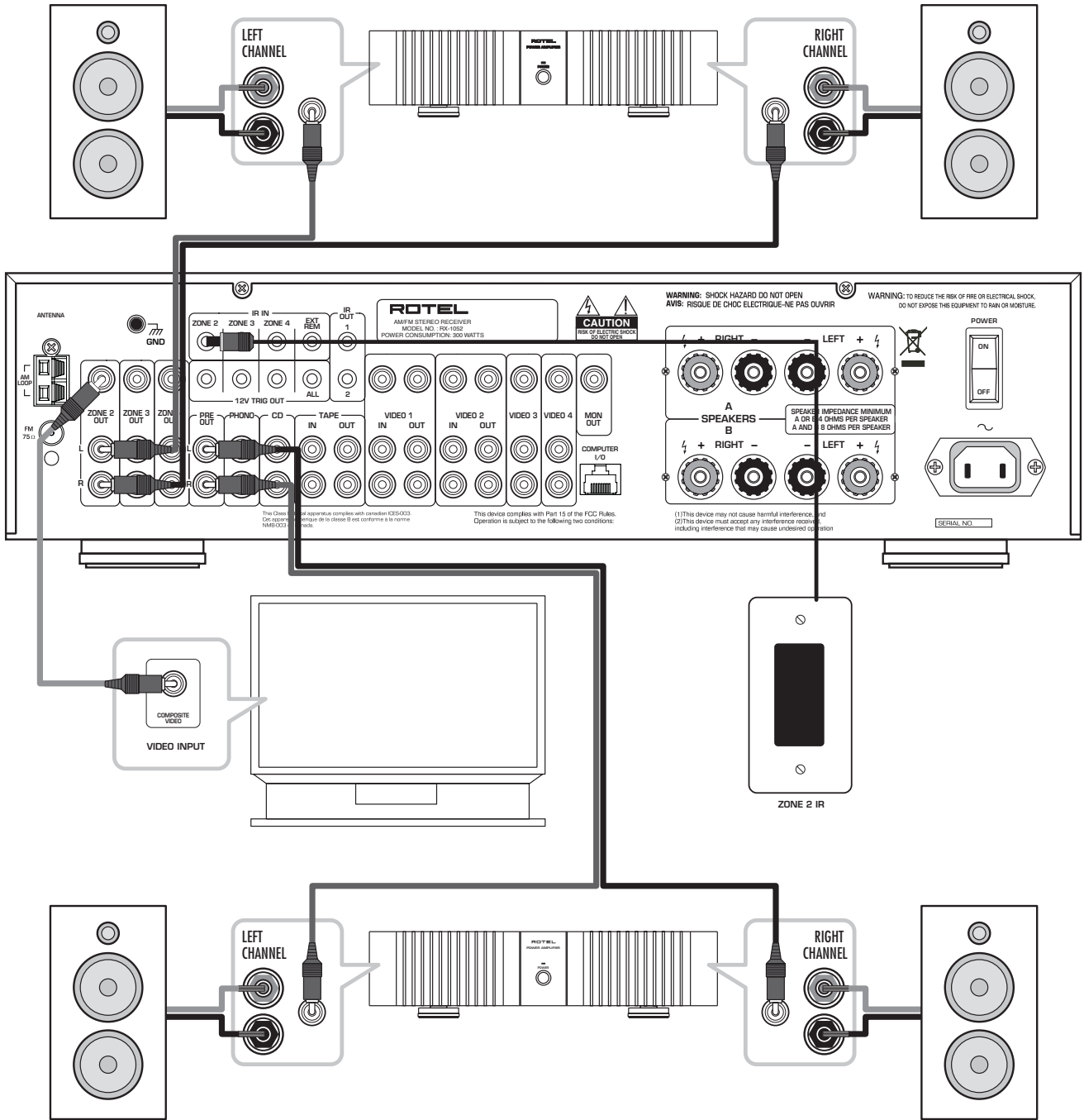
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About Rotel

A family whose passionate interest in music led them to manufacture high fidelity components of uncompromising quality founded Rotel over 45 years ago. Through the years that passion has remained undiminished and the family goal of providing exceptional value for audiophiles and music lovers regardless of their budget, is shared by all Rotel employees.

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

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

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

Getting Started

Thank you for purchasing the Rotel RX-1052 AM/FM Stereo Receiver. The RX-1052 is three products in one:

- Full-featured audio/video control center for analog audio and video source components
- A high-quality AM/FM RDS tuner with 30 station presets, direct access tuning, and auto-tuning.
- A high power 2-channel amplifier.

Key Features

- Rotel's Balanced Design Concept combines advanced circuit board layout, comprehensive parts evaluation, and extensive listening tests for superior sound and long term reliability.
- Independent selection of source inputs for listening and recording.
- Audio and video outputs for three remote zones with independent input selection and volume adjustments for multi-zone custom installations. IR-repeater capability for operation from the remote zone.
- Customizable labels for source inputs.
- A and B speaker outputs.
- Headphone output.
- Composite video inputs for four video sources plus composite video outputs for television monitors in the main room and three remote zones.
- Wireless remote control to operate the RX-1052 plus Rotel CD and DVD players.
- RS-232 port for computer controlled operation.
- Upgradable microprocessor software to accommodate future upgrades.

Unpacking

Remove the unit carefully from its packing. Look for the remote control and other accessories. Save the packing and box as it will protect the RX-1052 if you move or need to return it for maintenance.

Placement

Place the RX-1052 on a solid, dry, level surface away from direct sunlight, excessive heat, high humidity, or strong vibrations.

The RX-1052 can generate considerable heat during normal operation. Do not block its ventilation openings. **Allow a minimum of 10 cm (4 inches) of unobstructed open space around the unit.** If installed in a cabinet, make sure there is adequate ventilation.

Make sure the RX-1052 is close to the other components in your audio/video system and, if possible, place it on its own shelf. This will make initial cable routing, hookup, and any subsequent system changes easier. It also minimizes potential interference or heat buildup from other components.

Make sure there is enough room behind the RX-1052 for easy hookup. Remember, you are connecting many other components to this unit and you'll probably need more space than you think.

Don't stack other objects (components or other items) on top of the RX-1052. Don't let water fall into the RX-1052 as this could damage delicate circuitry.

We suggest you look over the RX-1052's front and rear panels before you start connecting other components. The explanations in this manual will help you get familiar with the unit's connections, features, and controls.

Most functions are duplicated on the front-panel and on the remote. A few are found only on one or the other. Throughout this manual, numbers in gray boxes refer to the RX-1052 illustration at the front of this manual. Letters refer to the RR-AT95 remote illustration. When both appear, the function is found on both the RX-1052 and the remote. When only one appears, that function is found only on the RX-1052 or the remote.

CONNECTIONS

Connecting the RX-1052 to your system is straightforward. Just take your time and check each connection before proceeding to the next.

The RX-1052 includes two pairs of speaker connections to the built-in stereo power amplifier, so that you can drive "A" speakers or "B" speakers. In addition, a composite video output connects the unit to your TV monitor for the display of video sources.

Each of the source components (VCR, TV set-top box, tape recorder, CD player) in the system is connected to the RX-1052 inputs with a pair of standard RCA cables for analog audio. A composite video input is provided for four of the source components.

In addition to the connections for the main system, there are analog audio outputs plus a composite video output for three additional zones. This allows the use of the RX-1052 to distribute audio and video signals to remote locations throughout the house.

The supplied AM and FM antennae are connected to the antenna inputs.

Finally, the AC power cord is plugged into the back panel of the RX-1052 and then into an AC wall outlet.

There are many ways to configure and hookup an audio/video system. It is not possible to cover every configuration in this manual; therefore, we describe the typical connections that will work well in a majority of situations.

NOTE: Do **not** plug any system component into an AC source until all connections have been properly made.

Cable selection

Use standard audio cables with RCA connectors for all analog audio connections. Use the following color code:

Left channel audio: white

Right channel audio: red

For composite video signals, use a single 75 ohm video cable with an RCA connector at each end. Use the following standard color code:

Composite video: yellow

NOTE: Do not use standard audio cables in place of 75 ohm video cables. Audio cables will usually pass the signal, but will degrade the quality.

When making signal connections, follow the color codes carefully at both ends of each cable.

Rear Panel

This section provides a short overview of the connections on the rear panel of the RX-1052. Detailed instructions for hooking up each type of component are provided in the following section.

Phono Inputs ³¹ Phono Ground ¹⁸

These inputs accept left/right analog audio signals from a standard moving magnet phono cartridge and a ground connection for the turntable.

CD Inputs ³²

These inputs accept left and right analog signals from a CD player.

Tape Inputs and Outputs ³³

The RX-1052 provides a set of audio tape connections (labeled TAPE) with a pair of inputs and a pair of record outputs that provide a signal for recording.

VIDEO 1 – 2 Inputs/Outputs ^{34 35}

There are two sets of connections for video source components. Each group includes a pair of RCA analog audio inputs and outputs at the bottom and an RCA composite video input and output at the top. The outputs send audio and video signals for recording to a VCR.

NOTE: These video source input/outputs may also be used for an audio-only source. Simply omit the video connections.

VIDEO 3 – 4 Inputs ^{36 37}

These two audio/video inputs allow connection of additional video components such as a play-only VCR, DVD player, LaserDisc player, or DSS satellite receiver. There are no outputs for sending a record out signal to these components. These video source inputs may also be used for an audio-only source. Simply omit the video connection.

NOTE: When using a Rotel DVD player, connect it to the VIDEO 4 inputs. This allows using the supplied remote to operate the basic transport functions of the Rotel DVD player.

TV Monitor Output ²²

The video output of the RX-1052 sends the video signal to your TV monitor. Connect the TV MONITOR output to an RCA composite video input on your television monitor. Whatever input source is selected on the RX-1052 will appear on screen.

Speaker Outputs ²³

The RX-1052 has a built-in stereo amplifier to power left and right speakers. There are two pairs of connections on the back panel which allow you to connect two pairs of speakers (A and B) and select them with front-panel buttons.

NOTE: The combined speaker impedance must be a minimum of 4 ohms. If you are driving just one pair of speakers (A or B connections), use speakers with a nominal impedance of 4 ohms or higher. If you are driving two pairs of speakers (A and B) simultaneously, use speakers rated at 8 ohms or higher.

Zone 2–4 Outputs ^{27 28 29}

Three sets of output connections distribute stereo audio and composite signals to three remote zones. Each zone has left and right pre-amp level audio outputs plus a composite video output for connection of a TV monitor.

PRE OUT Output ³⁰

The PRE OUT connections provide left and right pre-amp level audio outputs for use with a separate or additional power amplifier in the main room or nearby ("Zone 1").

AM Antenna ¹⁷

The RX-1052 includes a loop antenna to receive AM radio signals. The twin wires from this loop antenna are connected to the AM LOOP connectors.

FM Antenna ²⁶

The RX-1052 is supplied with a T-shaped indoor FM antenna. Connect the attached coax F-type plug to the FM antenna connector on the RX-1052.

AC Input ²⁴

Your RX-1052 is configured at the factory for the proper AC line voltage in the country where you purchased it (USA: 120 volts/60Hz AC or CE: 230 volts /50 Hz AC). The AC line configuration is noted on a decal on the back of your unit.

Plug the supplied cord into the AC INPUT receptacle on the back of the unit.

NOTE: Memorized settings and labels are preserved indefinitely, even if the RX-1052 is disconnected from AC power.

Master Power Switch ²⁵

The large rocker switch on the rear panel is a master power switch. When it is in the OFF position, power to the unit is completely off. When it is in the ON position, the front panel STANDBY and remote control ON/OFF buttons can be used to activate the unit or put it into standby mode.

NOTE: After all connections are completed, the rear panel master power switch should be put in the ON position and usually left in that position.

12V TRIGGER Connections ¹⁹

Many Rotel amplifiers offer the option of turning them on and off using a 12 volt trigger signal sent to them. These four connections provide this 12 volt trigger signal from the RX-1052. When the RX-1052 is activated, a 12 volt DC signal is sent to the amplifiers to turn them on. When the RX-1052 is put in STANDBY mode, the trigger signal is interrupted and the amplifiers turn off.

To use the remote turn on feature, connect one of the RX-1052's 12V TRIG OUT jacks to the 12 volt trigger input of a Rotel amplifier, using a cable with mono 3.5 mm mini-plugs on both ends. The +12 V DC signal appears at the "tip" connector.

There are four 12V TRIG OUT connectors on the back panel of the RX-1052, one for ZONE 2, one for ZONE 3, one for ZONE 4, and one labeled ALL. The outputs for ZONES 2, 3, and 4 send a trigger signal ONLY when the corresponding zone is activated by the RX-1052. The output labeled ALL sends a trigger signal whenever the RX-1052 is activated for any zone, including the main listening room.

IR IN Jacks ²⁰

Four 3.5 mm mini-jacks (labeled ZONE 2, ZONE 3, ZONE 4, and EXT IN) receive command codes from an industry-standard infrared receiver (Xantech, etc.).

EXT IN: The EXT IN jack is used with an outboard IR receiver to duplicate the front panel IR sensor. This feature is useful when the unit is installed in a cabinet and the front panel sensor is blocked or when IR signals need to be relayed to other components.

ZONE 2 - 4: The ZONE 2 - 4 jacks are used with IR repeater systems to receive signals from IR control systems in remote zones and control the RX-1052 only for the corresponding zone. For example, remote control signals sent to the ZONE 2 input control only the ZONE 2 features of the RX-1052. Signals received at any of these inputs and can be relayed to other components.

Consult your authorized Rotel dealer for information on infrared repeater systems and the proper wiring of a 3.5 mm mini-plugs to fit the REM IN jacks.

NOTE: The IR signals from the IR IN jacks can be relayed to source components using external IR emitters or hard-wired connections from the IR OUT jacks. See the following section for additional information.

IR OUT Jacks ²¹

The IR OUT 1 & 2 jacks send IR signals received at the IR IN jacks to an infrared blaster or emitter placed in front of a source component's IR sensor. In addition, the IR OUT jacks can be hard-wired to Rotel CD players, DVD players, or tuners with a compatible connector.

These outputs are used to allow IR signals from Zone 2-4 to be sent to the source components, or to pass along IR signals from an IR repeater in the main room when the sensors on the source components are blocked by installation in a cabinet.

See your authorized Rotel dealer for information on IR emitters and repeater systems.

Computer I/O ³⁶

The RX-1052 can be operated from a computer with audio system control software from third-party developers. This control is accomplished by sending operating codes from the computer via a hard-wired RS-232 serial connection. In addition, the RX-1052 can be updated using special software from Rotel.

The COMPUTER I/O input provides the necessary network connections on the rear panel. It accepts standard RJ-45 8-pin modular plugs, such as those commonly used in 10-BaseT UTP Ethernet cabling.

For additional information on the connections, cabling, software, and operating codes for computer control or updating of the RX-1052, contact your authorized Rotel dealer or Rotel Tech Support.

Making Connections

CD Player ³²

See Figure 6

Connect the left and right analog outputs from the CD player to the AUDIO IN jacks labeled CD (left and right).

There are no video connections for a CD Player.

NOTE: With a Rotel CD player connected to the CD inputs, the supplied remote control can operate the basic transport and numeric keypad functions of the CD player.

DVD Player ^{34 35 36 37}

See Figure 8

DVD connections can be made to the VIDEO 1, 2, 3, or 4 inputs.

Connect the left and right analog outputs from the DVD player to the left and right audio IN jacks of the desired VIDEO 1-4 input.

Connect a composite video cable from the output of the DVD player to the video IN jack.

NOTE: When using a Rotel DVD player, connect it to the VIDEO 4 inputs. This allows you to use the supplied remote control to operate the transport functions of the DVD player.

Cable, Satellite, or HDTV Tuner

34 35 36 37

See Figure 8

TV tuner connections can be made to the VIDEO 1, 2, 3, or 4 inputs.

Connect the left and right analog outputs from the TV tuner to the left and right audio IN jacks of the desired VIDEO 1–4 input.

Connect a composite video cable from the output of the TV Tuner to the video IN jack.

Audio Recorder

33

See Figure 7

Connect the left and right analog outputs from an audio tape deck to the TAPE IN jacks (left and right).

Connect the left/right TAPE OUT jacks to the left/right record inputs on the audio tape deck.

No video connections are required for an audio recording device.

VCR

34 35

See Figure 9

VCR connections can be made to the VIDEO 1 or VIDEO 2 inputs and outputs.

Connect a composite video cable from the video output of the VCR to the desired VIDEO 1 or 2 input.

Connect a composite video cable from the video OUT jack to the VCR video record input.

Connect the left and right analog outputs from the VCR to the left/right audio IN jacks for the VIDEO 1 or 2 input selected above.

Connect the left and right audio OUT jacks to the analog audio record inputs on the VCR.

Phono Turntable

18 31

See Figure 6

Connect the left and right audio output cables of a turntable to the left/right RCA jacks labeled PHONO on the RX-1052. Connect the ground wire from your turntable to the phono ground lug, labeled GND.

TV Monitor

22

See Figure 5

Connect the TV MONITOR *output* to the corresponding *input* on your television monitor, using a composite video cable.

Speakers

23

See Figure 5

There are two sets of binding post connections (one pair for SPEAKERS A and one for SPEAKERS B) which accept bare wire, spade lugs, or banana plug connectors (in some markets).

NOTE: *The combined speaker impedance must be a minimum of 4 ohms. If you are driving just one pair of speakers (A or B connections), use speakers with a nominal impedance of 4 ohms or higher. If you are driving two pairs of speakers (A and B) simultaneously, use speakers rated at 8 ohms or higher.*

Each pair of connectors is color-coded for polarity: red for positive and black for negative. Speakers and speaker wire are also marked for polarity. For proper performance, you must maintain this polarity at all speaker connections. Always connect the positive terminal of each speaker to the corresponding red speaker terminal on the RX-1052 and the negative speaker terminal to the corresponding black connector on the RX-1052.

Route the wires from the RX-1052 to the speakers. Leave enough slack so you can move the components to allow access to the speaker connectors. If you are using banana plugs, connect them to the wires and then plug them into the binding posts. The collars 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 back the insulation from the end of each conductor. Be careful not to cut into the wire strands. Unscrew the binding post collars. Place the connector lug or the twisted bare wire through the hole in the binding post shaft. Turn the collars clockwise to clamp the connector lug or wire firmly in place.

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

Connecting one pair of speakers:

1. Connect the right speaker to the binding posts labeled SPEAKERS A RIGHT.
2. Connect the left speaker to the binding posts labeled SPEAKERS A LEFT.

Connecting a 2nd pair of speakers:

1. Connect the right speaker to the binding posts labeled SPEAKERS B RIGHT.
2. Connect the left speaker to the binding posts labeled SPEAKERS B LEFT.

NOTE: *Installers can make use of the RX-1052's remote speaker switching function to program a learning remote control to switch the speakers on or off as desired.*

AM Antenna 17

See Figure 4

The RX-1052 includes a plastic loop antenna to receive AM radio signals. Remove this antenna from the box and locate it near the RX-1052. It can be tacked to a wall, using the mounting tab provided. Alternatively, you can fold the center portion of the antenna to form a tabletop stand.

Connect the 300 ohm twin-conductor wire from the loop antenna to the push terminals labeled AM LOOP, attaching one wire to each terminal. It does not matter which wire attaches to which terminal, but make sure that the connections are solid and that the two wires do not touch.

You may need to rotate or otherwise reorient the antenna to find the best position.

NOTE: To use an outdoor antenna, connect its 300 ohm twin-conductor wire to the terminals in place of the loop antenna.

FM Antenna 26

See Figure 4

The RX-1052 is supplied with a T-shaped indoor FM antenna. Connect the coax F-type plug to the FM antenna connector on the RX-1052. For best reception, unfold the T-shaped antenna. Eyelets at both ends of the T allow tacking the antenna to a wall, if desired. Experiment with positioning for best reception.

NOTE: To use an outdoor antenna, connect its 75 ohm coax lead wire to the FM connector instead of the indoor wire antenna, only after a professional contractor has installed the antenna system in accordance with local electrical codes.

ZONE Connections

19 20 27 28 29

See Figure 10

The RX-1052 provides three sets of connections for remote zones. Labeled ZONE 2, ZONE 3, and ZONE 4, each set of connections has left and right line level audio outputs and a composite video output.

To connect audio outputs to a remote zone, connect the left and right ZONE audio outputs to the left and right line level inputs on an amplifier for the remote zone.

To connect a TV monitor in the remote zone, connect the ZONE video output to a composite video input on the TV.

For remote control from the remote zone, connect a compatible powered infrared sensor in the remote zone to the corresponding Zone 2, 3, or 4 IR IN connection.

To automatically turn on or off a Rotel amplifier in the remote zone, connect the corresponding Zone 2, 3, or 4 12V TRIG OUT connection to the 12 V Trigger input on the amplifier.

PRE OUT Connections 30

See Figure 10

These output connections are for use when you wish to use a separate additional power amplifier with loudspeakers connected to the RX-1052 for the main room ("Zone 1"), or with a pair of extension speakers for an adjacent area without separate control. Connect the PRE OUT sockets to the Line Input or Main In inputs of the separate power amplifier, in the same way as you would connect the ZONE 2, 3 or 4 sockets to an additional power amplifier for use in another room. Input selection and volume will then be controlled in the normal way by the RX-1052 front panel controls and remote control buttons.

NOTE: When using the PRE OUT sockets, the built-in power amplifier section of the RX-1052 will also continue to function normally, providing output to connected loudspeakers.

USING THE RX-1052

To guide you through the operation of the RX-1052, this section of the manual starts with explaining the basic layouts and functions of the remote control and front panel. Then, we explain the basic operations such as turning the unit on and off, adjusting volume, selecting a source for listening, etc. Following that is a detailed explanation tuning radio stations. Then, come instructions for configuring the RX-1052 for various types of recordings. Finally, there are instructions for additional features and Zone 2 operations.

Throughout this manual, numbers in gray boxes refer to the RX-1052 illustration at the front of this manual. Letters refer to the RR-AT95 remote control illustration. When both appear, the function is found on both the RX-1052 and the remote. When only one appears, that function is found only on the RX-1052 or the remote.

Controls, Buttons and Features

The following is an overview of the controls, buttons, and features of the RX-1052. Details of their use are provided later in this manual.

RR-AT96 Remote Control

The RX-1052 includes a remote control that operates the receiver and is pre-programmed to operate many Rotel CD and DVD players.

Front-panel Display 6

The display on the front panel of the RX-1052 provides information about the status of the unit, tuner reception, and special features. The main portion of the display typically shows the current input source (or radio station frequency).

Icons at the left of the display show the tuning band (AM or FM). Icons across the top assist in tuning radio stations. A TUNED indicator lights when a sufficiently strong station is being received. A STEREO indicator lights when a stereo FM signal is being received.

The display can be turned off, if desired. See the DISP button section for instructions.

Remote Sensor **1**

This sensor receives IR signals from the remote control. Do not block this sensor unless an external IR receiver is used.

STANDBY Button **Z** POWER Switch **Z5**

The front panel STANDBY button activates or deactivates the unit. The rear panel master POWER switch must be in the ON position for the standby function to operate.

ON/OFF Buttons **A**

The power ON and OFF buttons on the remote provide discrete ON/OFF commands duplicating the function of the front panel STANDBY button. Press the ON button to activate the unit; press the OFF button to put the unit into standby mode. The rear panel master POWER switch must be in the ON position for the standby function to operate.

NOTE: Pressing the OFF button turns off the currently selected zone. Press and hold the OFF button to put all zones into standby mode.

VOLUME Knob **14** VOLUME Buttons **C**

The large knob on the front panel and the pair of VOLUME buttons on the remote provide the master VOLUME control, adjusting the output level of all channels simultaneously.

MUTE Button **L**

Push the MUTE button on the remote once to turn the sound off. An indication appears in the front panel. Press the button again to restore previous volume levels.

NOTE: Pressing the volume buttons on the remote also cancels the muting function.

Tone Controls **13**

BASS and TREBLE controls on the front panel increase or decrease the low and high frequency content respectively. Rotate clockwise to increase output and counterclockwise to reduce it. The center 0 position removes the control from the audio path.

NOTE: Bass and treble can also be adjusted from the remote by pressing the ENTER button repeatedly to select bass or treble, and adjusting up or down using the +/- buttons.

Headphones Jack **B**

This jack accepts a standard 1/4 inch stereo headphone plug. Use an adaptor if your headphones have a smaller plug.

NOTE: Inserting a headphone plug does not automatically disable the speaker outputs. Use the SPEAKER buttons described in the next section to turn the speakers on or off during headphone listening.

Speaker Buttons **9 J**

The RX-1052 provides output connections for two pairs of speakers: A and B. Speaker buttons on the front panel or remote control allow you to activate the desired pair(s) of speakers. Press the SPEAKER A button to activate or deactivate the SPEAKER A outputs. Press the SPEAKER B button to activate or deactivate the SPEAKER B outputs.

An LED indicator located to the left of each button lights when that speaker output is activated.

NOTE: For private headphone listening, deactivate both the SPEAKER A and B outputs.

Input Buttons **7 B**

Eight buttons on the right side of the front panel directly select an audio or video input source (PHONO, CD, TUNER, TAPE, VIDEO 1, VIDEO 2, VIDEO 3, VIDEO 4) for listening. The buttons are duplicated on the remote, labeled PHO, CD, TUN, TP, V1, V2, V3, and V4.

Push any of these buttons (or the duplicates on the remote) to select the desired source. You will hear this source and, if you have selected a video source, see its picture on your TV monitor. The front panel display shows the current source selection.

The input source buttons can also be used with the SEL button to select an input to be available at the outputs for recording or for use in remote zones.

ZONE Button **15 S**

The ZONE button, on the front panel or remote, serves as a standby button for the currently selected remote zone, toggling the zone on or off. Select the desired zone using the SEL button described below.

NOTE: Pressing the ZONE button without first specifying a zone with the SEL button, allows Zone 2 control.

A long press of the ZONE button activates the Party mode, selecting the source from the main room for use by all of the remote zones plus the record outputs. A long press of one of the Input source buttons on the remote control also activates the Party mode.

SEL Button **16 R**

Press the SEL button on the front panel or the remote to select a zone for changing the input, adjusting the volume, or turning a remote zone on or off. Repeatedly press the button until the desired zone appears in the front panel: RECORD > ZONE 2 > ZONE 3 > ZONE 4 > MAIN. Once the desired zone appears, you have 10 seconds to make the change. Change the input selection by pressing an INPUT button. When ZONES 2-4 appear, you can also adjust the volume or turn the zone on or off by pressing the ZONE button.

A long press of the SEL button is used to cancel the PARTY mode and return all zones to their last previously selected inputs.

ZONE LED **3**

The ZONE LED lights when a remote zone is activated. The LED also flashes when engaging Party Mode.

DISP Button **D**

A long press on the DISP button on the remote turns the front panel display off.

When receiving FM radio stations which transmit RDS data, the DISP button may be used to cycle through the RDS display modes, to show station name, program type, clock, and scrolling information text.

LABEL Button H

The LABEL button on the remote is used with the ENTER button in programming custom labels for the input buttons. These custom labels appear in the front panel display when an input is selected.

ENTER Button I

The ENTER button on the remote serves two functions.

To adjust the tone settings, repeatedly press the ENTER button until BASS or TREBLE is displayed. Then, use the CHARACTER +/- buttons to increase or decrease the selected tone setting.

The ENTER button is also used following the press of the LABEL button in programming custom labels.

BAND Buttons S O

Press the BAND button on the front panel or the remote to toggle between AM and FM reception.

TUNING Buttons 4 M

The TUNING buttons on the front panel or the remote control provide two different tuning functions, depending on the mode of operation: frequency tuning or preset tuning.

MEMORY Button 12 F

The front panel MEMORY button and the MEM button on the remote are used with the NUMERIC buttons to store station presets.

NUMERIC Buttons E

The NUMERIC buttons on the remote are used to enter the number of a memorized station preset or for direct entry of a station frequency. These buttons are also used for operating Rotel CD and DVD players.

DIRECT Button P

The DIRECT button on the remote is used with the NUMERIC buttons for direct entry of a station frequency in AM/FM tuning.

MONO Button 11 G

The MONO button on the front panel or the remote toggles the FM mode from stereo reception to mono reception.

TUNE/PRESET Button 10
T/P Button N

The front panel TUNE/PRESET or remote control T/P button toggle between FREQUENCY tuning and PRESET tuning modes.

CD/DVD Buttons K

The STOP ■, PLAY ►, TRACK ◀▶, and RANDOM buttons on the remote are used for operating Rotel CD and DVD players. They are not used in operating the RX-1052.

CHARACTER +/- Buttons M

The CHARACTER +/- buttons on the remote have three functions:

They can be used in selecting an input for recording or remote zones when used following a press of the SEL buttons.

They can be used to adjust the TREBLE or BASS following selection of tone controls with the ENTER button.

They can be used to select characters in custom input labels following a press of the LABEL button.

PTY, TP and TA Buttons T U V

These buttons are used for the advanced search options available with the RDS system on some FM broadcasts. See RDS Reception in the Additional Features section for more details.

Basic Operations

This section covers the basic operating controls of the RX-1052 and the remote.

Power and Standby On/OffZ 25 A

The rear panel POWER switch on the RX-1052 is a master power switch. The switch must be in the ON position for the unit to operate. When it is in the OFF position, the unit is fully off and cannot be activated from the front panel or remote control.

In normal operation, the rear panel POWER switch is always left in the ON position. The RX-1052 is activated and deactivated using the front panel STANDBY button or the remote ON/OFF buttons. When activated, the RX-1052 is fully functional and the front panel display illuminated. When deactivated, the unit goes into a standby mode, with minimal power applied to the microprocessor.

NOTE: When the unit has AC power applied and the rear panel POWER switch is on, the front panel STANDBY LED lights, regardless of whether the unit is in standby mode or activated.

The front panel STANDBY button functions as a toggle switch. Press the button to activate the unit; press again to put the unit in standby mode. The ON/OFF buttons on the remote serve the same function, but provide discrete ON (active) or OFF (standby) commands.

NOTE: When using the Zone 2 – 4 capability of the RX-1052, standby is independent for the main room and the remote zones. ON/OFF commands sent from the remote in the main room will not affect the other zones. Pressing the ON/OFF buttons on a remote located in a remote zone will only affect that zone and not the main room. **To switch all zones to standby mode from any room, press and hold the OFF button.** When a remote zone is activated, the Zone LED on the front panel lights.

There are three available power mode options, which may be useful in configuring the RX-1052 for special system configurations. See the *Setting Power Mode* topic for additional details.

Volume Adjustments 14 C

The listening volume of the RX-1052 can be adjusted from the front panel or the remote.

Front Panel: Rotate the front panel VOLUME knob clockwise to increase the volume, counterclockwise to decrease.

Remote: Press the VOL UP button to increase the volume; press the VOL DOWN button to decrease.

With any input other than the Tuner, the Volume setting is displayed as two digits following the input name:

Example: VIDEO 1 45

When adjusting the volume with the tuner input selected, the tuning frequency display is temporarily changed to a volume indication:

Example: VOLUME 45

NOTE: The VOLUME controls can be used to change the volume in the remote zones from the main room. Press the SEL button repeatedly until the desired zone appears in the front panel display, then adjust the volume. After 10 seconds, the VOLUME control reverts to normal operation. The default zone volume is 60.

Muting the Sound **L**

The volume of the RX-1052 can be turned off or muted. Push the MUTE button on the remote once to turn the sound off. A MUTE ON indication appears in the front panel display. Press the MUTE button again or adjust the volume settings to restore output levels.

Selecting Speakers **E J**

The RX-1052 can drive two pair of speakers, designated as Speaker A and Speaker B. The pair of SPEAKER buttons on the front panel (and duplicated on the remote) independently control which speaker outputs, if any, are active. Press the SPEAKER A button to activate or deactivate the SPEAKER A outputs. Press the SPEAKER B button to activate or deactivate the SPEAKER B outputs.

An LED indicator located to the left of each button lights when that speaker output is activated.

NOTE: For private headphone listening, deactivate both the SPEAKER A and B outputs.

Tone Adjustments **I3 G Q**

You can adjust BASS and TREBLE settings from the front panel or the remote.

From the front panel: Turn the BASS or TREBLE controls clockwise to increase the low frequencies or high frequencies.

From the remote: Press the ENTER button repeatedly to select the desired tone adjustment. BASS or TREBLE will appear in the front panel display. Then, press the CHARACTER +/- buttons to increase or decrease the selected setting.

Selecting Inputs

Selecting Listening Input **7 B**

To select any of eight source inputs for listening (and watching), press one of the INPUT buttons on the front panel or the remote. On the front panel the buttons are labeled PHONO, CD, TUNER, TAPE, VIDEO 1, VIDEO 2, VIDEO 3, and VIDEO 4. On the remote, the buttons are labeled PHO, CD, TUN, TP, V1, V2, V3, and V4.

The front-panel display shows the name of the current listening source selection. The labels for VIDEO sources can be customized to match your components.

NOTE: When the TUNER input button is pressed, the frequency of the currently tuned station is displayed. Pressing the button again toggles the display to show the word TUNER instead of the frequency display.

When the CD button on the remote is pushed, the remote can control basic transport and numeric input functions of Rotel CD players. When the V4 button on the remote is pushed, the remote can be used to control basic transport functions of Rotel DVD players. Control functions for CD and DVD players are only functional until a different INPUT button is pressed.

The INPUT buttons can also be used (following a press of the SEL or ZONE buttons) to select an input source signal to be available at the outputs for recording or for use in any of the remote zones.

Selecting an Input for Recording **7 I6 B R**

The RX-1052 allows independent selection of an input source for recording, allowing you to record one source while listening to another. The input signal selected for recording appears at the TAPE OUT and VIDEO 1/VIDEO 2 audio and video outputs.

Press the SEL button. The word REC appears in display. Then, press one of the INPUT buttons within 5 seconds to change the input selection. After 5 seconds with no selection, the INPUT buttons revert to normal operation, selecting a source for listening.

Selecting an Input for the Remote Zones **7 I6 B R Q**

The RX-1052 allows independent selection of an input source for each of the three remote zones (ZONES 2-4), allowing you to listen to different sources in each zone. The input signal selected for a zone appears at the audio and video outputs for that zone.

Press the SEL button repeatedly until the desired zone (Z2, Z3, Z4, MAIN) followed by an input name appears in the front panel display. Then, press one of the eight INPUT buttons within 10 seconds to change the input selection for that zone. Alternatively, you can press the CHARACTER +/- buttons on the remote to step through all of the inputs. After 10 seconds with no selection, the INPUT buttons revert to normal operation, selecting a source for listening.

NOTE: Pressing the ZONE button without first selecting a zone with the SEL button allows control of ZONE 2. You can select an input for ZONE 2 within ten seconds.

Selecting the Same Input for all Outputs **I5 I6 R S**

You may wish to have the same input for listening, recording, and all of the remote zones. The RX-1052 makes this configuration (called Party Mode) easy by linking the inputs for recording and remote zones to the input selected for listening. When linked, changing the input selection for listening will automatically change the input for recording and remote zones.

To activate Party Mode, press and hold one of the remote control Input buttons at main room or press and hold the ZONE button for 3 seconds. The word PARTY appears in the display and the ZONE LED flashes for ten seconds. The record input selection and all remote zone input selections will be displayed as "SOURCE", indicating that they are linked to the input selected for listening. While in PARTY mode, a "P" indicator appears in the display.

To cancel Party mode, press and hold the SEL button for at least 3 seconds. Party Mode is cancelled as indicated by the temporary display of the words PARTY OFF in the front panel display. The recording input and the inputs for all remote zones revert to their last previous selection, no longer linked to the listening input.

You can also cancel the link for just the record output or for one individual zone by selecting a different input for that output. In this case, the input selection for the unchanged record output or remote zones remained linked to the listening input selection. Any source change cancels the "P" indicator in the display.

AM/FM Tuning

The RX-1052 features a digital synthesized AM/FM tuner and 30 station presets. The unit offers a wide range of tuning options. Here is an overview of the tuning options (more detailed information is provided in subsequent sections of this manual):

- **Manual frequency tuning** tunes up or down to the next station frequency (when in frequency tuning mode). Press and release a TUNING button to tune.
- **Direct frequency tuning** lets you enter the desired station frequency digits. Press the DIRECT button and enter the digits using the NUMERIC buttons.
- **Automatic frequency search tuning** searches up or down to find the next receivable broadcast signal. Press and hold a TUNING button for at least one second to search up or down.
- **Station preset tuning** lets you directly enter the number of a memorized station preset. Enter the number of the memorized preset using the NUMERIC buttons.
- **Preset tuning** jumps up/down to the next memorized station preset. When in PRESET mode, press a TUNING button to select the next station preset. Press the TUNE/PRESET button on the front panel or the T/P button on the remote to toggle between preset and frequency tuning modes.

NOTE: The RX-1052 comes configured for tuning in the market where you purchased it (N. America or Europe). To change this default setting, see the Setup section of this manual.

Selecting AM or FM **E** **O**

Press a BAND button on the front panel or remote to toggle between AM and FM reception. An indicator in the front-panel display confirms your choice and the frequency of the currently tuned station is shown.

Tuning Stations **4** **M**

The TUNING buttons provide three different tuning functions, depending on the mode of operation.

In the normal FREQUENCY tuning mode, press a TUNING button and release to manually jump to the next station frequency, regardless of whether or not a station is broadcasting on that frequency. For auto frequency search tuning, press and hold the TUNING button for approximately one second. An AUTO indicator will appear in the front-panel display and the tuner begins scanning up or down through the frequencies until the next available signal is detected. If this is not the desired station, repeat the automatic tuning procedure to find the next station. Weak stations will be skipped during auto tuning.

In the PRESET tuning mode, press a TUNING button and release to jump to the next memorized station preset.

NOTE: Toggle between FREQUENCY and PRESET modes by pressing the TUNE/PRESET button on the front panel or the T/P button on the remote.

Several indicators in the front-panel display assist tuning. A large display shows the tuned frequency. A TUNED indicator lights when a sufficiently strong signal is received. A STEREO indicator lights when a stereo FM signal is received.

Using Station Presets **I** **Z** **E** **F**

The RX-1052 can store 30 station presets for recall at any time using the NUMERIC buttons on the remote. To memorize a station:

1. Tune to the desired station, AM or FM.
2. Press the front-panel MEMORY button or MEM button on the remote. A MEMORY indicator will flash for five seconds in the front-panel display.
3. While the MEMORY indicator is flashing, press the number of the preset where you wish to store the station frequency. For example, to memorize the station as preset 3, press the 3 button. To memorize preset 15, press the 1 button and the 5 button.
4. A previously stored frequency is erased from memory when a new frequency is memorized for the same preset number.

To tune to a memorized station, press the preset number on the NUMERIC buttons.

NOTE: If the TUNER is not already the selected input, first select the tuner input and then enter the desired PRESET number.

The NUMERIC buttons can also be used for direct access tuning (see next section).

Frequency Direct Tuning **E** **P**

If you know the frequency of the desired station, you may tune it directly using the DIRECT button and the NUMERIC buttons on the remote control.

1. Press the DIRECT button on the remote to change the NUMERIC buttons from station preset to Frequency Direct mode. The station frequency in the front-panel display will change to a series of four bars, representing the digits of a station frequency, with the first bar flashing.
2. Enter the first digit of the station frequency using the NUMERIC buttons. The digit will appear in the frequency display and the second bar will flash. Enter the remaining digits of the frequency. When all of the necessary digits have been entered, the receiver will tune to the displayed station frequency. Note that entering a station frequency is slightly different for the USA and Europe:

In the USA:

FM87.50MHz Press: 8>7>5

FM101.90MHz Press: 1>1>9

AM1410kHz Press: 1>4>1

In Europe:

FM87.50MHz Press: 8>7>5>0

FM101.90MHz Press: 1>1>9>0

AM1413kHz Press: 1>4>1>3

Selecting FM Mono **I** **G**

The MONO button toggles the FM mode from stereo reception to mono reception. In stereo mode, a stereo signal will be heard if the station is broadcasting a stereo signal and there is sufficient signal strength. An ST indicator will light in the front-panel display. In mono mode, a mono signal will be heard even if the station is broadcasting a stereo signal.

NOTE: Switching to mono mode can improve the reception of weak or distant FM signals. Less signal strength is required for clean mono reception than for stereo reception.

Additional Features

Turning the Display On/Off **D**

To turn the front panel display on or off, press and hold the DISP button on the remote control. When the display is off, pressing any control button turns the display on for five seconds.

RDS Reception **E D T U V**

RDS (the Radio Data System) allows FM broadcasters to transmit encoded information along with the radio signal. This data signal is decoded by an RDS-equipped receiver such as the RX-1052 and can provide a range of informational features including:

- A display of the station's identifying name (e.g. BBC1).
- A display of the station's program content (e.g. ROCK or NEWS).
- Traffic information broadcasts.
- A scrolling text display for announcements or information.

RDS broadcasting has been widely available in European markets for many years, and more recently has become widespread in the USA (where it was previously referred to as RBDS). Ask your authorized Rotel dealer for information on RDS broadcasting in your area.

There are five display options when the tuned station is broadcasting RDS data and the RDS indicator in the display is lit. Press the DISPLAY button **D** to step through the five available options:

1. Standard FREQUENCY display.
2. PROGRAM SERVICE name. This is typically the station's call letters, such as BBC1. If the current station is not broadcasting an RDS signal, the display will show "NO NAME DATA".
3. PROGRAM TYPE. This is a description of the station's content from a standardized list of program types in each market. If the station is not broadcasting an RDS signal, the display will show "NO PTY DATA".
4. CLOCK TIME. A time and date display broadcast by the station. If the station is not broadcasting an RDS signal, the display will show "NO TIME DATA".
5. RADIO TEXT. Additional scrolling text messages broadcast by the station. If the station is not broadcasting an RDS signal, the display will show "NO TEXT DATA".

In addition, RDS provides several advanced search features including:

- Search for a station with the desired program content (PTY). **T**
- Search for traffic information (TP). **U**
- Search for stations broadcasting special traffic announcements (TA). **V**

The **PTY search function** scans for RDS stations broadcasting a particular type of program.

1. Press the PTY button **T**. The current RDS program content type appears in the display.
2. If desired, change to a different PROGRAM TYPE using the DOWN/UP buttons to scroll through the list.
3. Press the PTY button a second time within 5 seconds. The receiver will attempt to find an RDS station broadcasting the selected type of program. If the button is not pressed within 5 seconds after selecting a program type, the PTY function will be cancelled.
4. If no station is located for the desired content type, the receiver will return to the last previously tuned station.
5. Cancel the PTY function by pressing any button (except MONO).

The TP Button searches for an RDS station broadcasting traffic information programming:

1. Press the TP button **U**. The receiver will attempt to find an RDS station broadcasting the traffic programming.
2. If no station is located, the receiver will return to the last previously tuned station.
3. Cancel the TP function by pressing any button (except MONO).

The TA Button searches for an RDS station broadcasting special traffic announcements:

1. Press the TA button **V**. The receiver will attempt to find an RDS station broadcasting traffic announcements.
2. If no station is located, the receiver will return to the last previously tuned station.
3. Cancel the TA function by pressing any button (except MONO).

NOTE: The RDS features are entirely dependent on the broadcaster sending encoded signals. Thus, they will only be available where RDS is currently implemented and where stations are broadcasting these data signals. If there are no RDS stations in your area, the RX-1052 will function as a standard radio receiver.

Controlling other Rotel Components **E B O K**

The STOP **■**, PLAY **▶**, TRACK **◀▶▶▶**, RANDOM, and NUMERIC buttons on the remote operate Rotel CD and DVD players.

To control a CD player: Press the CD INPUT button on the remote to select the CD as the active input. The transport, RANDOM, and NUMERIC buttons control the CD player until a different INPUT button is selected.

To control a DVD player: Press the V4 INPUT button on the remote to select the DVD as the source. The transport, RANDOM, and NUMERIC buttons control the DVD player until a different INPUT button is selected. Note that the DVD player must be connected to the V4 inputs for this feature to function properly.

Custom Setup Procedures

Custom Labels **H I Q**

You can program the RX-1052 to display custom names (up to seven characters long) for each of the source inputs. For example, you could relabel VIDEO 1 as "VCR" or VIDEO 2 as "DVD". To program custom labels:

1. Select the source input you wish to relabel. Its name appears in the display.
2. Press and hold the LABEL button on the remote until the characters in the display change to blinking solid blocks.
3. Use the CHARACTER +/- buttons on the remote to scroll through the character set. When the desired character is displayed, press the ENTER button on the remote to proceed to the next character.
4. Repeat the Step 3 to enter the remaining characters. After the last character is programmed, the new name is saved automatically.

When the source is selected, the original label (VIDEO 1, VIDEO 2, etc.) appears briefly, followed by the custom label.

Setting the Tuner Region

7 9 10 11

The AM/FM tuner is configured at the factory for the operation in the region where you purchased the unit: the USA or Europe. Should you need to change this setting:

1. With the RX-1052 on, press the SPKR B, TUNE/PRESET, and MONO buttons on the front panel simultaneously.
2. Use the CD and VIDEO 3 buttons on the front panel as up/down cursor keys to scroll through the options until the front panel display reads "BAND USA" or "BAND EUR".
3. Use the VIDEO 2 and VIDEO 4 buttons on the front panel as left and right cursor keys to change the band setting in the display to the desired choice: USA or EUR (Europe).
4. After making the selection, use the CD and VIDEO 3 buttons on the front panel as up/down cursor keys to scroll through the options until the word SAVE is displayed.
5. Use the VIDEO 2 and VIDEO 4 buttons on the front panel as left and right cursor keys to select SAVE YES to store the new settings and exit.

If you do not wish to save the new setting, repeat step 5, but select SAVE NO. Then use the CD and VIDEO 3 buttons to scroll through the options until EXIT is displayed. Then use the VIDEO 2 and VIDEO 4 buttons to select YES if you want to leave the Setup Menu, or NO if you want to make additional changes in the Setup Menu.

Setting Power Mode

7 9 10 11

The RX-1052 provides three optional power on settings that may be useful in certain system configurations where the unit is plugged into a switched AC power outlet:

STANDBY: With the default STANDBY setting, the unit powers up in standby mode when AC is applied and the rear panel POWER button is ON. The unit must be activated using the front panel STANDBY button or the remote ON/OFF buttons.

DIRECT: With the DIRECT setting, the unit is fully activated when AC power is applied and the rear panel POWER button is ON; however, it may be put in standby mode using the front panel STANDBY button or the remote ON/OFF buttons.

ALWAYS-ON: In ALWAYS-ON mode, the unit remains fully active whenever AC is present and the rear panel POWER button is ON; the front panel STANDBY button and the remote ON/OFF buttons are disabled and the unit cannot be put in standby mode.

To change the setting:

1. With the RX-1052 on, press the SPKR B, TUNE/PRESET, and MONO buttons on the front panel simultaneously.
2. Use the CD and VIDEO 3 buttons on the front panel as up/down cursor keys to scroll through the options until the front panel display reads "PWR ALWAYON" or "PWR DIRECT" or "PWR ST BY".
3. Use the VIDEO 2 and VIDEO 4 buttons on the front panel as left and right cursor keys to change the setting in the display to the desired choice.
4. After making the selection, Use the CD and VIDEO 3 buttons on the front panel as up/down cursor keys to scroll through the options until SAVE is displayed.
5. Use the VIDEO 2 and VIDEO 4 buttons on the front panel as left and right cursor keys to select SAVE YES to store the new settings and exit.

If you do not wish to save the new setting, repeat step 5, but select SAVE NO. Then use the CD and VIDEO 3 buttons to scroll through the options until EXIT is displayed. Then use the VIDEO 2 and VIDEO 4 buttons to select YES if you want to leave the Setup Menu, or NO if you want to make additional changes in the Setup Menu.

Zone Setup Procedures

Setting a Remote Zone Maximum Volume

7 9 10 11

You can set a maximum volume level for each remote zone.

1. With the RX-1052 on, press the SPKR B, TUNE/PRESET, and MONO buttons on the front panel simultaneously.
2. Use the CD and VIDEO 3 buttons on the front panel as up/down cursor keys to scroll through the options until the front panel display reads "Z2 MAX", "Z3 MAX" or "Z4 MAX".
3. Adjust the volume control on the front panel or remote to set the maximum volume level for the zone. The new setting appears in the display.

4. After setting the maximum volume for the zone, use the CD and VIDEO 3 buttons on the front panel as up/down cursor keys to scroll through the options until SAVE is displayed.
5. Use the VIDEO 2 and VIDEO 4 buttons on the front panel as left and right cursor keys to select SAVE YES to store the new settings and exit.

If you do not wish to save the new setting, repeat step 5, but select SAVE NO. Then use the CD and VIDEO 3 buttons to scroll through the options until EXIT is displayed. Then use the VIDEO 2 and VIDEO 4 buttons to select YES if you want to leave the Setup Menu, or NO if you want to make additional changes in the Setup Menu.

Setting a Remote Zone Turn-on Volume

7 9 10 11

You can set a turn-on volume level for each remote zone. Whenever the zone is turned on the volume level will be at the level you set.

1. With the RX-1052 on, press the SPKR B, TUNE/PRESET, and MONO buttons on the front panel simultaneously.
2. Use the CD and VIDEO 3 buttons on the front panel as up/down cursor keys to scroll through the options until the front panel display reads "Z2 T-ON", "Z3 T-ON" or "Z4 T-ON".
3. Adjust the volume control on the front panel or remote to set the turn-on volume level for the zone. The new setting appears in the display.
4. After setting the turn-on volume for the zone, use the CD and VIDEO 3 buttons on the front panel as up/down cursor keys to scroll through the options until SAVE is displayed.
5. Use the VIDEO 2 and VIDEO 4 buttons on the front panel as left and right cursor keys to select SAVE YES to store the new settings and exit.

If you do not wish to save the new setting, repeat step 5, but select SAVE NO. Then use the CD and VIDEO 3 buttons to scroll through the options until EXIT is displayed. Then use the VIDEO 2 and VIDEO 4 buttons to select YES if you want to leave the Setup Menu, or NO if you want to make additional changes in the Setup Menu.

NOTE: You can also adjust the volume level for the remote channels using the Setup Menu. Follow step 1 shown above. Then in step 2 select "Z2 VOL", "Z3 VOL" or "Z4 VOL". However it is easier to make zone volume adjustments by using the SEL button on the front panel. See the "Controlling Remote Zones from the Main Room" section later in this manual.

Setting a Remote Zone for a Fixed or Variable Volume Level

You can set each remote zone to have either a variable or fixed volume. If a zone is set for a fixed volume level you cannot adjust the volume level using the Whenever the zone is turned on the volume level will be at the level you set.

1. With the RX-1052 on, press the SPKR B, TUNE/PRESET, and MONO buttons on the front panel simultaneously.
2. Use the CD and VIDEO 3 buttons on the front panel as up/down cursor keys to scroll through the options until the front panel display reads "Z2 VOL", "Z3 VOL" or "Z4 VOL".
3. If you are setting the zone for a fixed volume level, adjust the volume control on the front panel or remote to set the volume level for the zone. The new setting appears in the display.
4. Use the VIDEO 2 and VIDEO 4 buttons on the front panel as left and right cursor keys to select "FIX" or "VARI".
4. Use the CD and VIDEO 3 buttons on the front panel as up/down cursor keys to scroll through the options until SAVE is displayed.
5. Use the VIDEO 2 and VIDEO 4 buttons on the front panel as left and right cursor keys to select SAVE YES to store the new settings and exit.

If you do not wish to save the new setting, repeat step 5, but select SAVE NO Then use the CD and VIDEO 3 buttons to scroll through the options until EXIT is displayed. Then use the VIDEO 2 and VIDEO 4 buttons to select YES if you want to leave the Setup Menu, or NO if you want to make additional changes in the Setup Menu.

Restoring the Original Labels and Default Settings

To clear all custom labels and restore the original defaults:

1. With the RX-1052 on, press the SPKR B, TUNE/PRESET, and MONO buttons on the front panel simultaneously.
2. Use the CD and VIDEO 3 buttons on the front panel as up/down cursor keys to scroll through the options until the word SAVE is displayed.
3. Use the VIDEO 2 and VIDEO 4 buttons on the front panel as left/right cursor keys to change from SAVE NO to SAVE YES to restore all default settings and labels.

CAUTION: This procedure deletes all custom labels and station presets.

Multi Zone Operation

The RX-1052 provides multi-room capability, allowing you to enjoy music and operate the system in three remote zones (ZONES 2, 3, and 4) in addition to the main room. From the remote zones, you can select a source component (independent from the source playing in the main room), adjust the volume level in the remote zone, and operate the source components.

To use the multi zone capability, you need additional components: a pair of speakers installed in each remote zone, an amplifier to drive them, an optional TV monitor for video signals, and a third-party IR repeater system.

Remote zones can be controlled from the main room using RX-1052's ZONE and SEL buttons and the remote control +/- buttons. Operation from the remote zone requires an infrared repeater system (Xantech, Niles, etc.) which relays infrared remote control commands from remote to the ZONE 2-4 IR IN connectors on the back of the RX-1052.

Several points about multi zone function:

- The remote control supplied with the RX-1052 will operate the remote zones if used with a repeater system from the remote zone. It can also be programmed to operate Rotel CD and DVD players via the RX-1052's IR OUT jack.
- Any source component connected to the RX-1052's inputs can be sent to the Zone 2 - 4 outputs. EACH ZONE operates independently. You can select a different source or adjust the volume in one zone without affecting the MAIN outputs or the other zones in any way.
- Avoid sending the same infrared command to the RX-1052 front panel sensor and a remote zone repeater at the **same** time. This means that remote zones **must** be in a different room from the RX-1052.

Remote Zone Power On/Off

Once master power is applied to the unit by pressing the rear panel POWER switch, the RX-1052 provides independent power on/off operation for both zones. Pressing the remote control ON/OFF buttons in the main room activates or deactivates the RX-1052 in the main room only and has no effect on the remote zones. Conversely, activating or deactivating a remote zone has no effect on the main listening room or the other zones.

To turn off all zones, press and hold the OFF button. Placing the rear panel master POWER switch in the OFF position completely shuts off the unit, for all zones.

NOTE: For proper power on and off operation with Zone 2, the RX-1052's power mode should be set to the factory default STANDBY setting or to the DIRECT setting using the Setting Power Mode procedure.

Controlling Remote Zones from the Main Room

You can control Zones 2 - 4 from the main room using front panel or remote control buttons to activate or deactivate a zone, change inputs, and adjust the volume. Controlling a remote zone from the main room is accomplished by pressing the SEL button, putting the RX-1052 in multi zone control mode temporarily. Press the button repeatedly until the desired zone is shown in the front panel display, during which time you can use the front panel VOLUME control, INPUT buttons, or +/- buttons to change the zone settings.

To turn a zone on or off:

1. Press the front panel SEL button repeatedly until the desired zone is shown in the display (Z2, Z3, Z4 or MAIN).
2. Within 10 seconds, press the ZONE button to toggle the remote zone on or off.
3. Following 10 seconds with no commands, the RX-1052 reverts to normal operation.

When a remote zone is activated, the front panel ZONE LED lights.

NOTE: Pressing the ZONE button without first selecting a zone with the SEL button provides control of ZONE 2.

To change the input source for a zone:

1. Press the front panel SEL button repeatedly until the desired remote zone (or MAIN) is shown in the display.
2. Within 10 seconds, press one of the INPUT buttons to select a new source. The name of the selected source appears in the display.
3. Instead of pressing an INPUT button, you can also push the CHARACTER +/- buttons on the remote to step through the inputs or turn the zone off. Select the "SOURCE" option to link the input for the selected zone to the input used for listening in the main room. When linked, changing the input in the main room will automatically change it in the remote zone, too.
4. Following 10 seconds with no commands, the RX-1052 reverts to normal operation.

To change a zone volume level:

1. Press the front panel SEL button repeatedly until the desired remote zone is shown in the display.
2. Within 10 seconds, adjust the volume control on the front panel or remote to change the zone output level. The new setting appears in the display.
3. Following 10 seconds with no commands, the RX-1052 reverts to normal operation.

NOTE: If you have set a Maximum Volume for a zone as described in the "Setting a Remote Zone Maximum Volume" section of this manual, you will not be able to adjust the volume of the zone above the set maximum. You will also not be able to adjust the volume if the zone has been configured for a fixed volume level.

Controlling a Zone from the Remote Location **A B C Q**

With a properly configured IR repeater system, you can control of each zone using the RX-1052 remote from the remote location. You can select and operate a source, adjust the volume, and turn the zone on or off. If the tuner is not in use for the main room, you can also tune AM/FM stations from the remote location. Whatever commands you send from the remote zone will change that zone and only that zone, just as if you were controlling a totally independent audio system in that room. These changes will have no effect on the main listening room (except for shared sources).

NOTE: It is not possible to control the RDS function on FM broadcasts from zone 2, 3 or 4.

To turn a zone on or off, press the ON/OFF buttons on the remote. To adjust the volume, press the VOLUME buttons on the remote. To select a different analog input source, press one of the INPUT buttons on the remote. You can also use the CHARACTER +/- buttons to step through the source inputs. Select the "SOURCE" option to link the input for the selected zone to the input used for listening in the main room. When linked, changing the input in the main room will automatically change it in the remote zone, too.

NOTE: When a remote zone is activated, the front panel ZONE LED lights.

MORE INFORMATION

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 RX-1052'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

The unit does not turn on.

- Make sure the power cord is plugged into the rear panel and a live AC wall outlet.
- Make sure the rear panel POWER switch is in the ON position.

No sound from any input.

- Make sure that MUTING is off and VOLUME is turned up.
- Make sure that speaker outputs are connected to the speakers and that there are no shorted wires.
- Make sure source inputs are connected and configured correctly.

No video output on TV monitor.

- Make sure that the TV monitor is connected properly.

Clicking or popping sounds when switching inputs.

- The unit uses relay switching to preserve maximum sound quality. The mechanical clicking of the relays is normal.

Controls do not operate.

- Make sure that fresh batteries are installed in the remote.
- Make sure that the IR sensor on the front panel is not blocked. Aim the remote at the sensor.
- Make sure the sensor is not receiving strong IR light (sunlight, halogen lighting, etc.)
- Restore all default settings and labels.
- Unplug the unit from the AC outlet, wait 30 seconds, and plug it back in to reset.

Front Panel Display not illuminated:

- Toggle the display on or off by pressing the DISP button on the remote.
- Check the illumination of all display elements by pressing and holding the front panel SPEAKER B button, the BAND button simultaneously, while pressing the rear panel POWER switch to the ON position. Cancel the illumination check by pressing the front panel STANDBY button.

Specifications

Audio

Continuous Amplifier Power

100 watts/channel
(20–20k Hz, <0.05% THD, 8 ohms)

Total Harmonic Distortion

<0.05% at rated power

Intermodulation Distortion (60 Hz:7 kHz)

<0.05% at rated power

Frequency Response

Line Level: 10 Hz - 70 kHz, ± 3 dB
Phono: 20 Hz - 20 kHz, ± 1 dB

Signal to Noise Ratio (IHF "A" weighted)

Line Level: 92 dB
Phono: 74 dB

Input Overload

Line Inputs: 5 V
Phono Inputs: >120 mV

Preamplifier Output Voltage

1.0 V (200 mV Input)

Input Sensitivity/Impedance

Line Level: 200 mV/47 kohms
Phono: 2.5 mV/47 kohms

Tone Controls (Bass/Treble)

± 8 dB at 100 Hz/10 kHz

Video

Frequency Response

3 Hz-10 MHz, ± 3 dB

Signal to Noise Ratio

45 dB

Input Impedance

75 ohms

Output Impedance

75 ohms

Output Level

1 volt

FM Tuner

Usable Sensitivity

14.2 dBf

50dB Quieting Sensitivity

20.2 dBf (mono)
45.3 dBf (stereo)

Signal to Noise Ratio (at 65 dBf)

70 dBf (mono)
65 dBf (stereo)

Harmonic Distortion (at 65 dBf)

0.3% (mono)
0.5% (stereo)

Frequency Response

30 Hz-14 kHz, ± 1.5 dB

Capture Ratio

2.0 dB

Alternate Channel Selectivity

47 dB (± 400 kHz)

Spurious Response Ratio

80 dB

Image Response Ratio

65 dB

IF Response Ratio

80 dB

AM Suppression Ratio

52 dB

Stereo Separation (100Hz/1 kHz/10 kHz):

40 dB/45 dB/35 dB

Output level

850 mV

Antenna Input

75 ohms unbalanced

AM Tuner

Sensitivity

500 μ V/m

Selectivity

25 dB

Image Response Ratio

35 dB

Signal to Noise Ratio

40 dB

Output level

250 mV

Antenna Input

Loop Antenna

General

Power Consumption

300 watts
28.4 watts (idle)
13.2 watts (standby)

Power Requirements (AC)

120 volts, 60 Hz (USA version)
230 volts, 50 Hz (European version)

Weight

10.8 Kg/30.4 lb.

Dimensions (W x H x D)

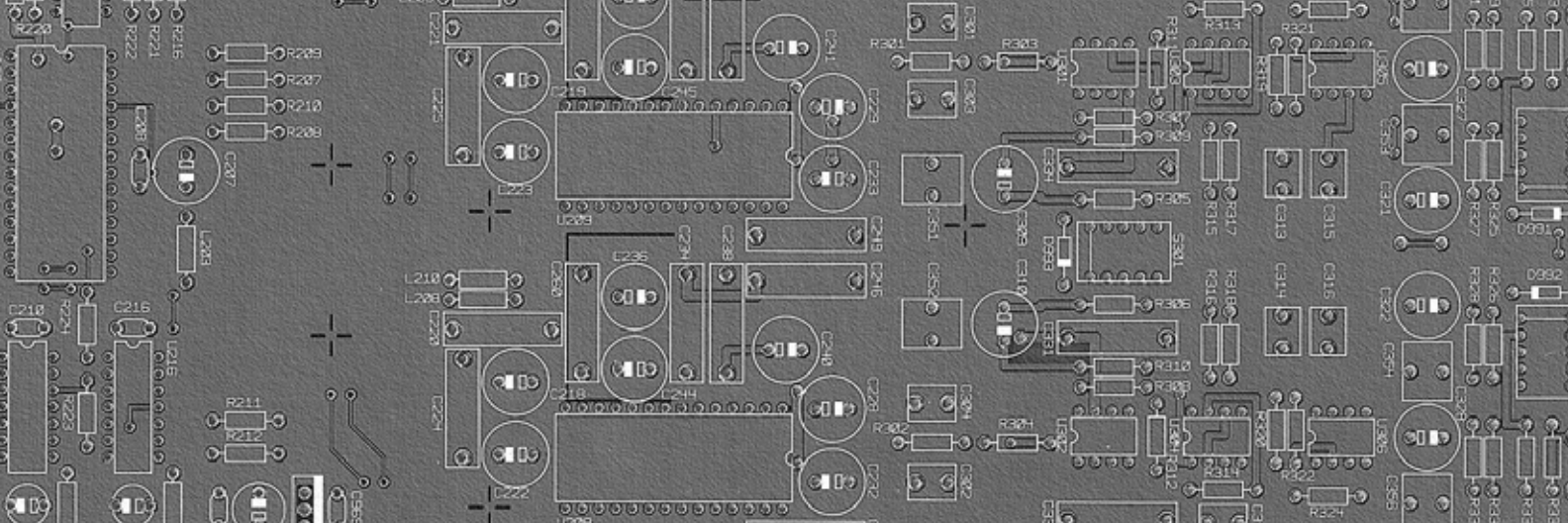
432 x 121 x 359 mm
17" x 43/4" x 141/8"

Front Panel Height (feet removed/for rack mount)

109 mm / 4.3"

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

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ROTEL

The Rotel Co. Ltd.

10-10 Shinsen-Cho
Shibuya-Ku
Tokyo 150-0045
Japan
Phone: +81 3-5458-5325
Fax: +81 3-5458-5310

Rotel of America

54 Concord Street
North Reading, MA 01864-2699
USA
Phone: +1 978-664-3820
Fax: +1 978-664-4109

Rotel Europe

Meadow Road
Worthing, West Sussex BN11 2RX
England
Phone: +44 (0)1903 524 813
Fax: +44 (0)1903 524 831

Rotel Deutschland

Kleine Heide 12
D-33790 Halle/Westf.
Germany
Phone: +49 05201-87170
Fax: +49 05201-73370

www.rotel.com