

# ONKYO

# A-9010

## Integrated Amplifier

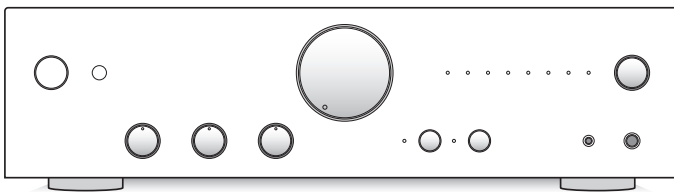
## Instruction Manual

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Thank you for purchasing an Onkyo product.  
Please read this manual thoroughly before making any connections and plugging in your new Onkyo product. Following the instructions in this manual will enable you to obtain optimum performance and listening enjoyment from your new product.  
Please retain this manual for future reference.

**WARNING:**

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

**CAUTION:**

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



**WARNING**  
RISK OF ELECTRIC SHOCK  
DO NOT OPEN

**ATTENTION**  
RISQUE DE CHOC ELECTRIQUE  
NE PAS OUVRIR



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

## Important safety instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. 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.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. 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 caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. 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.

PORTABLE CART  
WARNING



S3125A

### 15. Damage Requiring Service

Unplug the apparatus from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- A. When the power-supply cord or plug is damaged,
- B. If liquid has been spilled, or objects have fallen into the apparatus,
- C. If the apparatus has been exposed to rain or water,
- D. If the apparatus does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the apparatus to its normal operation,
- E. If the apparatus has been dropped or damaged in any way, and
- F. When the apparatus exhibits a distinct change in performance this indicates a need for service.

### 16. Object and Liquid Entry

Never push objects of any kind into the apparatus through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock.

#### **WARNING**

The apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases shall be placed on the apparatus.

Don't put candles or other burning objects on top of this unit.

### 17. Batteries

Always consider the environmental issues and follow local regulations when disposing of batteries.

### 18. If you install the apparatus in a built-in installation, such as a bookcase or rack, ensure that there is adequate ventilation.

Leave 20 cm (8") of free space at the top and sides and 10 cm (4") at the rear. The rear edge of the shelf or board above the apparatus shall be set 10 cm (4") away from the rear panel or wall, creating a flue-like gap for warm air to escape.

# Precautions

- 1. Recording Copyright**—Unless it's for personal use only, recording copyrighted material is illegal without the permission of the copyright holder.
- 2. AC Fuse**—The AC fuse inside the unit is not user-serviceable. If you cannot turn on the unit, contact your Onkyo dealer.
- 3. Care**—Occasionally you should dust the unit all over with a soft cloth. For stubborn stains, use a soft cloth dampened with a weak solution of mild detergent and water. Dry the unit immediately afterwards with a clean cloth. Don't use abrasive cloths, thinners, alcohol, or other chemical solvents, because they may damage the finish or remove the panel lettering.

## 4. Power

### WARNING

BEFORE PLUGGING IN THE UNIT FOR THE FIRST TIME, READ THE FOLLOWING SECTION CAREFULLY.

AC outlet voltages vary from country to country. Make sure that the voltage in your area meets the voltage requirements printed on the unit's rear panel (e.g., AC 230 V, 50 Hz or AC 120 V, 60 Hz).

The power cord plug is used to disconnect this unit from the AC power source. Make sure that the plug is readily operable (easily accessible) at all times.

For models with [POWER] button, or with both [POWER] and [ON/STANDBY] buttons:

Pressing the [POWER] button to select OFF mode does not fully disconnect from the mains. If you do not intend to use the unit for an extended period, remove the power cord from the AC outlet.

For models with [ON/STANDBY] button only:

Pressing the [ON/STANDBY] button to select Standby mode does not fully disconnect from the mains. If you do not intend to use the unit for an extended period, remove the power cord from the AC outlet.

## 5. Preventing Hearing Loss

### Caution

Excessive sound pressure from earphones and headphones can cause hearing loss.

## 6. Batteries and Heat Exposure

### Warning

Batteries (battery pack or batteries installed) shall not be exposed to excessive heat as sunshine, fire or the like.

- 7. Never Touch this Unit with Wet Hands**—Never handle this unit or its power cord while your hands are wet or damp. If water or any other liquid gets inside this unit, have it checked by your Onkyo dealer.

## 8. Handling Notes

- If you need to transport this unit, use the original packaging to pack it how it was when you originally bought it.
- Do not leave rubber or plastic items on this unit for a long time, because they may leave marks on the case.
- This unit's top and rear panels may get warm after prolonged use. This is normal.
- If you do not use this unit for a long time, it may not work properly the next time you turn it on, so be sure to use it occasionally.

### For U.S. models

#### FCC Information for User

##### CAUTION:

The user changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

##### 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 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 instructions, 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.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**For Canadian Models****NOTE:**

CAN ICES-3 B/NMB-3 B

For models having a power cord with a polarized plug:

**CAUTION:**

TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

**Modèle pour les Canadien****REMARQUE :**

CAN ICES-3 B/NMB-3 B

Sur les modèles dont la fiche est polarisée :

**ATTENTION :**

POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

**CAUTION:****HOT SURFACE. DO NOT TOUCH.**

The top surface over the internal heat sink may become hot when operating this product continuously.

Do not touch hot areas, especially around the ventilation openings.

**For British models**

Replacement and mounting of an AC plug on the power supply cord of this unit should be performed only by qualified service personnel.

**IMPORTANT**

The wires in the mains lead are coloured in accordance with the following code:

Blue: Neutral

Brown: Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows: The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black. The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

**IMPORTANT**

The plug is fitted with an appropriate fuse. If the fuse needs to be replaced, the replacement fuse must be approved by ASTA or BSI to BS1362 and have the same ampere rating as that indicated on the plug. Check for the ASTA mark or the BSI mark on the body of the fuse. If the power cord's plug is not suitable for your socket outlets, cut it off and fit a suitable plug. Fit a suitable fuse in the plug.

**For European Models****Declaration of Conformity**

We declare, under our sole responsibility, that this product complies with the standards:

- Safety
- Limits and methods of measurement of radio disturbance characteristics
- Limits for harmonic current emissions
- Limitation of voltage changes, voltage fluctuations and flicker
- RoHS Directive, 2011/65/EU

**WEEE**

<http://www.onkyo.com/manual/weee/weee.pdf>

# Introduction

## Features

### Simple circuitry that delivers powerful and faithful sound quality

The A-9010 is a model designed to deliver the best performance in sound quality, the most basic element required for a pre-main amplifier. Using our reliable discrete amplifier as a core component, the A-9010 incorporates compact circuitry thanks to its simplified functionality. To minimise the number of switcher components for the signal paths, the number of speaker terminal sets is limited to only one. In addition, the amplifier section for headphones and the one for driving speakers are separated. The result is a product faithful to its design concept, which gives the highest priority to the direct and high-precision delivery of musical energy.

- Low NFB (negative feedback), high current low impedance drive design
- (European models) 70 W/ch (1 kHz, 4 ohms, 0.7 % THD, 2 ch Driven IEC)
- (North American models) 70 W/ch (1 kHz, 4 ohms, 0.7 % THD, 2 ch Driven FTC)
- Adopted parts such as aluminum extrusion heatsink, high grade speaker terminal, etc.
- Installed direct function that will shorten the signal path
- (North American and Continental European models) Equipped with Wolfson 192 kHz/24 bit D/A converter

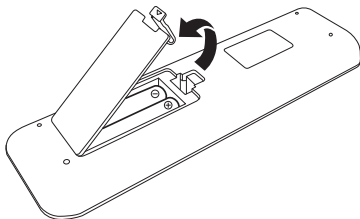
## Supplied accessories

- Remote control (RC-902S) × 1
- Batteries for remote control (AAA/R03) × 2

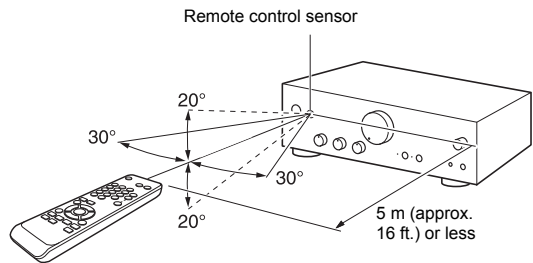
\* In catalogs and on packaging, the letter at the end of the product name indicates the color. Specifications and operations are the same regardless of color.

## Using the remote control

Remove the cover from the back of the remote control and insert two AAA/R03 batteries with their +/– ends oriented in the case as shown. Replace the cover.



- If the remote control doesn't work reliably, try replacing the batteries.
- Don't mix new and old batteries or different types of batteries.
- If you intend not to use the remote control for a long time, remove the batteries to prevent damage from leakage or corrosion.
- Remove expired batteries as soon as possible to prevent damage from leakage or corrosion.

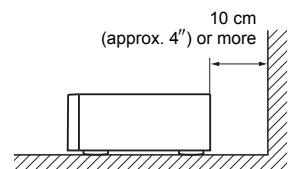
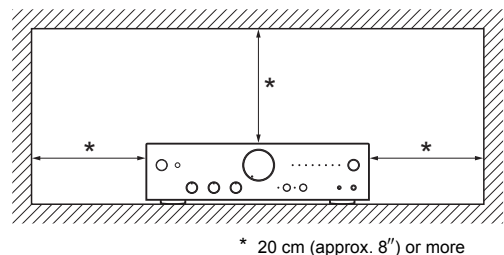


When using the remote control, point it toward the remote control sensor on the unit from a distance of 5 m (approx. 16 ft.) or less.

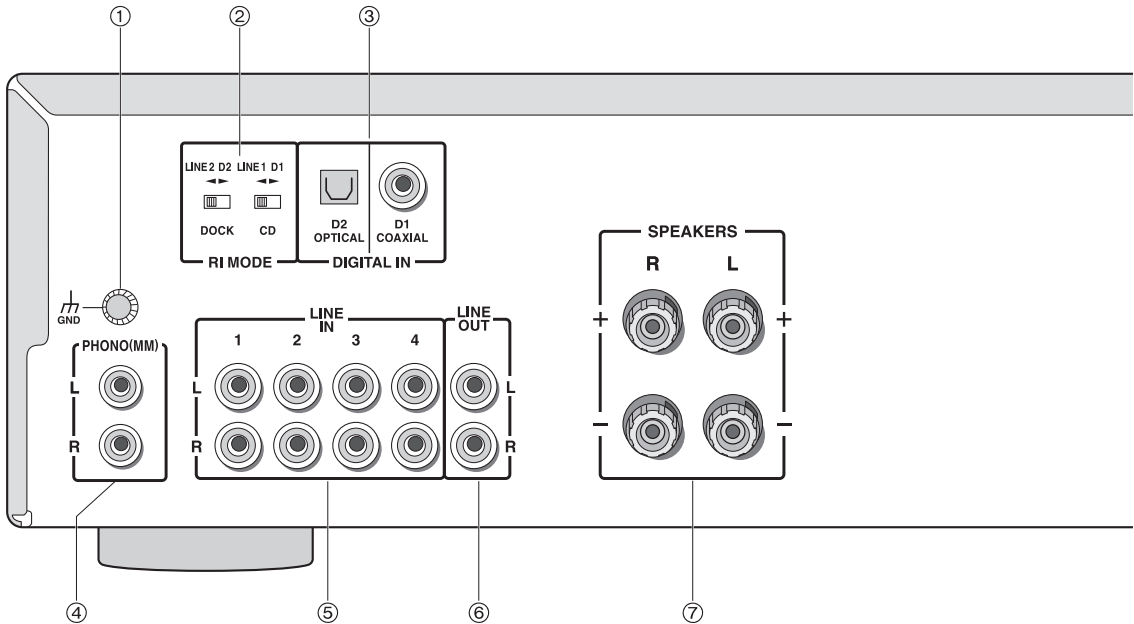
- Do not place obstructions between the unit and the remote control.
- If another remote control of the same type is used in the same room, or the unit is installed close to equipment that uses infrared rays, the remote control may not work reliably.
- The remote control may not work reliably if the unit is subjected to bright light, such as direct sunlight or inverter-type fluorescent lights. Keep this in mind when installing.
- The remote control may not work reliably if the unit is installed in a rack behind colored glass doors. Keep this in mind when installing.

## Installation

Install horizontally on a sturdy shelf or rack. Do not install the unit in a place with vibration or an unstable location. Make sure not to hamper heat dissipation by ensuring proper ventilation.



# Connections



- ① **GND terminal:** Connects the turntable's ground wire.
- ② **RI MODE switch (North American and Continental European models):** Used to set the link function with the Onkyo equipment with RI terminal.
- ③ **DIGITAL IN COAXIAL (D1)/OPTICAL (D2) jacks (North American and Continental European models):** Connects to a reproduction equipment with digital audio output terminal such as CD player, TV, etc. Connect with an optical digital cable (OPTICAL) or an coaxial digital cable (COAXIAL).
  - As the OPTICAL (D2) jack of the unit has a cover, push in the cable against the cover as it is turned inside.
  - To prevent cover damage, hold the optical plug straight when inserting and removing.
- ④ **PHONO (MM) jacks:** Connects to a turntable with an audio pin cable.
- ⑤ **LINE IN 1/2/3/4 jacks:** Connects to a reproduction equipment such as CD player, etc., with an audio pin cable.
- ⑥ **LINE OUT jacks:** Connects to a recording equipment such as cassette tape deck, etc., with an audio pin cable. This is used to record an audio from the reproduction equipment connected to this unit.
- ⑦ **SPEAKERS terminals:** Connect speakers.

## Cables used to connect (sold separately)

Audio pin cable



(North American and Continental European models)  
Coaxial digital cable



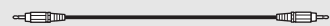
(North American and Continental European models)  
Optical digital cable



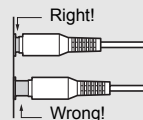
Speaker cable



RI cable



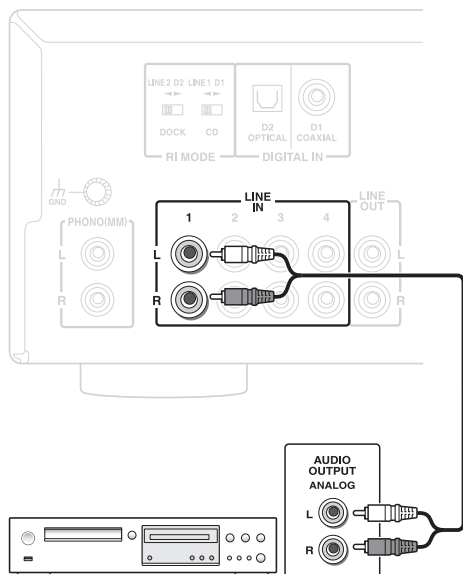
Push plugs in all the way to make good connections. Loose connections can cause noise or malfunctions.



## Connecting CD player, etc., via LINE

Using an audio pin cable, connect to one of the terminal of LINE IN 1/2/3/4.

Example: Connection with the LINE IN 1 terminal



- When playing back, turn the INPUT selector and light up the input source LED corresponding to the connected terminal. (Example: "LINE 1" when connected to the LINE IN 1 terminal)

### Connecting to an Onkyo equipment with RI terminal

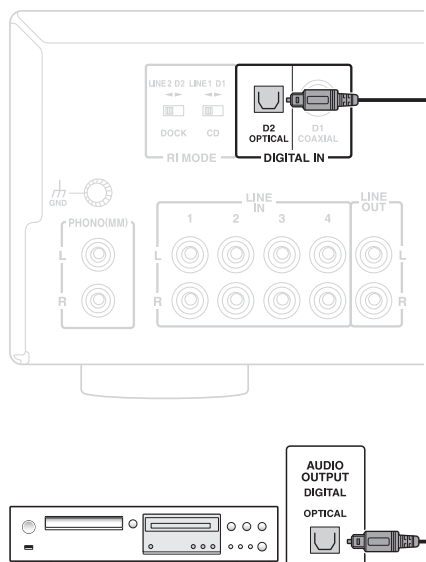
The operation such as power can be linked when connecting to an Onkyo equipment with RI terminal. For the connecting and setting methods, refer to "Connecting Onkyo equipment with RI terminal" (⇒ 8).

## Connecting CD player, etc., via DIGITAL (North American and Continental European models)

Connect to either COAXIAL (D1) terminal or OPTICAL (D2) terminal in accordance with the connecting terminal of the reproduction equipment to be used.

A PCM digital audio can be enjoyed with this unit. Do not input digital audio signal other than PCM.

Example: Connection with the OPTICAL (D2) terminal



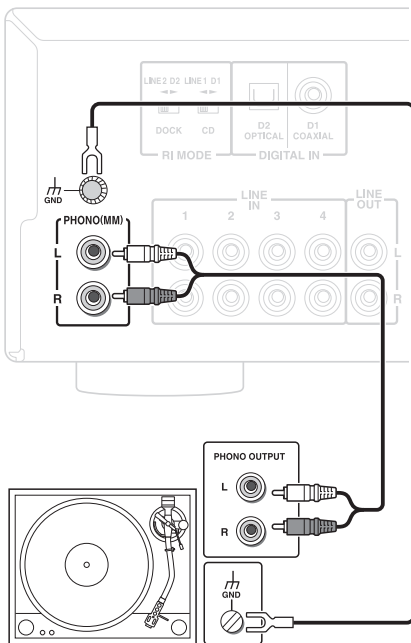
- When playing back, turn the INPUT selector and light up the input source LED corresponding to the connected terminal. (Example: "D 2" when connected to the OPTICAL (D2) terminal)

### Connecting to an Onkyo equipment with RI terminal

The operation such as power can be linked when connecting to an Onkyo equipment with RI terminal. For the connecting and setting methods, refer to "Connecting Onkyo equipment with RI terminal" (⇒ 8).

## Connecting a turntable

Using an audio pin cable, connect to the PHONO (MM) terminal. Also, if there is a GND terminal on the turntable, connect with the GND terminal of this unit using a ground wire.



- This unit is designed for a turntable using a MM cartridge. When using a turntable with MC cartridge, connect a commercial step-up transformer or head amplifier between this unit and the turntable.
- When the turntable has a built-in phono equalizer, connect the audio pin cable to one of the LINE IN 1/2/3/4 terminal.

## Connecting Onkyo equipment with RI terminal

Following link functions can be operated by connecting an Onkyo CD player, an RI dock, or a tuner (\*) with RI terminal via an RI cable.

\* The link function will not operate appropriately with other equipment such as MD player, etc. Also, part of the function may not operate even if it is connected via RI depending on the equipment.

**Auto Power On:** When you start playback on an equipment connected via RI while the unit is in standby mode, the unit will automatically turn on and select that equipment as the input source.

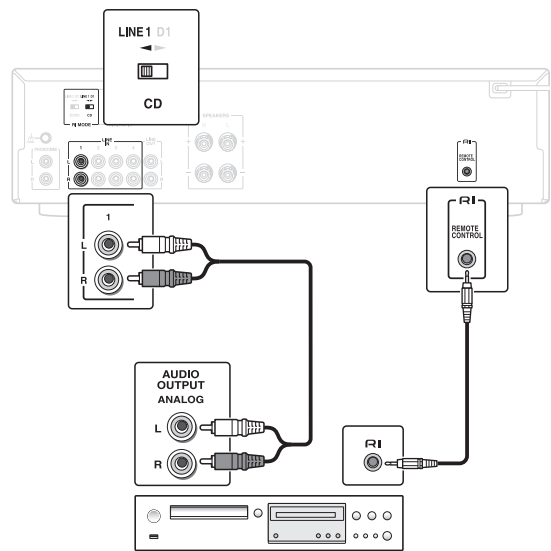
**Direct Change:** When playback is started on an equipment connected via RI, the unit automatically selects that equipment as the input source.

**System Off:** When you turn off the unit, the equipment turn off automatically.

**Remote Control:** You can use the unit's remote control to control your other RI-capable Onkyo equipment, pointing the remote control at the unit's remote control sensor instead of the equipment. For information on remote control operation, see "Operating with the remote control" (⇒ 13).

### Connection example (connection to a CD player via LINE)

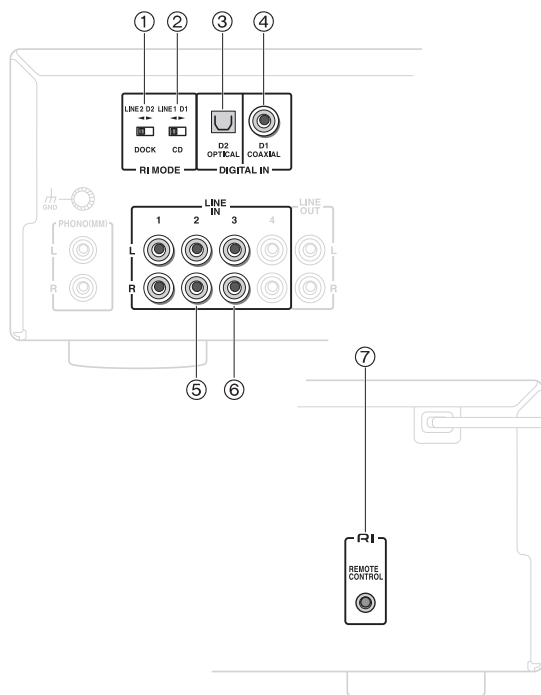
This is an example of connecting Onkyo CD player via LINE. See next section for other connections.



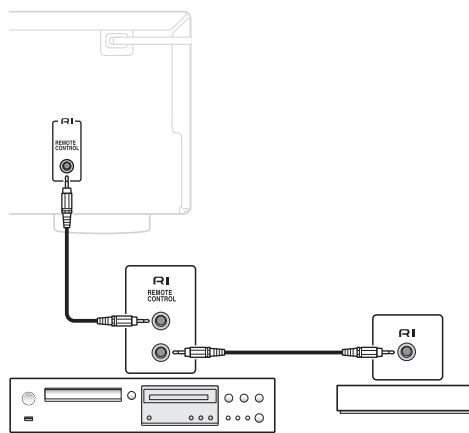
1. Connect the audio pin cable to the LINE IN 1 jack.
  - The RI link will not work properly when connected to a terminal other than the LINE IN 1.
2. Connect the RI cable to the RI REMOTE CONTROL jack.
  - When there are two RI terminals on the used equipment, the operation is the same when connected to either terminal.
3. (North American and Continental European models) Set the RI MODE (CD) switch to LINE1.



### ■ Other connection method



### ■ When connecting two or more RI equipment



When there are two RI terminals on the equipment, one can be connected to this unit and the other can be connected to other equipment, allowing to link both equipment to this unit. Similarly, it is possible to increase the equipment to be linked. There is no specification for order to connect the equipment.

#### Connection to a CD player via DIGITAL (North American and Continental European models):

Connect the coaxial digital cable to the ④ COAXIAL (D1) jack. Connect the RI cable to the ⑦ RI REMOTE CONTROL jack. Set the ② RI MODE (CD) switch to D1.

**Connection to an RI dock via LINE:** Connect the audio pin cable to the ⑤ LINE IN 2 jack. Connect the RI cable to the ⑦ RI REMOTE CONTROL jack.

(North American and Continental European models) Set the ① RI MODE (DOCK) switch to LINE2.

#### Connection to an RI dock via DIGITAL (North American and Continental European models):

Connect the optical digital cable to the ③ OPTICAL (D2) jack. Connect the RI cable to the ⑦ RI REMOTE CONTROL jack. Set the ① RI MODE (DOCK) switch to D2.

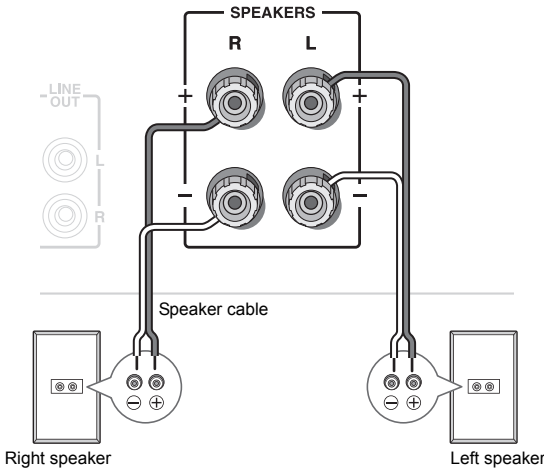
**Connection to a tuner via LINE:** Connect the audio pin cable to the ⑥ LINE IN 3 jack. Connect the RI cable to the ⑦ RI REMOTE CONTROL jack.

- (North American and Continental European models)  
The link function of RI is not supported when a tuner is connected via DIGITAL. Do not connect the RI cable.

### Connecting speakers

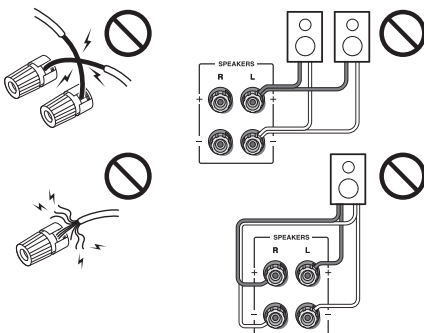
Refer to the illustration below to connect the unit and the right and left speakers with the speaker cables. Connect the speaker to be placed on the right hand side to the SPEAKERS terminal (R), and connect the speaker to be placed on the left hand side to the SPEAKERS terminal (L).

**Important:** Connect speakers with 4 Ω to 16 Ω impedance. Connecting a speaker with a lower impedance may damage the unit.

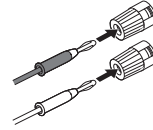


Remove the vinyl from the tip of the speaker cable and twist the core before connecting to the terminal. Make correct connection between the unit's terminals and speaker's terminals (+ to + and - to -) for each channel. If connection is wrong, a bass sound may become poor due to reverse phase.

- Short-circuiting the + cable and - cable or contacting the cable core to the rear panel of the unit may cause failure. Also do not connect two or more cables to one speaker terminal or one speaker to several terminals.



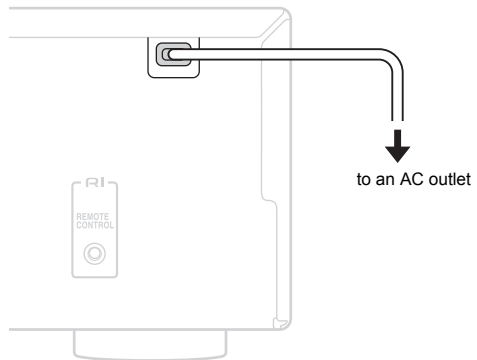
- (North American models) When using commercially available banana plugs, tighten the speaker terminals to the end and then insert the banana plugs. It is not possible to connect by inserting the core of the speaker cable directly into the hole for a banana plug. Make sure to attach a banana plug before inserting.



### Connecting the power cord

Before connecting the power cord, connect all of your equipment.

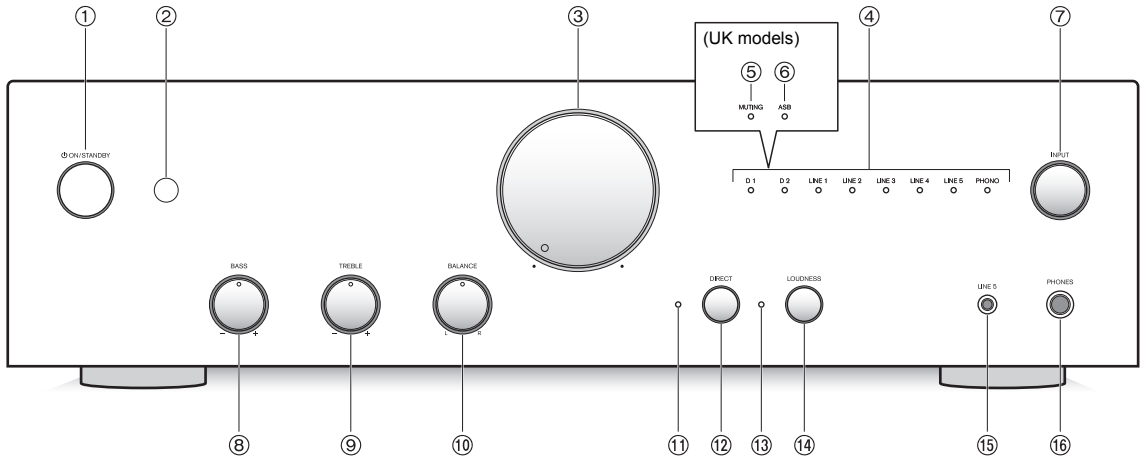
Connect the power cord to an AC outlet.



- Turning on the unit may cause a momentary power surge that might interfere with other electrical equipment on the same circuit. If this is a problem, plug the unit into a different branch circuit.
- To reduce noise, do not tie signal cables together with the power cord. Wire them so that they are away from each other.

Disconnect the power cord only after putting the unit into standby mode.

# Operations



- ① **ON/STANDBY** button
- ② **Remote control sensor**
- ③ **Volume control**
- ④ **Input source LEDs**
- ⑤ **MUTING LED**
- ⑥ **ASB (Auto Standby) LED**
- ⑦ **INPUT selector**
- ⑧ **BASS control**
- ⑨ **TREBLE control**

- ⑩ **BALANCE control**
- ⑪ **DIRECT LED**
- ⑫ **DIRECT button**
- ⑬ **LOUDNESS LED**
- ⑭ **LOUDNESS button**
- ⑮ **LINE 5 jack**: Connects to reproducing equipment such as portable audio player via stereo mini-plug (ø 3.5 mm).
- ⑯ **PHONES jack**

## Turning on the unit

1. Press the ① **ON/STANDBY** button.  
The ④ input source LED blinks, then lights up after a short time.

**To return to standby mode:** This unit will go into standby mode by pressing the **ON/STANDBY** button again, then the input source LED will go off.

- The power of Onkyo equipment connected via RI will be automatically turned off when the power is turned to standby.

The Auto Standby can be set on this unit. For detail, refer to "Setting the Auto Standby function" (⇒ 12).

## Adjusting the volume

1. Adjust the volume by slowly turning the ③ volume control.

## Selecting the input source

1. Switch the input source by turning the ⑦ **INPUT selector**.  
Input from following can be selected.  
(North American and Continental European models)  
D 1, D 2, LINE 1, LINE 2, LINE 3, LINE 4, LINE 5, PHONO  
(UK models)  
LINE 1, LINE 2, LINE 3, LINE 4, LINE 5, PHONO  
The ④ input source LED corresponding to the selected input lights up.
  - If there is no input signal when D 1 or D 2 is selected, the LED for that source will blink.

## Adjusting sound quality, etc.

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### ■ DIRECT

Audio is output through shortest path which is advantageous to sound quality without passing the sound quality adjustment circuit (BASS, TREBLE).

1. Press the ⑫ DIRECT button.  
DIRECT function is enabled and the ⑪ DIRECT LED lights up.
  - BASS, TREBLE, and LOUDNESS is disabled when the DIRECT function is enabled.

**To cancel the DIRECT function:** Press the DIRECT button again to cancel, and the DIRECT LED goes off.

### ■ LOUDNESS

Bass and treble is enhanced when the volume is turned down.

1. Press the ⑭ LOUDNESS button.  
LOUDNESS function is enabled and the ⑬ LOUDNESS LED lights up.
  - When the DIRECT function is enabled, LOUDNESS function will not be enabled even when the LOUDNESS button is pressed. Press the LOUDNESS button after canceling the DIRECT function by pressing the DIRECT button.
  - When the BASS or TREBLE is raised very high, effect of the LOUDNESS will become smaller.

**To cancel the LOUDNESS function:** Press the LOUDNESS button again to cancel, and the LOUDNESS LED goes off. Also, the LOUDNESS function will be canceled when the DIRECT function is enabled.

### ■ BASS

Adjusts the bass.

1. Turn the ⑨ BASS control.
  - BASS is disabled when the DIRECT function is enabled.
  - When the LOUDNESS function is enabled, adjustment range in + direction for BASS will become smaller.

### ■ TREBLE

Adjusts the treble.

1. Turn the ⑩ TREBLE control.
  - TREBLE is disabled when the DIRECT function is enabled.
  - When the LOUDNESS function is enabled, adjustment range in + direction for TREBLE will become smaller.

### ■ BALANCE

Adjusts the audio output balance between the left and right speakers.

1. Turn the ⑩ BALANCE control.

## Using headphones

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Turn down the volume, then connect your stereo headphones with a standard plug (ø 6.3 mm, 1/4") to the ⑯ PHONES jack. The speakers output no sound while the headphones are connected.

## Setting the Auto Standby function

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This unit will go into standby mode automatically with following conditions when the Auto Standby is set to On.

- When there is no audio in the currently selected input source and this unit is not operated for approximately 20 minutes
- (North American and Continental European models)  
When there is no PCM signal input in D 1 or D 2, and this unit is not operated for approximately 20 minutes

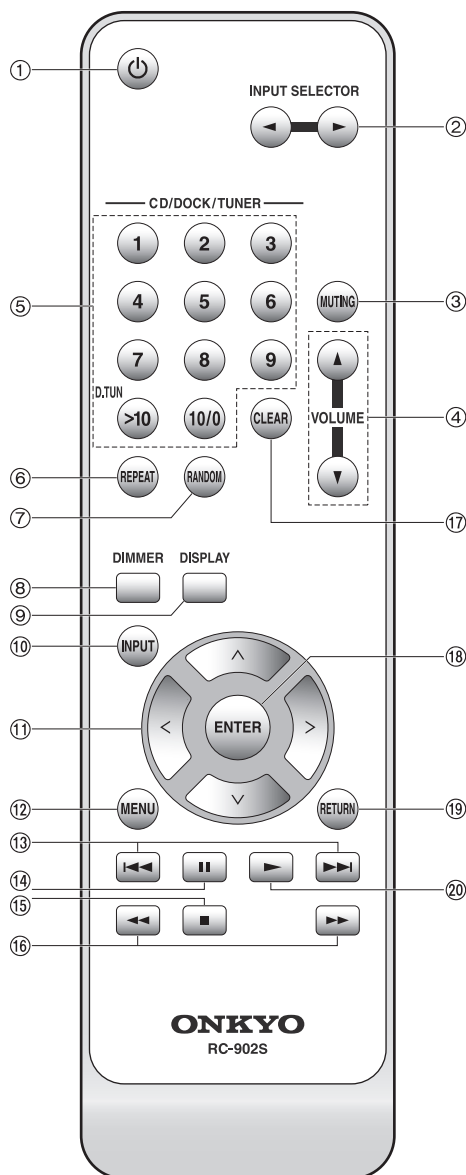
The default Auto Standby setting is set as follows.

(North American models) Off

(Others) On

The setting can be changed with following procedure.

1. Press and hold the ① ON/STANDBY button while the power is in standby. The power will come on when the button is pressed, but keep on pressing the button. The setting for the Auto Standby is changed, and it will be displayed as follows.  
(North American and Continental European models)  
On: D 1 LED will blink for approximately 2 seconds.  
Off: D 2 LED will blink for approximately 2 seconds.  
(UK models)  
On: ASB LED will light up.  
Off: ASB LED will go off.



### Operating with the remote control

- ① **Power button:** Turn the unit on or put it in standby mode.
  - The power of Onkyo equipment connected via RI will be automatically turned off when the power is turned to standby.
- ② **INPUT SELECTOR ◀▶ buttons:** Select an input source of the unit.
- ③ **MUTING button:** Mutes the sound. It is displayed as follows when the muting is working. (North American and Continental European models) The input source LED blinks. (UK models) MUTING LED blinks. To cancel muting, press the MUTING button again. It is also canceled by adjusting the volume or setting this unit into standby mode.
- ④ **VOLUME ▲/▼ buttons:** Adjust the volume of the unit.

### ■ Buttons that can be used with the Onkyo equipment that is connected via RI

For the operation of each button, refer to the instruction manual of the connected equipment.

- ⑤ **Number buttons/D.TUN button**
- ⑥ **REPEAT button**
- ⑦ **RANDOM button**
- ⑧ **DIMMER button**
- ⑨ **DISPLAY button**
- ⑩ **INPUT button**
- ⑪ **Direction (▲/▼/◀/▶) buttons**
- ⑫ **MENU button**
- ⑬ **Skip (◀◀/▶▶) buttons**
- ⑭ **Pause (||) button**
- ⑮ **Stop (■) button**
- ⑯ **Search (◀◀/▶▶) buttons**
- ⑰ **CLEAR button**
- ⑱ **ENTER button**
- ⑲ **RETURN button**
- ⑳ **Playback (▶) button**

- With some equipment, the remote control may not work, or only partially.
- To control the equipment, an RI connection is required. For detail, refer to "Connecting Onkyo equipment with RI terminal" (⇒ 8).

# Troubleshooting

## Before starting the procedure

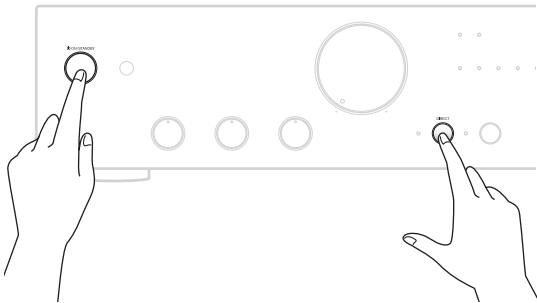
Problems may be solved by simply turning the power on/off or disconnecting/connecting the power cord, which is easier than working on the connection, setting and operating procedure. Try the simple measures on both the unit and the connected device.

## To return to the default setting

When this unit is not operating properly, it may return to normal condition by returning the condition to default setting in following procedure.

While the unit is on, press and hold the DIRECT button and press the  $\text{ON/STANDBY}$  button.

All the LEDs will go off and the unit will turn into standby mode after approximately 5 seconds later, and the condition will return to default setting.



## The unit does not turn on.

- Confirm that the power plug is securely plugged in to an outlet.
- Unplug the power cord once, wait 5 seconds and then plug it in again.

## The unit turns off unexpectedly.

- Confirm that the Auto Standby is not enabled. The Auto Standby may operate when the input signal is very small. In such case, set the Auto Standby to Off ( $\Rightarrow$  12).
- When the protection circuit is activated (because of speaker short-circuit, overload, or over-current), the unit enters standby mode. Remove the source of the problem and turn the unit back on.

## There's no sound.

- Make sure the correct input source is selected.
- Check if the volume is minimized or muting is operating.
- Check all connections and correct as necessary.
- While headphones are connected, the speakers output no sound.
- There may be a loose contact when no sound is output from headphone, so check the connection.
- (North America and Continental European models)  
The unit does not support digital formats other than

PCM. Inputting a digital format other than PCM may cause loud noise.

## There is noise.

### The sound quality is not good.

- Make sure the speaker cables are connected with the correct polarity.
- Make sure all audio connecting plugs are pushed in all the way.
- Place the unit as far away as possible from TVs and other devices that emit strong electromagnetic waves.
- If you have any devices that emit high-intensity radio waves near the unit, such as a cellular phone that's being used to make a call, the unit may output noise.
- Bundling audio cables with speaker cables or power cords may degrade the sound quality, so refrain from doing it.
- Audio performance will be at its best about 10 to 30 minutes after the unit has been turned on and had time to warm up.

## The RI functions don't work properly.

- Check that each device is connected correctly.
- (North American and Continental European models)  
Check that the RI MODE switch is set correctly.
- The connecting method may vary depending on the device that will be connected. See the instruction manual for the connected device.

Onkyo is not responsible for damages (such as CD rental fees) due to unsuccessful recordings caused by the unit's malfunction. Before you record important data, make sure that the material will be recorded correctly.

The unit contains a microcomputer for signal processing and control functions. In very rare situations, severe interference, noise from an external source, or static electricity may cause it to lockup. In the unlikely event that this should happen, unplug the power cord, wait at least 5 seconds, and then plug it again.

If the top of this unit is too hot to touch even when no sound is played back, it is necessary to reconsider the installation location. Secure appropriate ventilation so it will not obstruct heat dissipation.

# Specifications

<b>Rated output power:</b>	<b>44 watts minimum continuous power per channel, 8 ohm loads, 2 channels driven at 1 kHz, with a maximum total harmonic distortion of 0.08 % (FTC)</b> <b>70 watts minimum continuous power per channel, 4 ohm loads, 2 channels driven at 1 kHz, with a maximum total harmonic distortion of 0.7 % (FTC) (North American)</b> 2 ch × 44 W at 8 ohms, 1 kHz, 2 ch Driven of 0.08 % (IEC) 2 ch × 70 W at 4 ohms, 1 kHz, 2 ch Driven of 0.7 % (IEC) (European)
Maximum effective output power:	2 ch × 85 W at 4 ohms, 1 kHz, 2 ch driven (JEITA) (Asian)
THD+N (Total Harmonic Distortion+Noise):	0.08 % (Rated output power)
Damping factor:	95 (1 kHz, 8 Ω)
Input sensitivity and impedance (unbalance):	150 mV/100 kΩ (LINE) 3.0 mV/47 kΩ (PHONO MM)
Rated RCA output level and impedance:	150 mV/2.2 kΩ (LINE OUT)
Phono overload:	94 mV (1 kHz 0.5 %)
Frequency response:	10 Hz - 100 kHz/+1 dB, -3 dB (LINE 1)
Tone control characteristics:	±10 dB, 100 Hz (BASS) ±10 dB, 10 kHz (TREBLE)
Signal to noise ratio:	97 dB (LINE, IHF-A) 77 dB (PHONO MM, IHF-A)
Speaker impedance:	4 Ω - 16 Ω
Power supply:	AC 120 V, 60 Hz (North American) AC 220 - 240 V, 50/60 Hz (European)
Power consumption:	140 W (North American) 155 W (European) 0.3 W (Stand-by, North American) 0.4 W (Stand-by, European) 20 W (No-sound, North American) 25 W (No-sound, European)
Dimensions (W × H × D):	435 mm × 129.5 mm × 332.5 mm (17-1/8" × 5-1/8" × 13-1/16")
Weight:	6.5 kg (14.3 lbs)

## ■ Audio inputs

Digital (North American and Continental European):	DIGITAL IN (D1 COAXIAL, D2 OPTICAL)
Sampling frequency (PCM):	32, 44.1, 48, 88.2, 96, 176.4, 192 kHz (COAXIAL) 32, 44.1, 48, 88.2, 96 kHz (OPTICAL)
Analog:	LINE IN 1-4, LINE IN 5 (front) PHONO (MM)

## ■ Audio outputs

Analog:	LINE OUT
Speaker outputs:	SPEAKERS L/R
Phones:	PHONES (Ø 6.3 mm, 1/4")

## ■ Others

RI:	1
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Specifications and features are subject to change without notice.

# ONKYO

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Please contact an Onkyo distributor referring to Onkyo SUPPORT site.  
<http://www.intl.onkyo.com/support/>

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