

# ONKYO

## Integrated Amplifier

# A-9070

## Instruction Manual

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

## Contents

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## 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

**AVIS**  
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.  


PORTABLE CART WARNING  
S3125A
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.
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.  
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 30 cm (12") 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

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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:** THIS CLASS B DIGITAL APPARATUS COMPLIES WITH CANADIAN ICES-003.

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:** CET APPAREIL NUMÉRIQUE DE LA CLASSE B EST CONFORME À LA NORME NMB-003 DU CANADA.

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.

## 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.

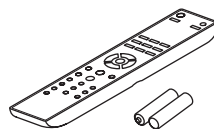
## For European Models

<b>Declaration of Conformity</b>	
We, ONKYO EUROPE ELECTRONICS GmbH LIEGNITZERSTRASSE 6, 82194 GROEBENZELL, GERMANY	
declare in own responsibility, that the ONKYO product described in this instruction manual is in compliance with the corresponding technical standards such as EN60065, EN55013, EN55020 and EN61000-3-2, -3-3.	
GROEBENZELL, GERMANY	 K. MIYAGI
ONKYO EUROPE ELECTRONICS GmbH	

## Supplied Accessories

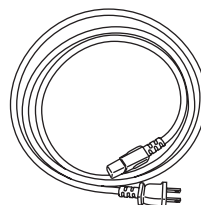
Make sure you have the following accessories:

### Remote controller and two batteries



- Remote controller (RC-830S) . . . . . (1)
- Batteries (R03) . . . . . (2)

### Power cord



- Power cord (5.9 ft/1.8 m) . . . . . (1)
- (Plug type varies from country to country.)

\* 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.

# Features

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- **(North American models)** 140 W/Ch (4 ohm, 20 Hz - 20 kHz, 0.05%, 2 Channels Driven, FTC)
- **(European models)** 140 W/Ch (4 ohm, 20 Hz - 20 kHz, 0.05%, 2 Channels Driven, IEC)
- A WRAT (Advanced Wide Range Amplifier Technology)
- DIDRC (Dynamic Intermodulation Distortion Reduction Circuitry)
- Parallel Push-Pull Amplification Design with Three-Stage Inverted Darlington Circuitry
- Symmetrical Layout of Power Stage
- Four Large 15,000  $\mu$ F Capacitors
- Side-mounted Circuit Board Construction to Reduce Vibration
- Separate Digital/Analog Circuitry
- Low-noise Static Display
- PLL Ultra-Low Jitter Technology
- Separate Wolfson 192 kHz/24-Bit DACs (WM8742) for L/R Channels
- Direct Mode
- Tone Control (Bass/Treble)
- Balance Control
- Independent Headphone Amplifier
- Discrete Phono Equalizer
- Phono Input (MM/MC)
- De-emphasis Function\*1
- 3 Digital Inputs (2 Coaxial and 1 Optical)
- Gold-Plated, Machined Solid Brass RCA Inputs
- Gold-plated, Color-coded, Transparent Speaker Posts
- Display Dimmer (Normal/Dim)

\*1 This function only applies to the following sampling rates: 32 kHz, 44.1 kHz, 48 kHz. Other rates are not supported.

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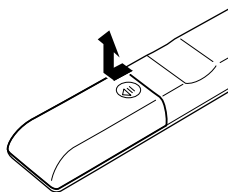
## Others

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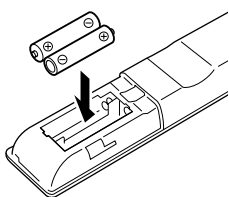
# Before Using the Integrated Amplifier

## Installing the Batteries

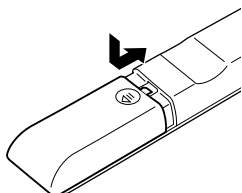
- 1 To open the battery compartment, press the small hollow and slide the cover.



- 2 Insert the two supplied batteries (R03) in accordance with the polarity diagram inside the battery compartment.



- 3 Replace the cover and slide it shut.

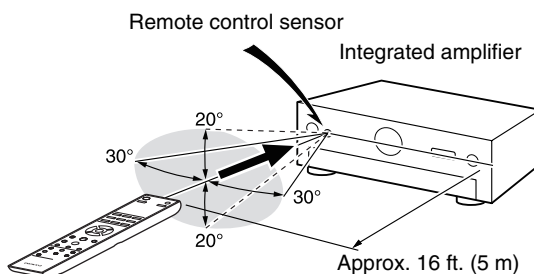


### Note

- If the remote controller 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 controller 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.

## Using the Remote Controller

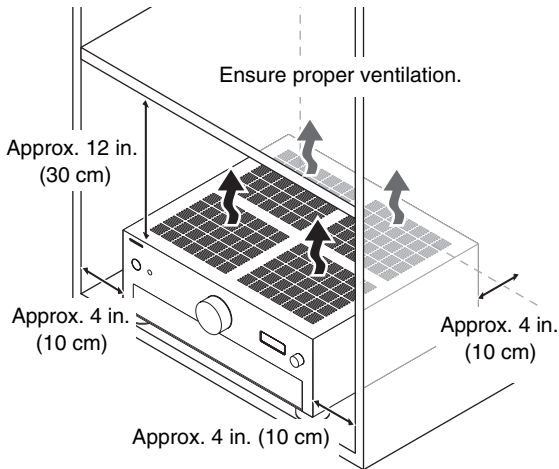
To use the remote controller, point it at the integrated amplifier's remote control sensor, as shown below.



### Note

- The remote controller may not work reliably if the integrated amplifier is subjected to bright light, such as direct sunlight or inverter-type fluorescent lights. Keep this in mind when installing.
- If another remote controller of the same type is used in the same room, or the integrated amplifier is installed close to equipment that uses infrared rays, the remote controller may not work reliably.
- Don't put anything, such as a book, on the remote controller, because the buttons may be pressed inadvertently, thereby draining the batteries.
- The remote controller may not work reliably if the integrated amplifier is installed in a rack behind colored glass doors. Keep this in mind when installing.
- The remote controller will not work if there's an obstacle between it and the integrated amplifier's remote control sensor.

## Installing the Integrated Amplifier



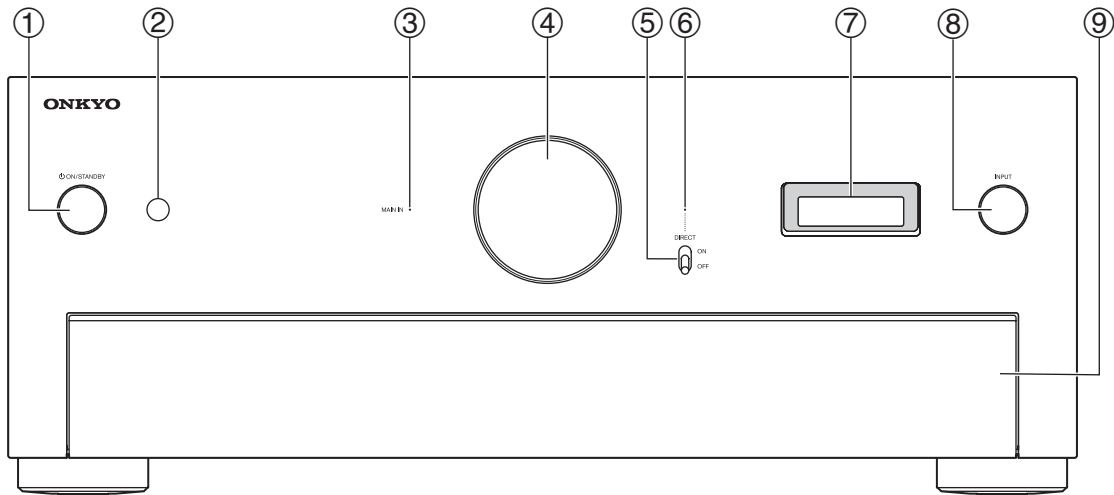
Install the integrated amplifier on a sturdy rack or shelf. Position it so that its weight is evenly dispersed on its four legs. Do not install the integrated amplifier in a place with vibration or an unstable location.

The integrated amplifier is designed to have high conversion efficiency, however, its temperature will become much higher than other audio equipment. Therefore, make sure not to hamper heat dissipation by ensuring proper ventilation.



# Getting to Know the Integrated Amplifier

## Front Panel



For detailed information, see the pages in parentheses.

① **ON/STANDBY button** (→ page 26)

Sets the integrated amplifier to On or Standby.

② **Remote control sensor** (→ page 7)

Receives control signals from the remote controller.

③ **MAIN IN LED** (→ page 25)

Lights when the integrated amplifier is used as a power amplifier (Main mode).

④ **Volume controller** (→ page 27)

Adjusts the volume.

⑤ **DIRECT switch** (→ page 28)

Enables or disables the Direct function.

⑥ **DIRECT LED** (→ page 28)

Lights when the integrated amplifier is in Direct mode.

⑦ **Information display**

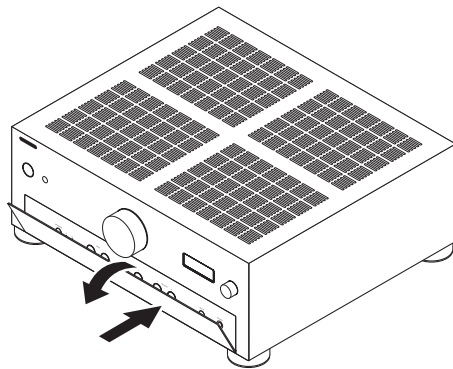
Displays various information.

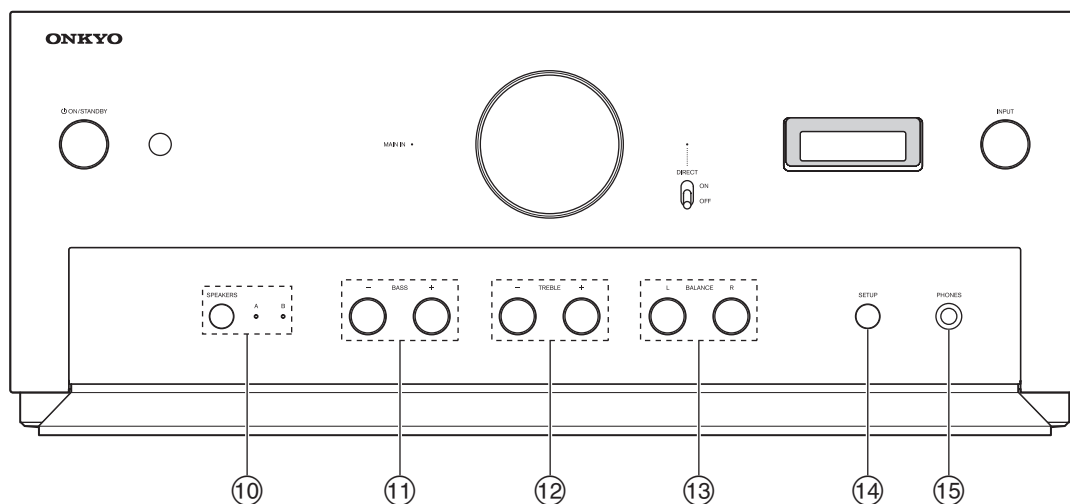
⑧ **INPUT selector** (→ page 28)

Selects the input sources in sequence. It is also used to select settings.

⑨ **Front flap**

Gently push on the lower end of the front panel to open the flap.





For detailed information, see the pages in parentheses.

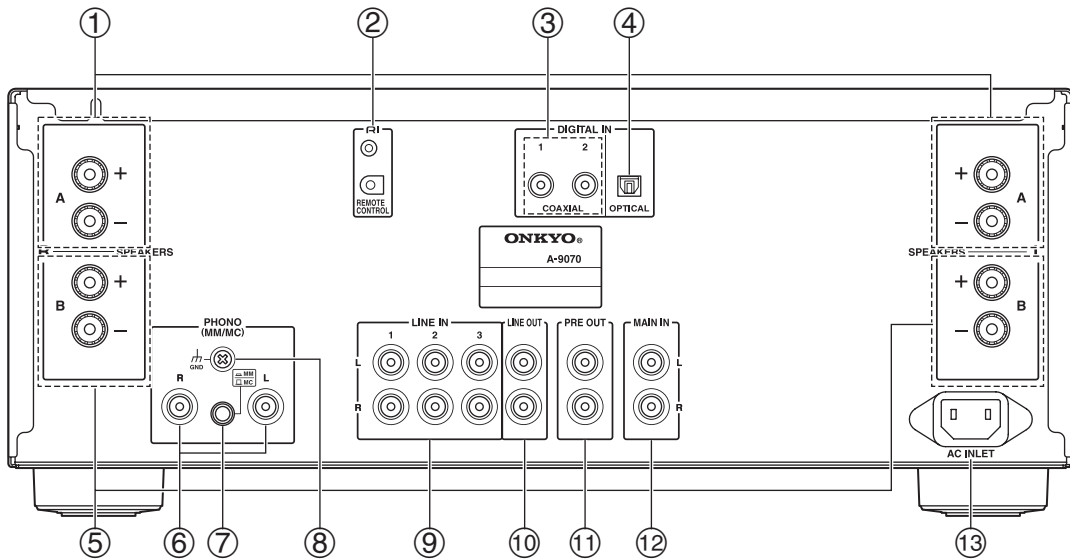
- ⑩ **SPEAKERS button and A/B LEDs (→ page 27)**  
 Selects Speakers A, Speakers B, or both. The **A** and **B** LEDs show which speaker set is selected.

⑪ **BASS +/- buttons (→ page 29)**  
 Adjusts the level of bass sounds. Press the button once to display the current level value.

⑫ **TREBLE +/- buttons (→ page 29)**  
 Adjusts the level of treble sounds. Press the button once to display the current level value.
- ⑬ **BALANCE L/R buttons (→ page 29)**  
 Adjusts the balance of left and right channels.

⑭ **SETUP button (→ page 35)**  
 Selects and confirms settings.

⑮ **PHONES jack (→ page 31)**  
 Connects headphones with a standard plug.



① **SPEAKERS A terminals**

Connect Speakers A.

② **RI REMOTE CONTROL jacks**

Connect Onkyo components such as Onkyo Docks, CD Players, or Network Tuner with **RI** (Remote Interactive) jacks.

③ **DIGITAL IN COAXIAL 1/2 jacks**

Connect components such as CD players with coaxial digital audio output.

④ **DIGITAL IN OPTICAL jack**

Connects components such as CD players with optical digital audio output.

⑤ **SPEAKERS B terminals**

Connect Speakers B.

⑥ **PHONO (MM/MC) L/R jacks**

Connect a turntable with analog audio output.

⑦ **MM/MC selector**

Set this selector according to the turntable's cartridge format (≡ **MM**/□ **MC**).

⑧ **GND screw**

Connects the turntable's ground wire.

⑨ **LINE IN 1/2/3 L/R jacks**

Connect playback devices with analog audio output.

⑩ **LINE OUT L/R jacks**

Connect components such as analog line-level sources. The input signals are output with no level adjustment.

⑪ **PRE OUT L/R jacks**

Connect a power amplifier when the integrated amplifier is used as a preamplifier (Pre mode).

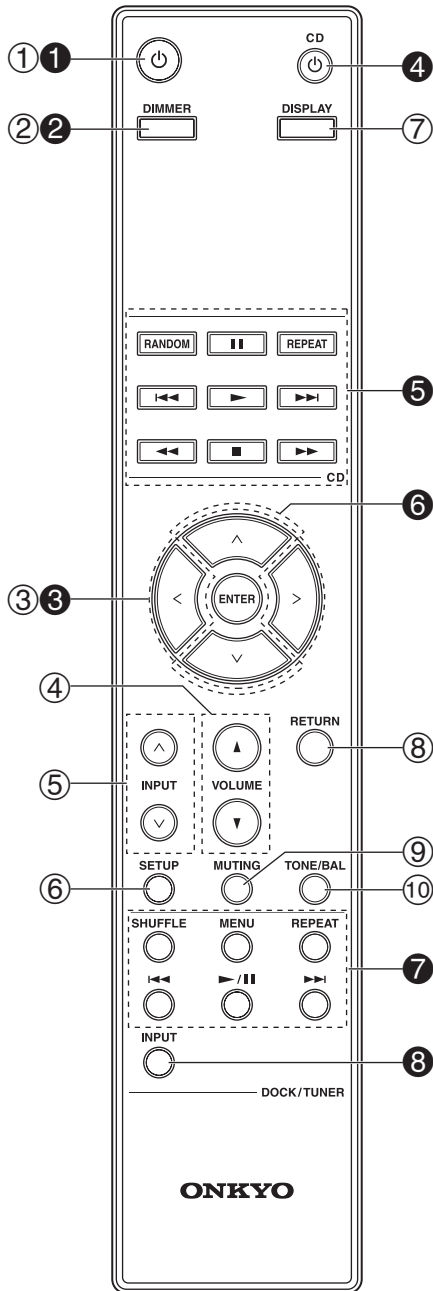
⑫ **MAIN IN L/R jacks**

Connect a preamplifier when the integrated amplifier is used as a power amplifier (Main mode).

⑬ **AC INLET**

Connects the supplied power cord. The other end of the power cord should be connected to a suitable wall outlet.

See "Connections" for connection information (→ **pages 13 to 25**).



For detailed information, see the pages in parentheses.

- ① **⏻ button** (→ **page 26**)  
Sets the integrated amplifier to On or Standby.
- ② **DIMMER button** (→ **page 28**)  
Adjusts the display brightness.
- ③ **^/∇/◀/▶ and ENTER buttons**  
Select and adjust settings.
- ④ **VOLUME ▲/▼ buttons** (→ **page 27**)  
Adjust the volume of the integrated amplifier.
- ⑤ **INPUT ^/∇ buttons** (→ **page 28**)  
Select an input source.
- ⑥ **SETUP button** (→ **page 35**)  
Enters the Setup menu.
- ⑦ **DISPLAY button** (→ **page 30**)  
Displays the current input and settings.
- ⑧ **RETURN button**  
Returns to the previous display when changing settings.
- ⑨ **MUTING button** (→ **page 31**)  
Mutes or unmutes the integrated amplifier.
- ⑩ **TONE/BAL button** (→ **page 29**)  
Adjusts the tone (bass/treble) and balance of the integrated amplifier.

You can also use the remote controller to control your Onkyo CD Player (e.g. C-7070), Onkyo Dock, or Onkyo Network Tuner (e.g. T-4070).

### Note

- Make sure the remote controller is pointed at the CD player when using it.
- With some components, the remote controller may not work, or only partially.
- To control the Onkyo Dock and Onkyo Network Tuner, an **RI** connection is required (→ **page 20**).
- Refer to the manuals supplied with your Onkyo CD Players, Network Tuner or RI Docks.

### ■ Controlling the Onkyo CD player (→ **page 32**)

- ④ **⏻ CD button**
- ⑤ **Playback mode buttons**

### ■ Controlling the Onkyo Dock (→ **page 33**)

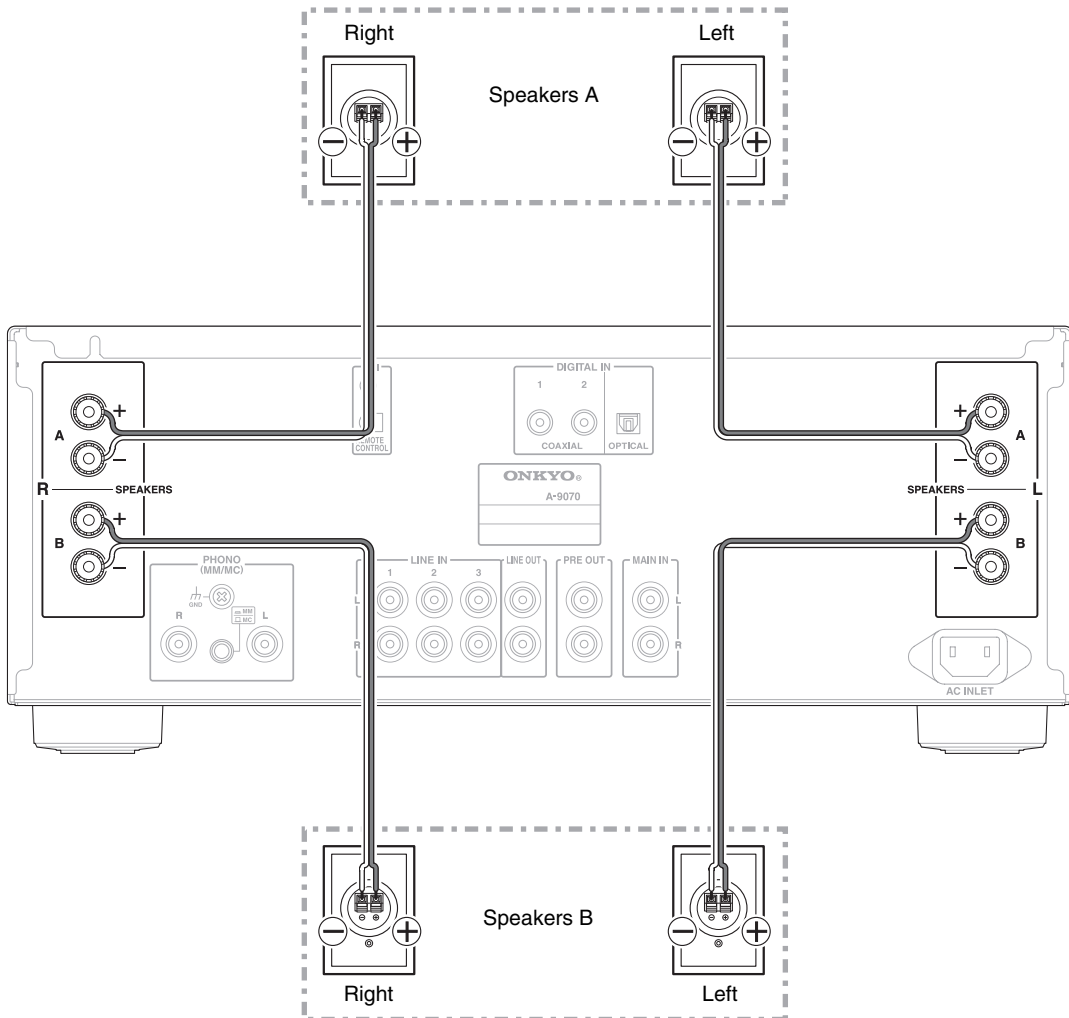
- ① **⏻ button**
- ② **DIMMER button**
- ⑥ **^/∇ and ENTER buttons**
- ⑦ **Dock control buttons**

### ■ Controlling the Onkyo Network Tuner (→ **page 34**)

- ① **⏻ button**
- ② **DIMMER button**
- ③ **^/∇/◀/▶ and ENTER buttons**
- ⑦⑧ **Tuner control buttons**

# Connections

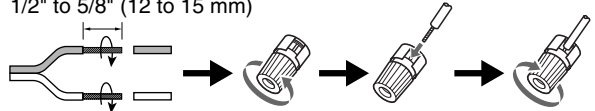
## Connecting Your Speakers



### ■ Screw-type speaker terminals

Strip 1/2" to 5/8" (12 to 15 mm) of insulation from the ends of the speaker cables, and twist the bare wires tightly, as shown.

1/2" to 5/8" (12 to 15 mm)

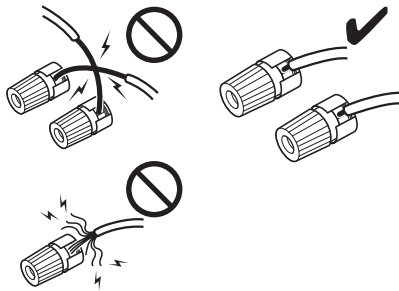


### ■ Banana Plugs (North American models)

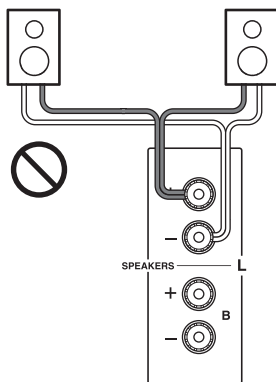
- If you are using banana plugs, tighten the speaker terminal before inserting the banana plug.
- Do not insert the speaker code directly into the center hole of the speaker terminal.

### Note

- Make sure that the wires do not touch metal parts on the back panel or elsewhere.
- Y plugs cannot be connected.
- Two sets of speakers (Speakers A and Speakers B) can be connected to the integrated amplifier. You can select which speakers to output audio to when listening to music. You can also output audio from both sets of speakers.
- If you use Speakers A or Speakers B, make sure to use speakers with an impedance of 4 to 16 ohms. If you use Speakers A and Speakers B, make sure to use speakers with an impedance of 8 to 16 ohms. Connecting speakers with an impedance less than 8 ohms may cause the protection circuit to activate.
- When using only one speaker, or when playing back monaural audio, don't connect a single speaker to both the left and right speaker terminals.
- Pay close attention to speaker wiring polarity. In other words, connect positive (+) terminals only to positive (+) terminals, and negative (-) terminals only to negative (-) terminals. If you get them the wrong way around, the sound will be out of phase and will feel unnatural.
- Be careful not to short the positive and negative wires. Doing so may damage the integrated amplifier.
- Make sure the metal core of the wire does not have contact with the integrated amplifier's rear panel. Doing so may damage the integrated amplifier.



- Don't connect more than one speaker wire to a single speaker terminal. Doing so could damage the integrated amplifier or cause it to malfunction.

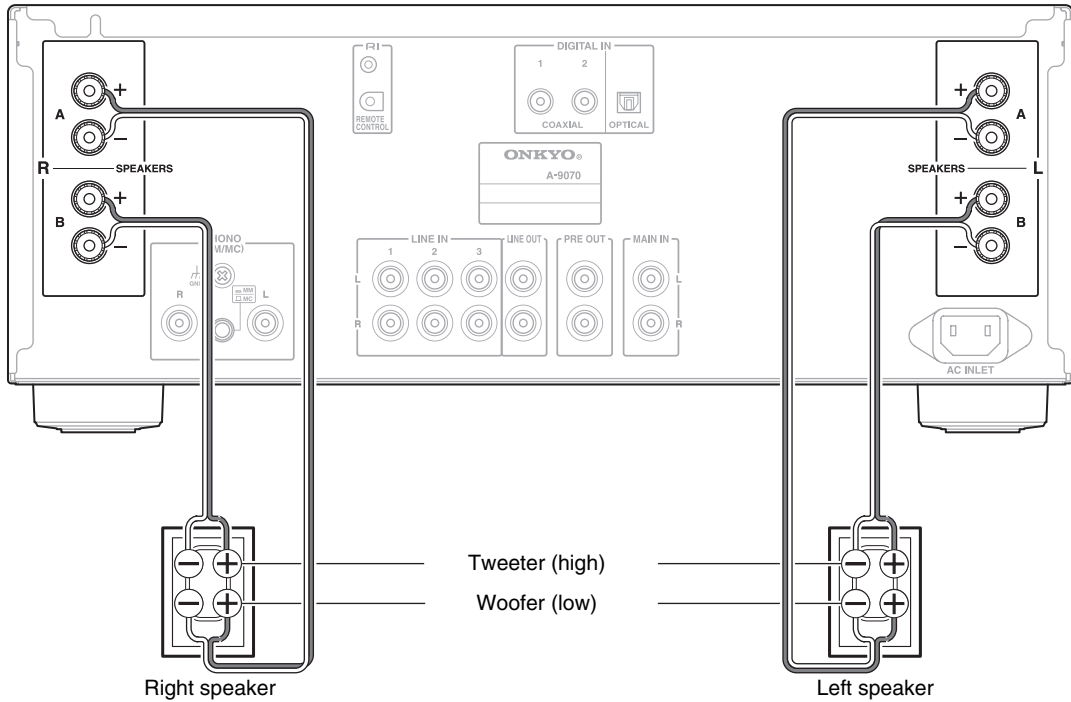


## Bi-wiring Connection

Bi-wiring provides improved bass and treble performance. Using terminals of both **SPEAKERS A** and **SPEAKERS B**, it separates high frequency from low frequency signals.

### Important:





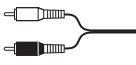





- Bi-wiring can be used only with speakers that support bi-wiring. Refer to your speaker manual.
- When making the bi-wiring connections, be sure to remove the jumper bars that link the speakers' tweeter (high) and woofer (low) terminals.
- When making the bi-wiring connections, set **SPEAKERS** to **A+B** (→ page 27).



### Tip

- As shown on the illustration, the wiring terminals of **SPEAKERS A** are connected to the woofer and **SPEAKERS B** are connected to the tweeter. However, wiring them the other way around is also possible.

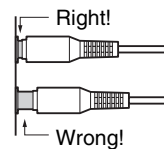
## Cable and Jacks

Optical digital audio		 OPTICAL	Optical digital connections allow you to enjoy digital sound such as PCM. The maximum sampling rate for PCM input is 96 kHz/24 bit, 2ch.
Coaxial digital audio*		 COAXIAL	Orange
Analog audio (RCA)		L  R 	White Red
<b>RI</b>		  REMOTE CONTROL	To use <b>RI</b> (Remote Interactive), you need to connect your Onkyo CD Player, Network Tuner, or RI Dock to the integrated amplifier with an <b>RI</b> cable.

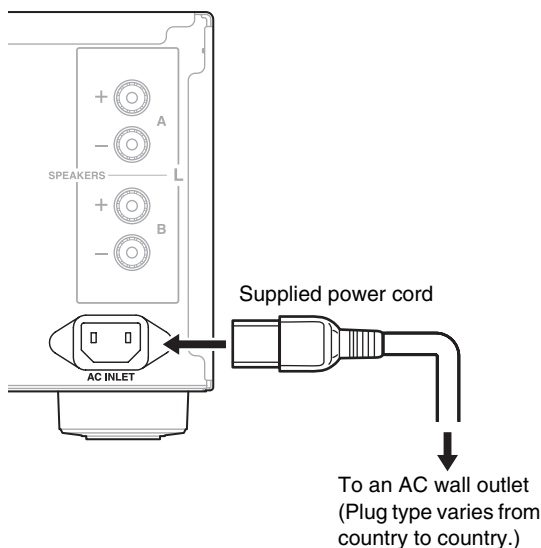
### Note

- Push plugs in all the way to make good connections (loose connections can cause noise or malfunctions).
- To prevent interference, keep audio cables away from power cords and speaker cables.
- The integrated amplifier's optical digital jacks have shutter-type covers that open when an optical plug is inserted and close when it's removed. Push plugs in all the way.
- To prevent shutter damage, hold the optical plug straight when inserting and removing.
- Do not use digital audio signals other than PCM.

\* An analog audio cable can be used instead of a coaxial cable. However, we recommend that you use a coaxial or a composite video cable.



## Connecting the Power Cord



### Tip

- To reduce noise, do not tie signal cables together with the power cable. Wire them so that they are away from each other.
- Depending on the country, the integrated amplifier may be polarity-sensitive. In this case, plug the power cord in a way that provides the best sound quality.

### Note

- **Never disconnect the power cord from the integrated amplifier while the other end is still plugged into a wall outlet.** Doing so may cause an electric shock. Always disconnect the power cord from the wall outlet first, and then the integrated amplifier.
- Turning on the integrated amplifier may cause a momentary power surge that might interfere with other electrical equipment on the same circuit. If this is a problem, plug the integrated amplifier into a different branch circuit.
- Do not use a power cord other than the one supplied with the integrated amplifier. The supplied power cord is designed exclusively for use with the integrated amplifier and should not be used with any other equipment.

- 1** Connect all of your speakers and components.
- 2** Connect the supplied power cord to the integrated amplifier's **AC INLET**.
- 3** Plug the power cord into an AC wall outlet.

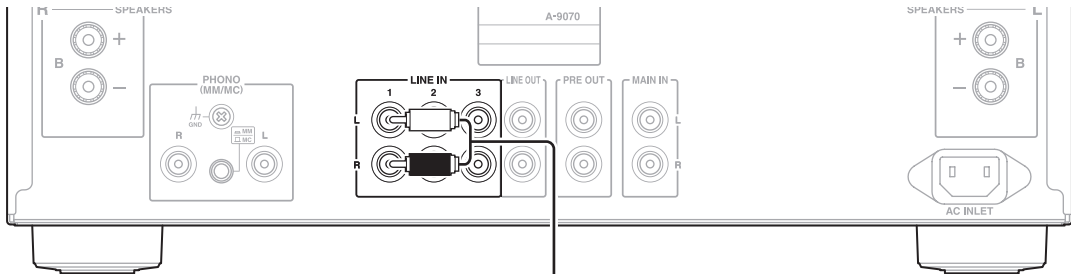


## Connecting a CD Player

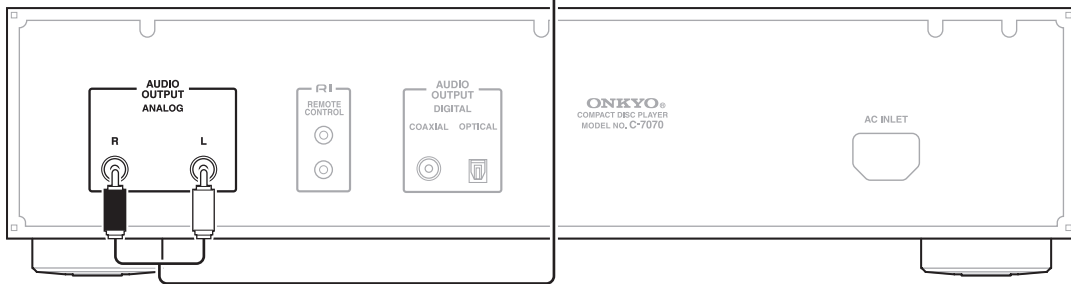
This is an example of connection using the CD Player C-7070.

### Analog Connection

#### Integrated Amplifier A-9070



#### CD Player C-7070

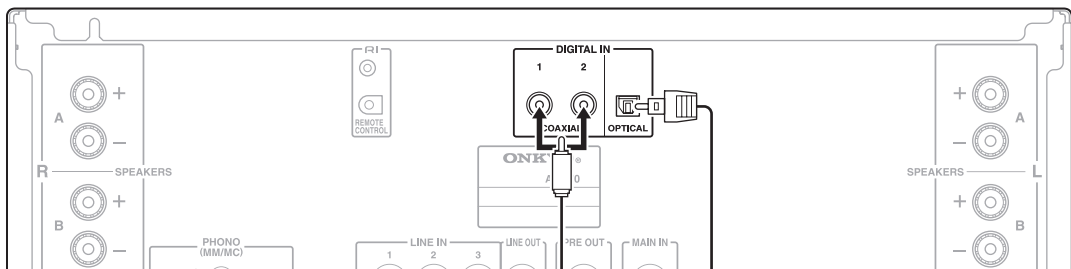


#### Tip

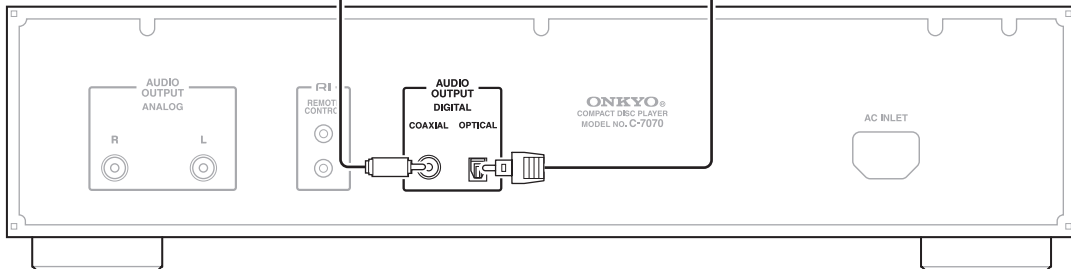
- Connect the CD Player to either of the following jacks: **LINE IN 1/2/3**.

### Digital Connection (Coaxial or Optical)

#### Integrated Amplifier A-9070



#### CD Player C-7070



Connect either of them.

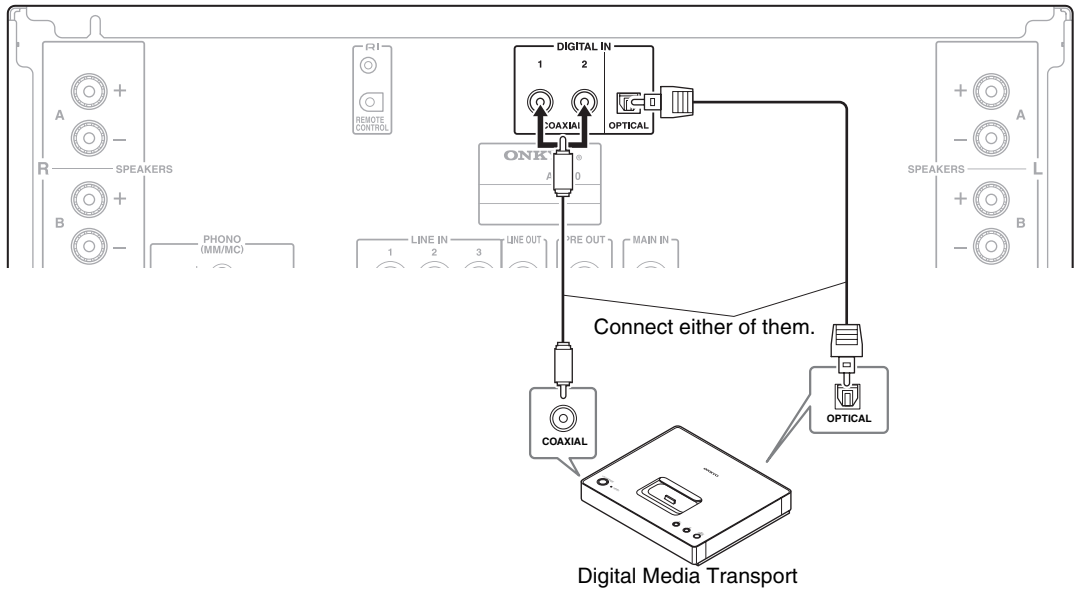
#### Tip

- Connect the CD Player to either of the following jacks: **COAXIAL 1/2, OPTICAL**.

## Connecting an Onkyo Dock

This is an example of connection using the Onkyo Digital Media Transport.

### Integrated Amplifier A-9070



#### Note

- Use only an Onkyo Dock with digital connections.
- To use the **RI** (Remote Interactive) connection, you need to change the names of inputs (→ **pages 20, 35**).

#### Tip

- Connect the Onkyo Dock to either of the following jacks: **COAXIAL 1/2, OPTICAL**.

## Connecting a Tuner

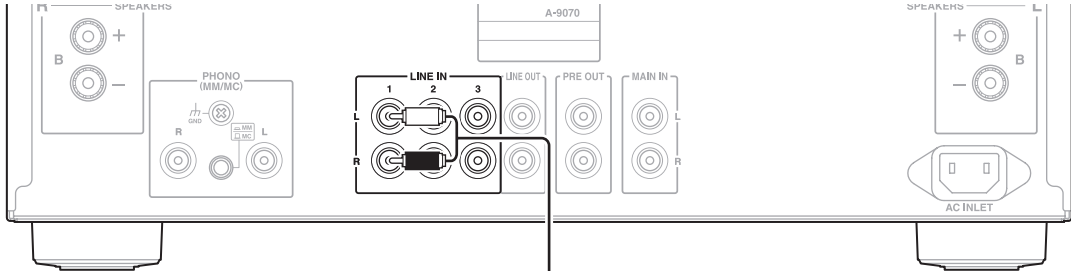
This is an example of connection using the Network Tuner T-4070.

### Note

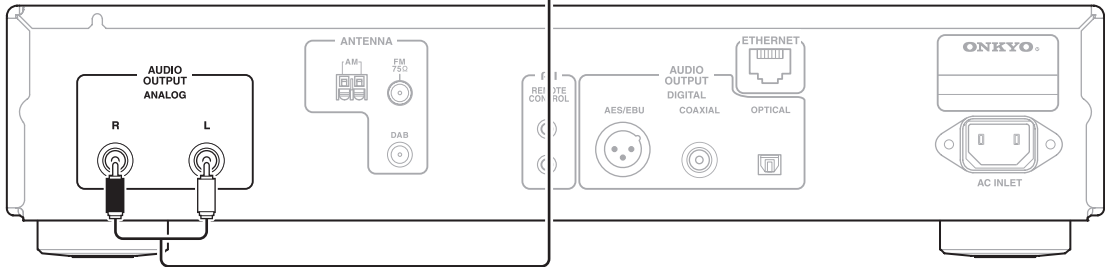
- To use the **RI** (Remote Interactive) connection, you need to change the names of inputs (→ **pages 20, 35**).

## Analog Connection

### Integrated Amplifier A-9070



### Network Tuner T-4070

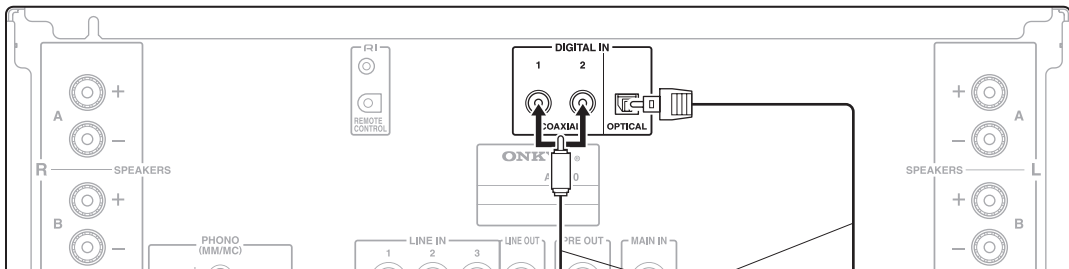


### Tip

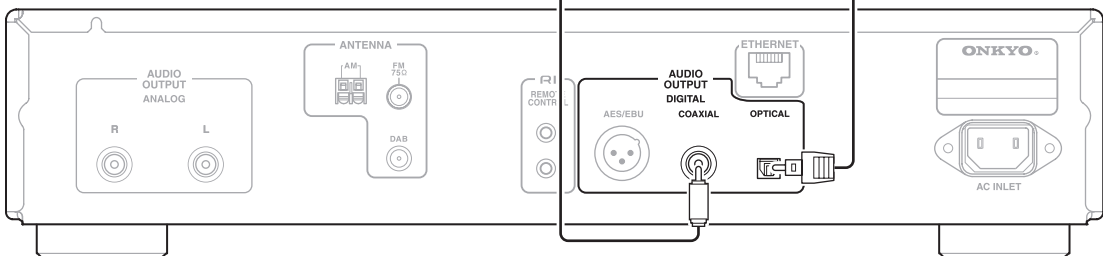
- Connect your tuner to either of the following jacks: **LINE IN 1/2/3**.

## Digital Connection (Coaxial or Optical)

### Integrated Amplifier A-9070



### Network Tuner T-4070

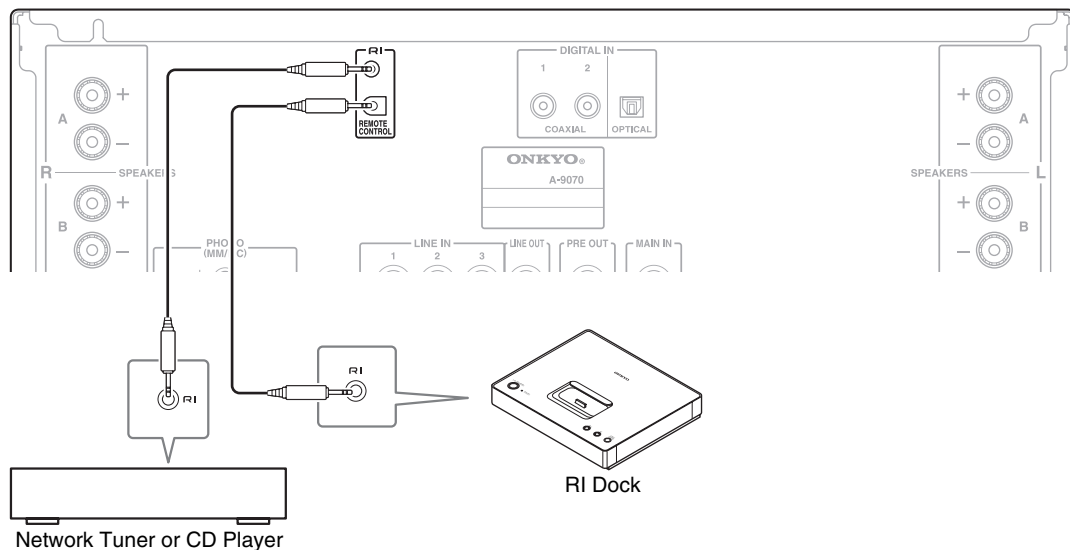


### Tip

- Connect the Network Tuner to either of the following jacks: **COAXIAL 1/2, OPTICAL**.

# Connecting Onkyo RI Components

## Integrated Amplifier A-9070



### 1 Change the names of inputs in accordance with each component connected (→ page 35).

Connected component	Names of inputs
CD Player	CD
Network Tuner	TUNER
RI Dock	DOCK

### 2 Make sure that each Onkyo CD Player, Network Tuner or RI Dock is connected (→ pages 17 to 19).

### 3 Make the RI connections (see the illustration).

With **RI** (Remote Interactive), you can use the following special functions:

#### ■ Auto Power On

When you start playback on a component connected via **RI** while the integrated amplifier is on Standby, the integrated amplifier will automatically turn on and select that component as the input source.

#### ■ Direct Change

When playback is started on a component connected via **RI**, the integrated amplifier automatically selects that component as the input source.

#### ■ System Off

When you turn off the integrated amplifier, the components turn off automatically.

#### ■ Remote Control

You can use the integrated amplifier's remote controller to control your other **RI**-capable Onkyo Network Tuner or RI Dock, pointing the remote controller at the integrated amplifier's remote control sensor instead of the component.

#### Tip

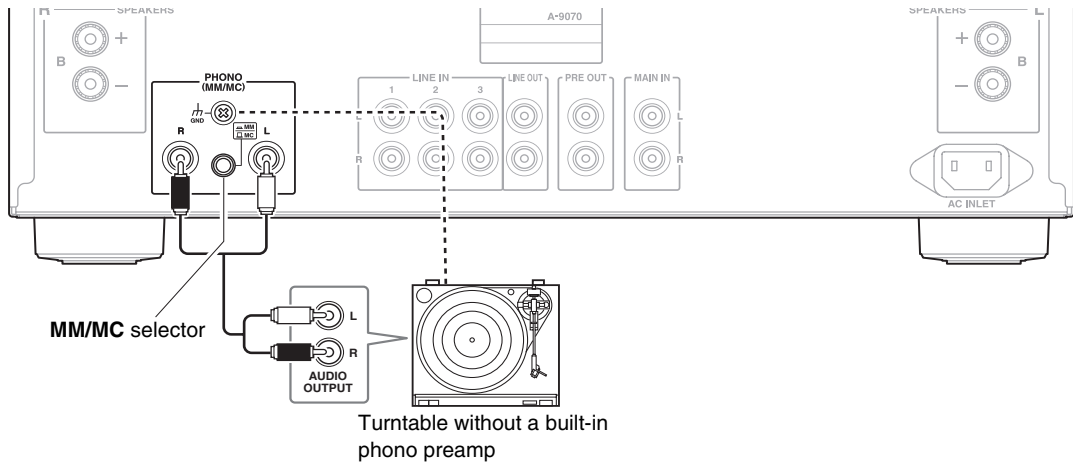
- For details on operating the connected components, see "Controlling Other Onkyo Components" (→ page 32).

#### Note

- Use only **RI** cables for **RI** connections. **RI** cables are supplied with your Onkyo CD Player, Network Tuner or RI Dock.
- If two **RI** jacks are present, you can use either one indifferently as they work the same way.
- Connect only an Onkyo CD Player, Network Tuner or RI Dock to the **RI** jacks. Connecting other manufacturer's components may cause a malfunction.
- Only Onkyo CD Players (e.g. C-7070), Network Tuners (e.g. T-4070), and RI Docks (e.g. ND-S1000) are supported by the integrated amplifier's **RI**. With other components such as MD recorders, the **RI** won't work properly.
- Some components may not support all **RI** functions. Refer to the manuals supplied with your Onkyo CD Players, Network Tuner or RI Docks.
- The CD Players only support the Auto Power On and Direct Change functions.

## Connecting a Turntable

### Integrated Amplifier A-9070



Use the **MM/MC** selector on the back of the integrated amplifier to select either **MM** or **MC**, in accordance with the cartridge format of the turntable.

Remove the short pins plugged into the jacks before connecting a turntable to the **PHONO** inputs.

#### Note

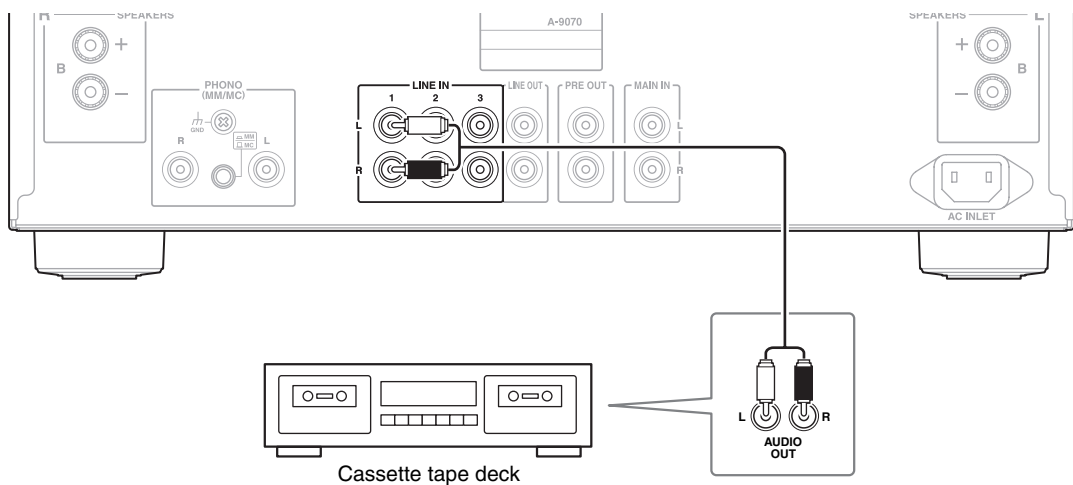
- Always turn off the integrated amplifier before switching between **MM** and **MC**.

#### Tip

- If your turntable has a built-in phono preamp, you can connect the turntable to other analog inputs such as **LINE IN 1**.
- If your turntable has a ground wire, connect it to the **GND** screw. With some turntables, connecting the ground wire may produce an audible hum. If this happens, disconnect it.

## Connecting a Cassette Tape Deck

### Integrated Amplifier A-9070



#### Tip

- Connect your cassette tape deck to either of the following jacks: **LINE IN 1/2/3**.

## Connecting a Recording Component

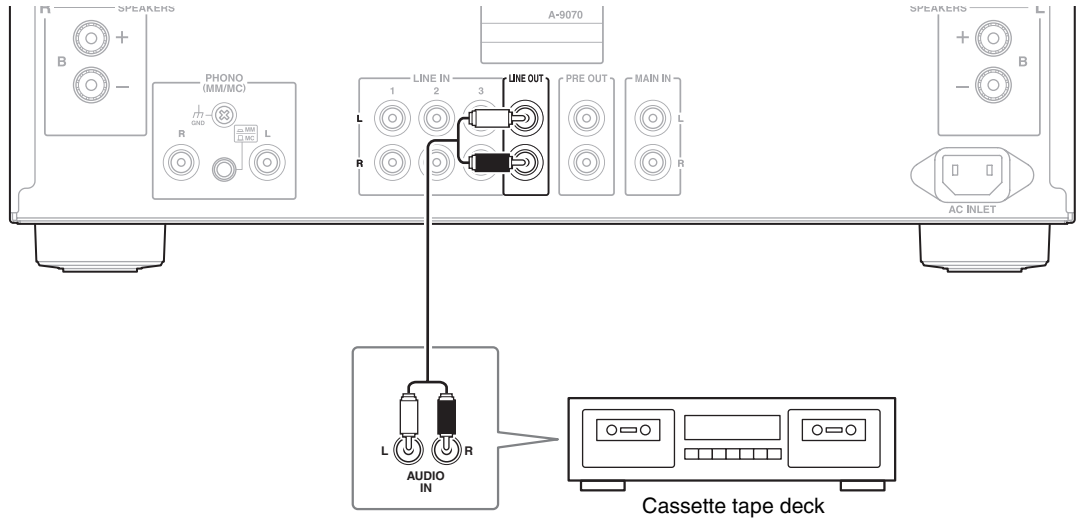
### Important:

- Unless you have the full consent of the copyright holder, copyright laws prohibit using your recordings for anything other than personal enjoyment!
- Do not change the integrated amplifier's input while recording. Doing so will cause the audio from the selected component to be recorded.

### Note

- Volume adjustments and use of the muting function are not reflected in the signal output from **LINE OUT**.
- Manual tone adjustments using **BASS +/-**, **TREBLE +/-**, **BALANCE L/R**, and **TONE/BAL** are not reflected in the signal output from **LINE OUT**.
- See the manual of the recording component for instructions on correct use.

### Integrated Amplifier A-9070



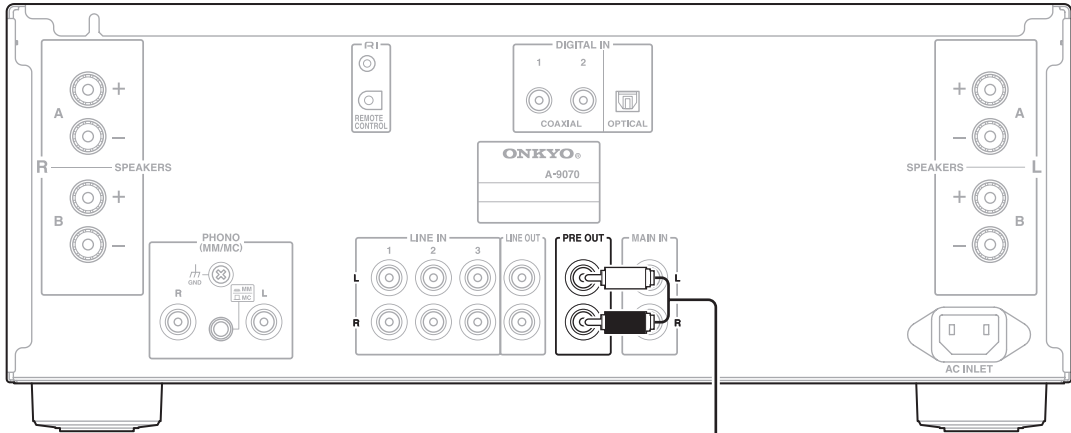
## Using the Integrated Amplifier as a Preamplifier

The integrated amplifier can be used as a preamplifier (Pre mode). This mode keeps the heat down, as opposed to when the integrated amplifier is used as a pre-main amplifier. This is an example of connection using the power amplifier M-5000R.

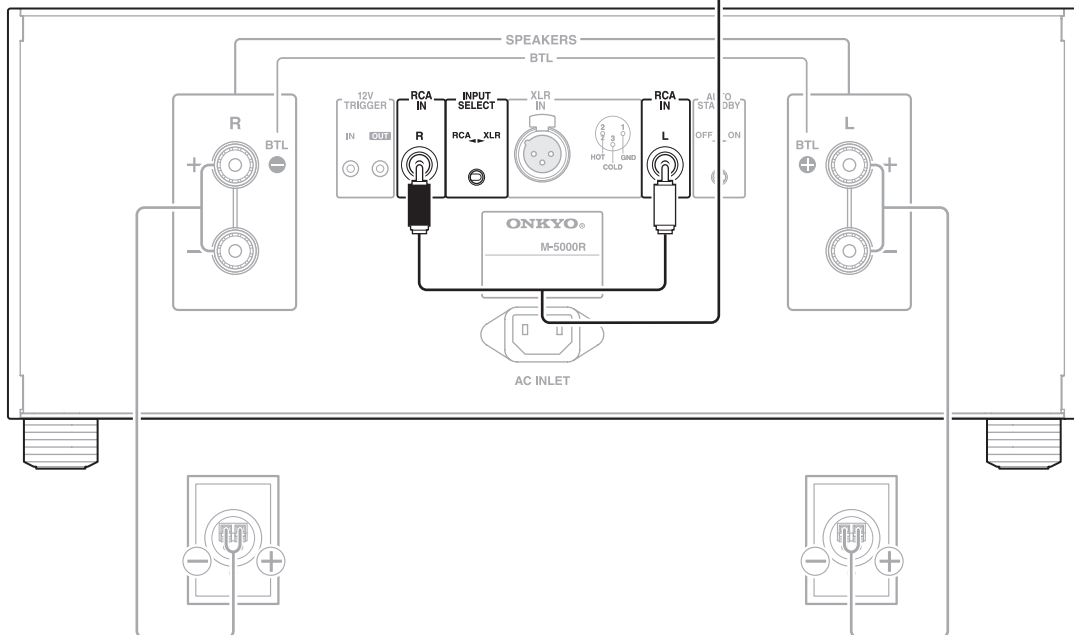
### Important:

- In this mode, **SPEAKERS** cannot be used.
- To use this mode, you need to change the “ROUTE” setting (→ [page 39](#)).

### Integrated Amplifier A-9070



### Power Amplifier M-5000R



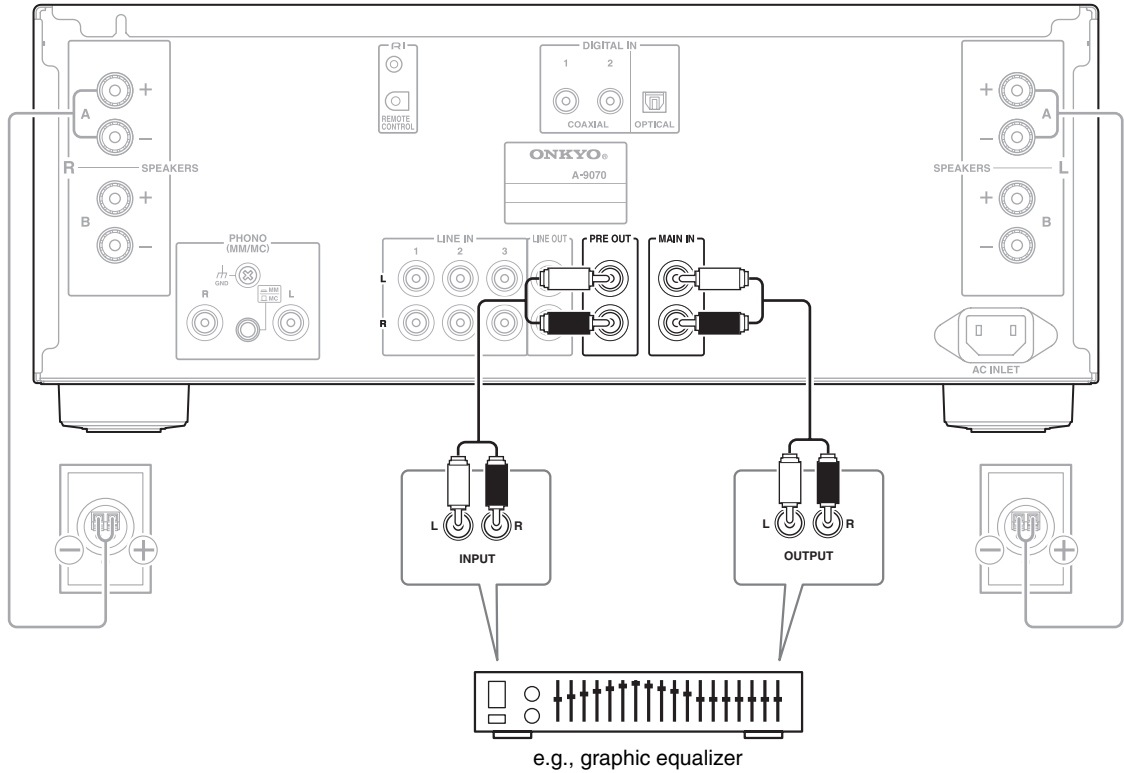
## Separating the Pre-amp and Main Amp Units

You can use the integrated amplifier's pre-amp and main amp units individually (Split mode) to connect a sound processor such as a graphic equalizer between the pre-amp and main amp units.

### Important:

- Always turn the integrated amplifier off before connecting the **MAIN IN** jacks.
- To use this mode, you need to change the “**ROUTE**” setting (→ **page 39**).

### Integrated Amplifier A-9070



### Note

- Depending on the sound processor used, noise may be produced upon switching the integrated amplifier on and off. In this case, turn on each device in the following sequence: sound processor, integrated amplifier. Turn off each device in the following sequence: integrated amplifier, sound processor.



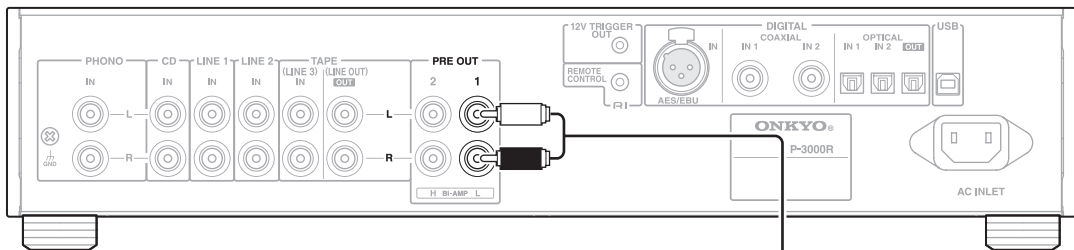
## Using the Integrated Amplifier as a Power Amplifier

Combined with a preamplifier of your choice, the integrated amplifier can be used as a power amplifier (Main mode). When it is selected, the **MAIN IN** LED lights. See “Connecting Your Speakers” for connection information (→ **page 13**). This is an example of connection using the preamplifier P-3000R.

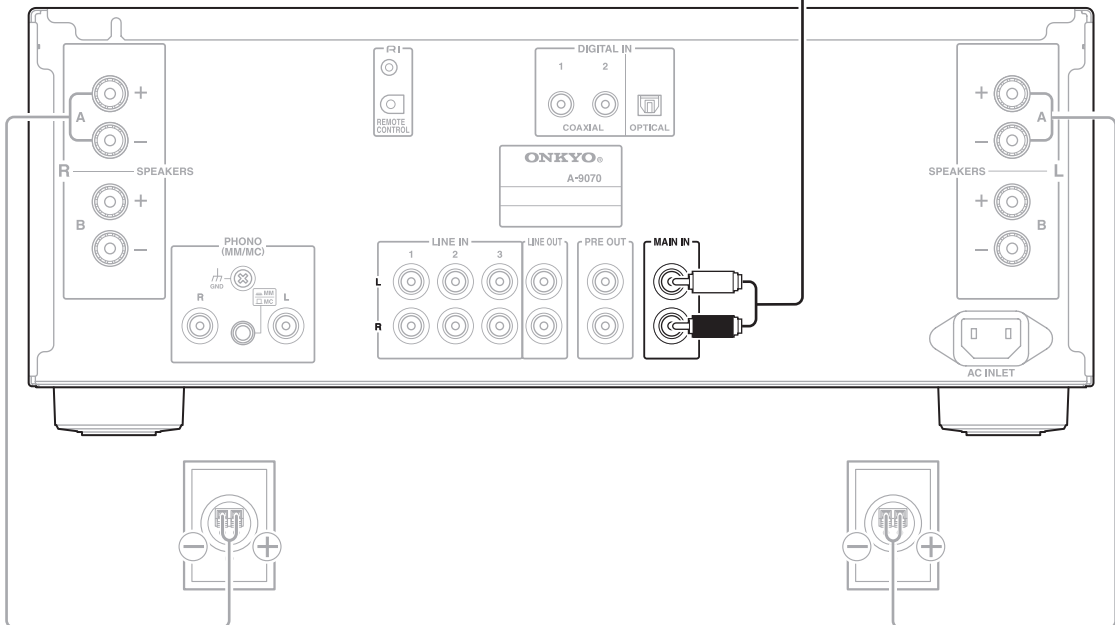
### Important:

- Always turn the integrated amplifier off before connecting the **MAIN IN** jacks.
- Before setting the integrated amplifier to Main mode, make sure that no component such as a CD player is connected to the **MAIN IN** jacks, as a direct connection may cause a massive blast sound and damage the integrated amplifier or your speakers.
- This mode can be used with the following limitations:
  - The volume level can't be adjusted.
  - Only **SPEAKERS** and **SETUP** can be used.
  - Only the **MAIN IN** and **SPEAKERS** terminals can be used.
  - The Auto Standby function is not available (→ **page 38**).
- To use this mode, you need to change the “**ROUTE**” setting (→ **page 39**).

### Preamplifier P-3000R

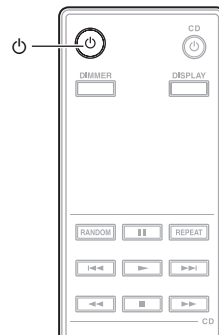
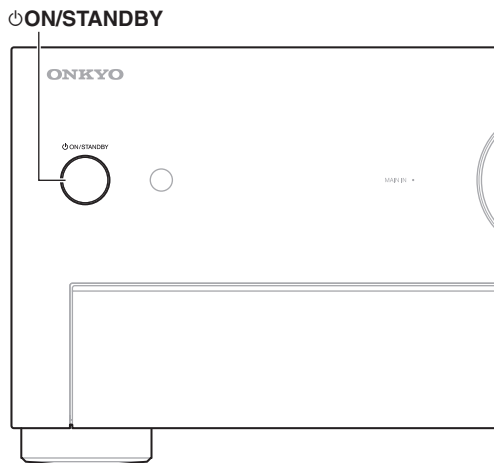


### Integrated Amplifier A-9070



# Basic Operations

## Turning On/Off the Integrated Amplifier



### Turning On the Integrated Amplifier

#### ■ Operating with the remote controller

##### 1 Press .

The integrated amplifier comes on, and the information display lights.

#### ■ Operating on the integrated amplifier

##### 1 Press ON/STANDBY.

The integrated amplifier comes on, and the information display lights.

#### Tip

- After showing the volume level from the last session, the message “MUTING” flashes on the information display until the speakers or headphones become active.
- After a certain time of warming up, the internal temperature of the integrated amplifier stabilizes, and the sound is softened.
- The integrated amplifier remembers the state when power was last turned off, and returns to that state.

### Turning Off the Integrated Amplifier

#### ■ Operating with the remote controller

##### 1 Press .

The integrated amplifier enters Standby mode and the information display goes off.

#### ■ Operating on the integrated amplifier

##### 1 Press ON/STANDBY.

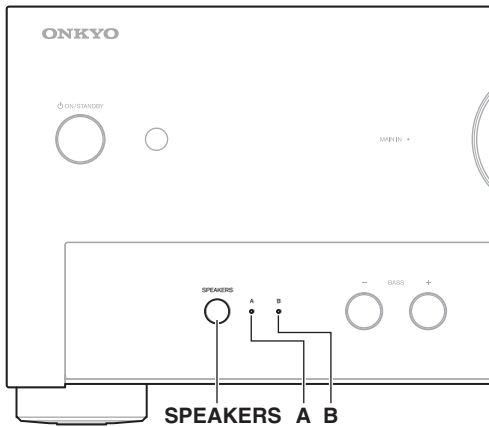
The integrated amplifier enters Standby mode and the information display goes off.

#### Tip

- For details on power management settings, see “Setting the Auto Standby Function” (→ [page 38](#)).

## Selecting Speakers A and Speakers B

You can select to output sound from Speakers A, Speakers B, or both A + B.



### 1 Press **SPEAKERS** repeatedly on the integrated amplifier.

The LED of the selected speakers lights.

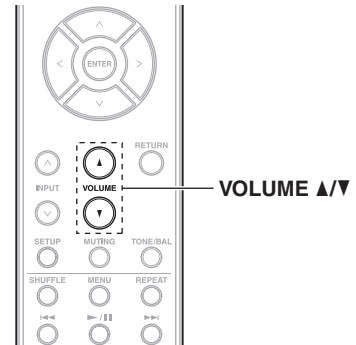
#### Note

- While headphones are connected, this setting is disabled.
- When “ROUTE” is set to “PRE”, this setting is disabled (→ page 39).
- When this setting is set to **A + B**, the impedance of speakers is restricted. For further details, see “Connecting Your Speakers” (→ page 13).

## Adjusting the Volume

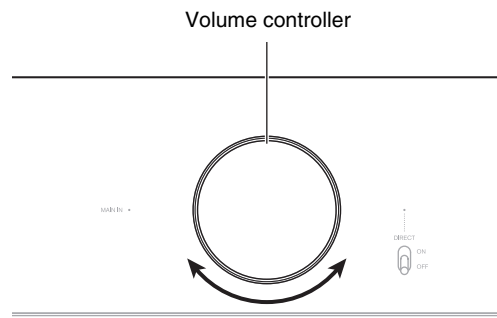
You can adjust the volume within the following range:  
**VOLMIN, -95dB, -90dB, -85dB, -80dB to 14dB, VOLMAX**

### ■ Operating with the remote controller



### 1 Press **VOLUME ▲/▼** repeatedly.

### ■ Operating on the integrated amplifier



### 1 Use the volume controller.

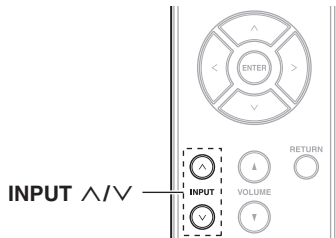
#### Tip

- The default level is -55 dB.

## Selecting the Input Source

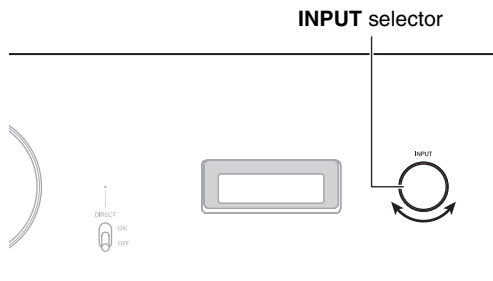
You can switch inputs to select the desired source component. Choose an input from the following: **LINE1, LINE2, LINE3, COAX1, COAX2, OPT, PHONO**

### ■ Operating with the remote controller



1 Press **INPUT ^/∇** repeatedly.

### ■ Operating on the integrated amplifier



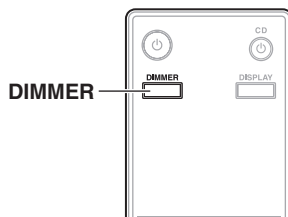
1 Use the **INPUT selector**.

#### Tip

- For changing the input's name, see "Changing Input Names" (→ [page 35](#)).
- To hide the display of unused inputs, see "Skipping Unused Inputs" (→ [page 36](#)).

## Adjusting the Display Brightness

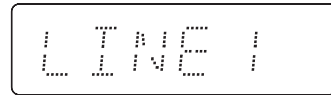
You can adjust the brightness of the integrated amplifier's information display.



1 Press **DIMMER** repeatedly.

Normal ↔ Dim

**Normal**



**Dim**



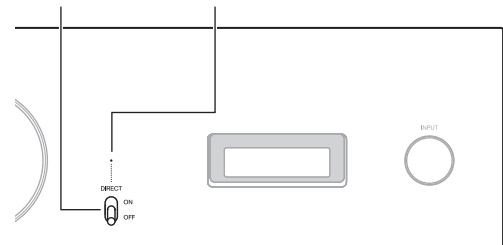
#### Note

- When using the integrated amplifier's remote controller to operate **RI**-connected components, their display brightness can only be adjusted in 2 levels.

## Using the Direct Function

By bypassing the tone control circuit, the Direct function uses the shortest path for enhanced sound quality. Although this function generally turns the display off, the integrated amplifier makes use of a display that doesn't affect the sound quality. It is therefore possible to turn the display on while the Direct function is enabled. Also, since the left/right balance setting uses a system that doesn't affect the sound quality, the balance can be adjusted even if the Direct function is enabled.

**DIRECT switch**    **DIRECT LED**



1 Set the **DIRECT switch** to the **ON** position.

The information display goes off and the **DIRECT LED** lights.

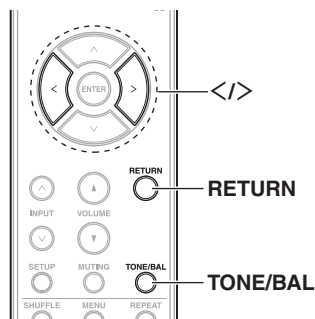
#### Tip

- To turn the information display on while the Direct function is enabled, press **DIMMER** on the remote controller.

## Adjusting the Bass, Treble and Balance

You can adjust the bass, treble and left/right output balance respectively.

### ■ Operating with the remote controller

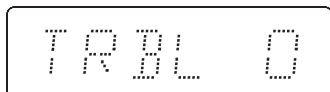
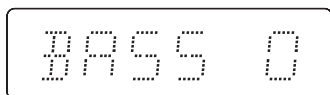


#### 1 Press **TONE/BAL** repeatedly.

##### ▶ **BASS:**

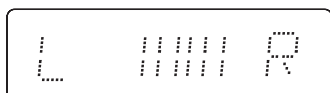
##### ▶ **TRBL (Treble):**

You can adjust the bass and treble levels from -6 to +6.



##### ▶ **L, R (Balance):**

The left and right output balance can be adjusted. The more the bars move to the right, the higher the volume will be on the right output. Conversely, the more the bars move to the left, the higher the volume will be on the left output. When no bar appears on the display, the volume is evenly distributed.

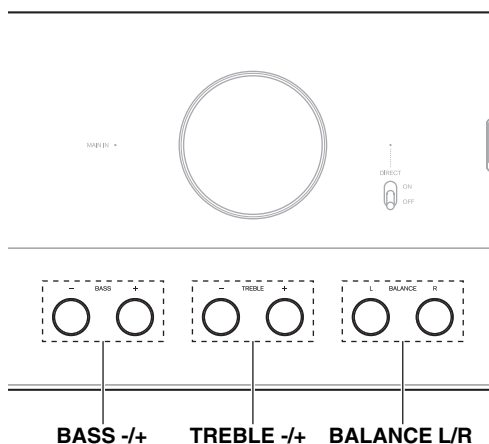


#### 2 Press **</>** repeatedly.

The adjustment is automatically confirmed.

To exit the adjustment, press **RETURN**.

### ■ Operating on the integrated amplifier



#### 1 Press **BASS +/-**, **TREBLE +/-**, or **BALANCE L/R** repeatedly.

The adjustment is automatically confirmed.

#### Tip

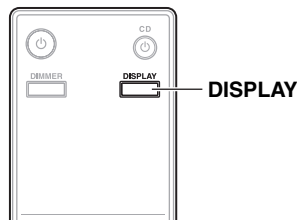
- By default, bass and treble are set to 0, and balance is set to the center position (no visible bars).

#### Note

- The integrated amplifier will end the adjustment if there is no operation for 5 seconds.
- While the Direct function is enabled, the tone controls are disabled and pressing the buttons will display the message "DIRECT".
- When headphones are connected, the balance can't be adjusted and pressing the buttons will display the message "PHONES".

## Changing the Display Information

You can display information such as the current input or the value of settings.



**1** Press **DISPLAY** repeatedly.

**Current Input**

LINE 1

**Current Volume**

-95 dB

**BASS Level**

BASS 0

**TRBL (Treble) Level**

TRBL 0

**Input fs (sampling rate)**

44.1K

**Pre-emphasis Signal Detection**

EMPHAS

**Setting of ROUTE**

NORMAL

To exit the adjustment, press **RETURN**.

### Note

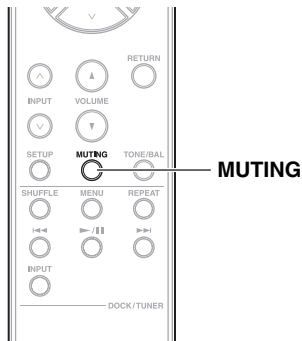
- Input fs (sampling rate) is displayed only when a digital input (COAX1, COAX2, OPT) is selected.
- Depending on the source, the value on the information display may differ from the actual sampling rate's.
- When the Direct function is enabled, "**BASS**" and "**TRBL**" are not displayed.
- When a signal treated for treble emphasis (pre-emphasis) is detected, the integrated amplifier is designed to restore the original signal characteristics via the "de-emphasis" process. The message "**EMPHAS**" only appears when a signal processed with pre-emphasis is detected.
- When "**ROUTE**" is set to "**MAIN**", **DISPLAY** can't be used (→ [page 39](#)).

### Tip

- When a variation of sampling rate is detected, the value is automatically displayed.

## Muting the Sound

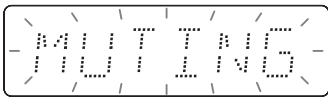
You can temporarily mute the output of the integrated amplifier.



### 1 Press **MUTING**.

The message “**MUTING**” flashes on the information display.

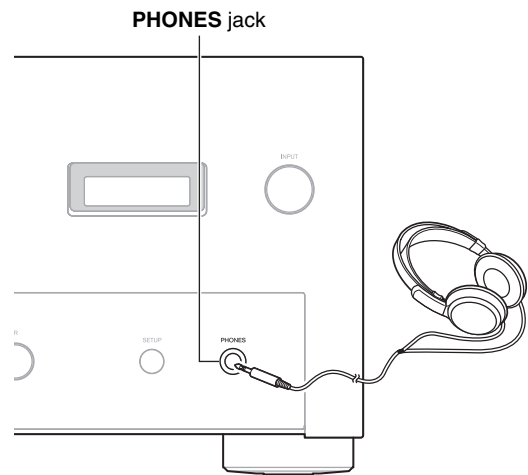
To unmute the integrated amplifier, press **MUTING** again.



#### Note

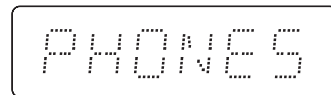
- While the integrated amplifier is muted:
  - Adjusting the volume or setting the integrated amplifier to Standby will unmute the integrated amplifier.
  - Pressing **INPUT**  $\wedge/\vee$  on the remote controller or turning the **INPUT** selector on the integrated amplifier will display the current input for 3 seconds.
- If **MUTING** is pressed while a setting is being performed, the setup will be terminated.
- Even if the power cord is unplugged, the muting function will be maintained on to the next session.

## Using Headphones



### 1 Connect a pair of stereo headphones with a standard plug (1/4 inch or 6.3 mm) to the **PHONES** jack.

When connecting the headphones, the message “**PHONES**” appears on the information display and the **A/B** LEDs go off.



You can adjust the volume and mute the sound, by using **VOLUME**  $\blacktriangle/\blacktriangledown$ .

While headphones are connected, no sound is output from the speakers and **PRE OUT** jacks.

#### Tip

- If there's a volume difference between your speakers and your headphones, you can adjust the offset level (→ **page 37**).

#### Note

- Always turn down the volume before connecting your headphones.
- When headphones are connected, the balance adjustment and **SPEAKERS** are disabled. Pressing the buttons will display the message “**PHONES**”.

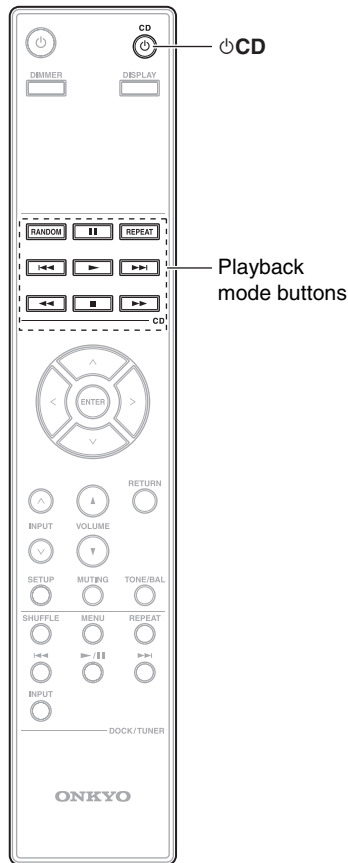
# Controlling Other Onkyo Components

## Controlling the Onkyo CD Player

You can use the integrated amplifier's remote controller to control your Onkyo CD player, pointing the remote controller at the CD player's remote control sensor.

### Note

- With some components, the remote controller may not work, or only partially.



### ⏻ CD button

Sets the CD Player to On or Standby.

### **RANDOM button**

Performs random playback.

### **II button**

Pauses playback.

### **REPEAT button**

Cycles through the repeat back modes.

### **⏮ button**

Selects the beginning of the current song. Pressing this button twice selects the previous song.

### **▶ button**

Starts playback.

### **⏭ button**

Selects the next song.

### **⏪ button**

Performs fast reverse playback.

### **■ button**

Stops playback.

### **⏩ button**

Performs fast forward playback.

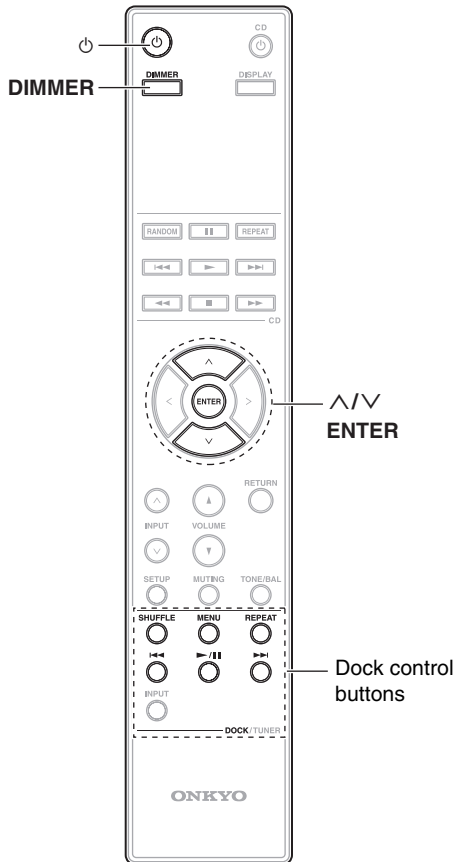


## Controlling the Onkyo Dock

Connect an Onkyo Dock to the integrated amplifier, and play music files from your iPod. You can use the integrated amplifier's remote controller to control basic iPod functions, but the functionality will depend on your iPod model and generation.

To control the Onkyo Dock, an **RI** connection is required (→ page 20).

To control the Onkyo Dock with the integrated amplifier's remote controller, you need to change the input name to "DOCK" (→ page 35).



### ⏻ button

Sets an Onkyo Dock to Standby.

### DIMMER button

Adjusts the display brightness.

### ^/∇ and ENTER buttons

Select a music file.

### SHUFFLE button

Performs shuffle playback.

### MENU button

Opens iPod menu or returns to the previous menu.

### REPEAT button

Cycles through the repeat back modes.

### ◀◀ button

Selects the beginning of the current song. Pressing this button twice selects the previous song.

### ▶▶/|| button

Starts or pauses playback.

### ▶▶ button

Selects the next song.

### Tip

- If you use your iPod with any other accessories, iPod playback detection may not work.
- Use the integrated amplifier's volume control to adjust the playback volume.
- While your iPod is inserted in an Onkyo Dock, its volume control has no effect.

### Note

- When the Auto Standby function is activated, the power of the Onkyo Dock connected via **RI** is automatically turned off (→ page 38).

Apple and iPod are trademarks of Apple Inc., registered in the U.S. and other countries.

## About Onkyo Dock

Dock is sold separately. Use only the Onkyo Dock with digital connections.

For the latest information on the Onkyo Dock components, see the Onkyo web site at: <http://www.onkyo.com>

Before using the Onkyo Dock components, update your iPod with the latest software, available from the Apple web site.

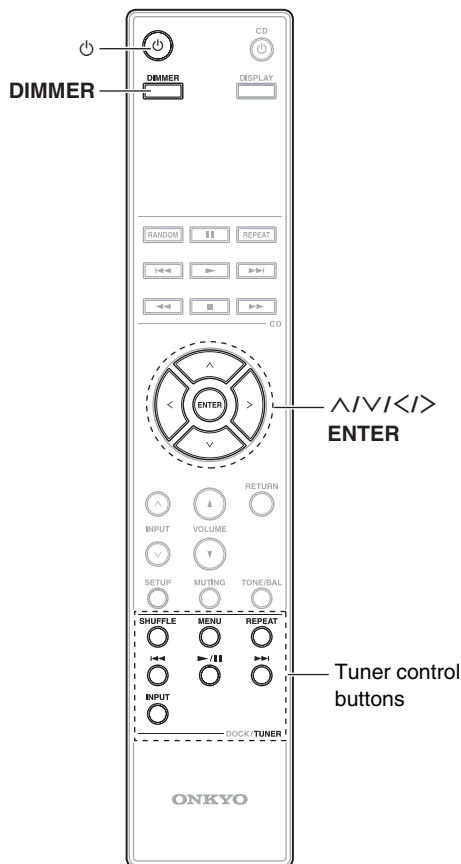
For supported iPod models, see the instruction manual of the Onkyo Dock.

## Controlling the Onkyo Network Tuner

Connect an Onkyo Network Tuner to the integrated amplifier and enjoy its music. You can use the integrated amplifier's remote controller to control the Network Tuner, but the functionality will depend on your Network Tuner's input.

To control the Onkyo Network Tuner, an **RI** connection is required (→ page 20).

To control the Onkyo Network Tuner with the integrated amplifier's remote controller, you need to change the input name to "TUNER" (→ page 35).



### ⏻ button

Sets an Onkyo Network Tuner to Standby.

### DIMMER button

Adjusts the display brightness.

### ⤴/⤵/⤶/⤷ and ENTER buttons

Select and adjust settings.

### SHUFFLE button

Performs shuffle playback. (When the Network Tuner's input is set to USB or AirPlay.)

### MENU button

Returns to the top menu of the Internet Radio service. (When the Network Tuner's input is set to NET.)

### REPEAT button

Cycles through the repeat back modes. (When the Network Tuner's input is set to USB or AirPlay.)

### ⏮ button

Selects the beginning of the current song. Pressing this button twice selects the previous song. (When the Network Tuner's input is set to USB or AirPlay.)

Selects the previous Internet radio station. (When the Network Tuner's input is set to NET.)

Selects the previous radio preset. (When the Network Tuner's input is set to TUNER.)

### ▶/⏸ button

Starts or pauses playback. (When the Network Tuner's input is set to USB, NET or AirPlay.)

### ▶▶ button

Selects the next song. (When the Network Tuner's input is set to USB or AirPlay.)

Selects the next Internet radio station. (When the Network Tuner's input is set to NET.)

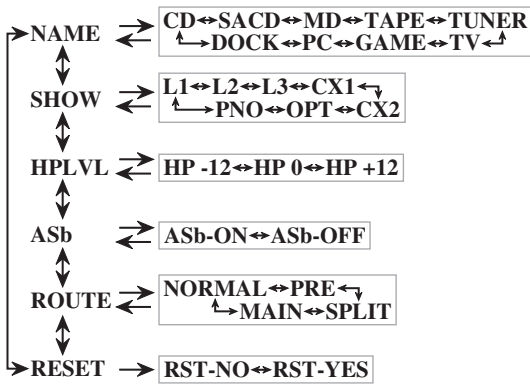
Selects the next radio preset. (When the Network Tuner's input is set to TUNER.)

### INPUT button

Cycles through the input sources.

# Custom Setup

You can perform custom settings using **SETUP** on the remote controller or the integrated amplifier. The **SETUP** menu allows you to set the following items: **NAME**, **SHOW**, **HPLVL**, **ASb**, **ROUTE**, and **RESET**.



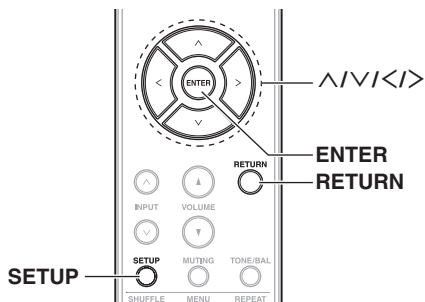
## Note

- When “ROUTE” is set to “MAIN”, the “NAME”, “SHOW”, “HPLVL” and “ASb” settings are not available.
- When the “PHONO” input is selected, “NAME” setting is not available.

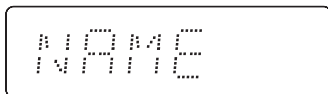
## Changing Input Names

You can change the name of the currently selected input. Choose a name from the following: **CD**, **SACD**, **MD**, **TAPE**, **TUNER**, **TV**, **GAME**, **PC**, **DOCK**

### ■ Operating with the remote controller



- 1 Press **SETUP**.
- 2 Press **^/v** repeatedly to select “NAME”.



- 3 Press **ENTER**.  
The name currently assigned to the input flashes.

- 4 Press **</>** repeatedly to select the name you want to assign.

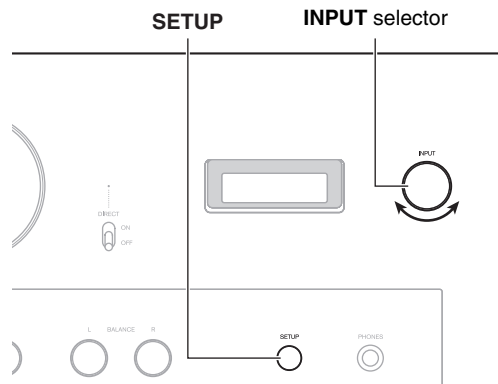
The selected name flashes.



- 5 Press **ENTER**.  
The selected name flashes rapidly for a few times as the setting is confirmed.

- 6 Press **RETURN** repeatedly to exit the setup.

### ■ Operating on the integrated amplifier



- 1 Press **SETUP** repeatedly to select “NAME”.
- 2 Use the **INPUT** selector to select the name you want to assign.  
First, the currently assigned name flashes on the information display. Then, the assignable names are displayed flashing.
- 3 Press and hold down **SETUP**.  
The selected name flashes rapidly for a few times as the setting is confirmed.
- 4 Press **SETUP** repeatedly to exit the setup.

## Tip

- By default, input names are set according to the terminal names.

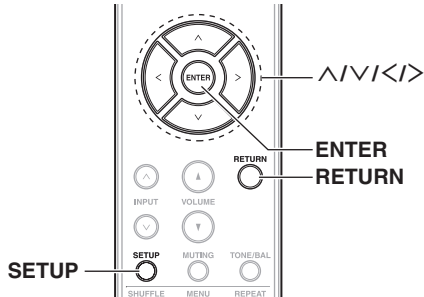
## Note

- If you assign a name that is already used on another input, the name of that other input will be restored to its default.
- When the “PHONO” input is selected, “NAME” setting is not available.
- The integrated amplifier will end the setup if there is no operation for 8 seconds.

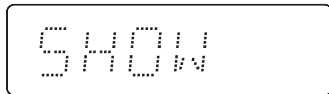
## Skipping Unused Inputs

You can hide the display of those inputs that are not used, so that they are skipped when selecting an input. Change any input from the following: **L1(LINE1)**, **L2(LINE2)**, **L3(LINE3)**, **CX1(COAX1)**, **CX2(COAX2)**, **OPT**, **PNO(PHONO)**

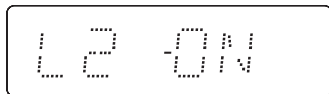
### Operating with the remote controller



- 1 Press **SETUP**.
- 2 Press **^/∇** repeatedly to select “SHOW”.

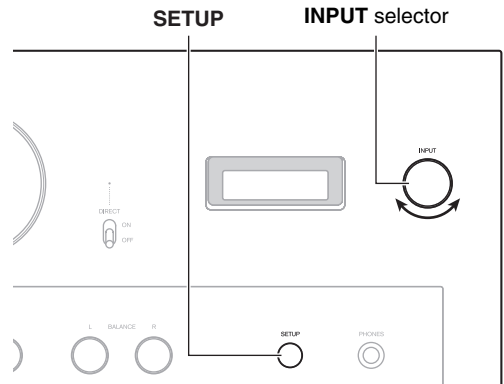


- 3 Press **ENTER**.
- 4 Press **^/∇** repeatedly to select the input you want to change.



- 5 Press **</>** to switch between **ON** and **OFF**.
  - ▶ **ON:**  
Shows the display of selected input.
  - ▶ **OFF:**  
Hides the display of selected input.
 The setting is automatically confirmed.
- 6 Press **RETURN** repeatedly to exit the setup.

### Operating on the integrated amplifier



- 1 Press **SETUP** repeatedly to select “SHOW”.
- 2 Use the **INPUT selector** to select the input you want to change.
- 3 Press and hold down **SETUP**.  
The setting is switched **ON/OFF**.  
The setting is automatically confirmed.
- 4 Press **SETUP** repeatedly to exit the setup.

#### Tip

- The default setting is **ON**.

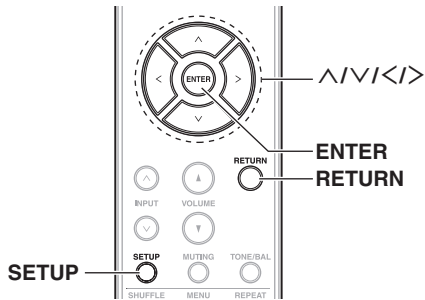
#### Note

- The current input doesn't appear as selectable. For example, if the input is currently set to “**LINE1**”, “**L1**” won't appear as selectable.
- The integrated amplifier will end the setup if there is no operation for 8 seconds.

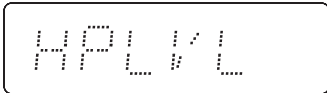
## Setting the Headphone Level

You can set the volume when using headphones.

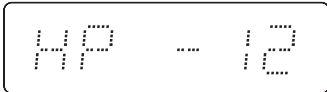
### ■ Operating with the remote controller



- 1 Press **SETUP**.
- 2 Press **^/∨** repeatedly to select “HPLVL”.



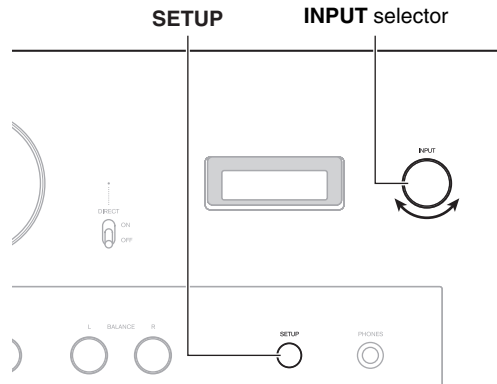
- 3 Press **ENTER**.  
The current level is displayed.



- 4 Press **</>** repeatedly to adjust the offset level.  
You can adjust the offset level from -12 dB to +12 dB in 1 dB steps.  
The setting is automatically confirmed.

- 5 Press **RETURN** repeatedly to exit the setup.

### ■ Operating on the integrated amplifier



- 1 Press **SETUP** repeatedly to select “HPLVL”.
- 2 Use the **INPUT selector** to adjust the offset level.  
First, the current level flashes on the information display. Then, the value is adjusted.  
The setting is automatically confirmed.
- 3 Press **SETUP** repeatedly to exit the setup.

#### Tip

- The default level is 0.

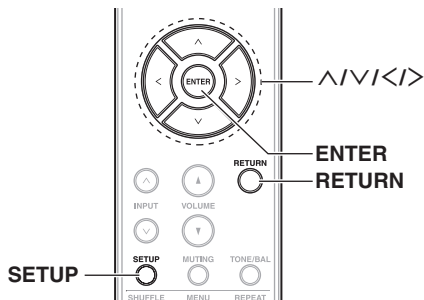
#### Note

- The integrated amplifier will end the setup if there is no operation for 8 seconds.

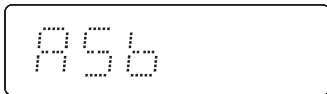
## Setting the Auto Standby Function

When the Auto Standby (ASb) function is activated, the integrated amplifier will automatically enter Standby mode if there is no operation for 30 minutes with no audio signal input.

### ■ Operating with the remote controller



- 1 Press **SETUP**.
- 2 Press **^/∨** repeatedly to select “ASb”.



- 3 Press **ENTER**.  
The current setting is displayed.



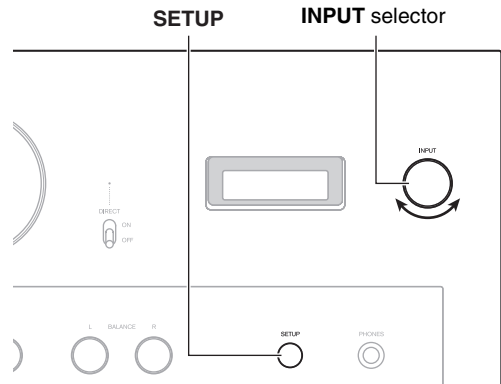
- 4 Press **</>** to switch between “ASb-ON” and “ASb-OFF”.
  - ▶ **ASb-ON**:  
Enables Auto Standby.
  - ▶ **ASb-OFF**:  
Disables Auto Standby.

The setting is automatically confirmed.

- 5 Press **RETURN** repeatedly to exit the setup.

Once the Auto Standby (ASb) function has been activated, the integrated amplifier will not automatically turn on even if it receives a signal. To turn on the integrated amplifier, press **ON/STANDBY** on the integrated amplifier, press **ON/STANDBY** on the remote controller manually.

### ■ Operating on the integrated amplifier



- 1 Press **SETUP** repeatedly to select “ASb”.
- 2 Use the **INPUT selector** to switch between “ASb-ON” and “ASb-OFF”.  
First, the current setting flashes on the information display. Then, the setting is switched ON/OFF. The setting is automatically confirmed.
- 3 Press **SETUP** repeatedly to exit the setup.

#### Tip

- Depending on the countries, the default setting is ON (European models) or OFF (North American models).

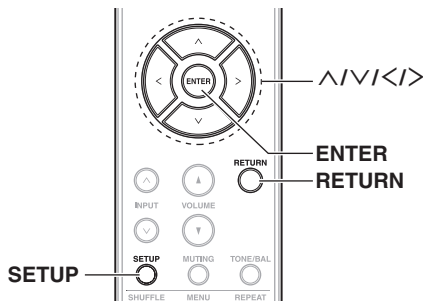
#### Note

- When the Auto Standby (ASb) function is activated, Onkyo components connected via **RI** are automatically turned off (→ **page 20**).
- Before entering Standby mode with the Auto Standby (ASb) function, the message “ASb” flashes for 30 seconds on the information display.
- The integrated amplifier will end the setup if there is no operation for 8 seconds.

## Setting the Route

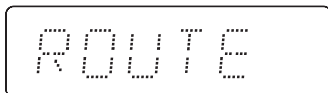
You can specify the function (Route) of the integrated amplifier by selecting between Normal, Pre, Split, and Main modes.

### ■ Operating with the remote controller



**1** Press **SETUP**.

**2** Press  $\wedge/\vee$  repeatedly to select “ROUTE”.



**3** Press **ENTER**.

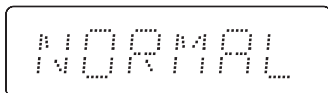
The route currently selected is displayed.

**4** Press  $\lt;/\gt$  repeatedly to select the route you want to set.

The selected route flashes.

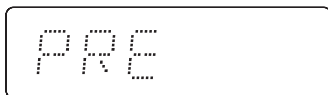
#### ▶ **NORMAL:**

With this setting, you can use the integrated amplifier as is.



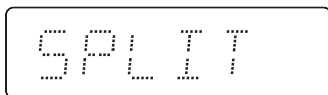
#### ▶ **PRE:**

With this setting, you can use the integrated amplifier as a preamplifier (→ [page 23](#)).



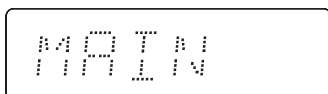
#### ▶ **SPLIT:**

With this setting, you can use the integrated amplifier's pre-amp and power amp units separately (→ [page 24](#)).



#### ▶ **MAIN:**

With this setting, you can use the integrated amplifier as a power amplifier (→ [page 25](#)). When it is selected, the **MAIN IN** LED lights.

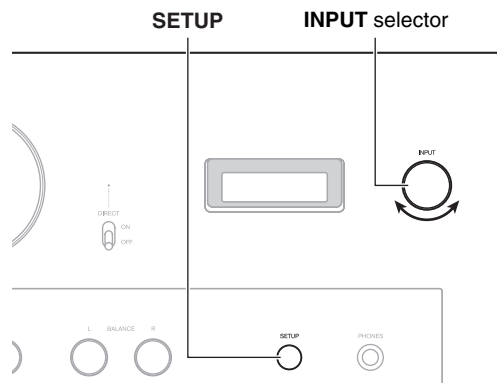


**5** Press **ENTER**.

The selected route flashes rapidly for a few times as the setting is confirmed.

**6** Press **RETURN** repeatedly to exit the setup.

### ■ Operating on the integrated amplifier



**1** Press **SETUP** repeatedly to select “ROUTE”.

**2** Use the **INPUT** selector to select the route you want to set.

First, the current setting flashes on the information display. Then, the selectable routes are displayed flashing.

**3** Press and hold down **SETUP**.

The selected route flashes rapidly for a few times as the setting is confirmed.

**4** Press **SETUP** repeatedly to exit the setup.

#### Tip

- The default setting is “NORMAL”.

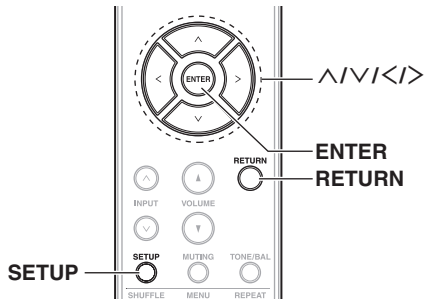
#### Note

- In “PRE” mode, **SPEAKERS** can't be used.
- In “SPLIT” mode, you need to use **PRE OUT** and **MAIN IN**.
- In “MAIN” mode, only **SPEAKERS** and **SETUP** can be used.
- In “MAIN” mode, the audio coming from **MAIN IN** is output by speakers with a 32.5 dB amplification.
- The integrated amplifier will end the setup if there is no operation for 8 seconds.

## Restoring the Default Settings

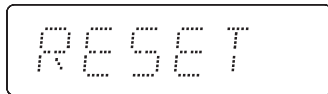
You can restore the default settings of the integrated amplifier.

### ■ Operating with the remote controller



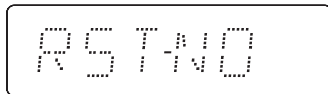
**1** Press **SETUP**.

**2** Press  $\wedge/\vee$  repeatedly to select “RESET”.



**3** Press **ENTER**.

The current setting flashes on the information display.



**4** Press  $\langle/\rangle$  to switch between “RST-NO” and “RST-YES”.

▶ **RST-YES:**

Restores the default settings.

▶ **RST-NO:**

Cancels the operation.

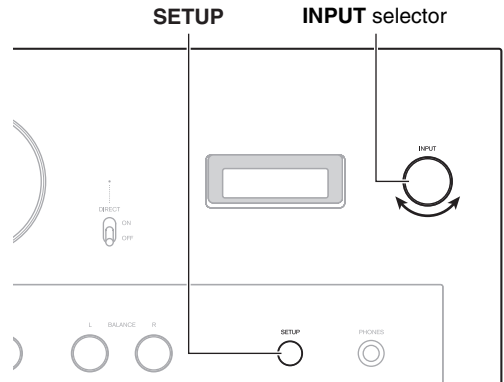
**5** Press **ENTER**.

If “RST-YES” is selected, “CLEAR” appears on the information display. The integrated amplifier then automatically turns off.

If “RST-NO” is selected, the setup returns to “RESET”.



### ■ Operating on the integrated amplifier



**1** Press **SETUP** repeatedly to select “RESET”.

**2** Use the **INPUT selector** to switch between “RST-YES” and “RST-NO”.

First, the current setting flashes on the information display. Then, the setting is switched while flashing.

**3** Press and hold down **SETUP**.

If “RST-YES” is selected, “CLEAR” appears on the information display. The integrated amplifier then automatically turns off.

If “RST-NO” is selected, the setup returns to “RESET”.

#### Note

- The integrated amplifier will end the setup if there is no operation for 8 seconds.



# Troubleshooting

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If you have any trouble using the integrated amplifier, look for a solution in this section.

If you can't resolve the issue yourself, try resetting the integrated amplifier before contacting your Onkyo dealer. To reset the integrated amplifier to its factory defaults, see "Restoring the Default Settings" (→ [page 40](#)).

## Power

### Can't turn on the Integrated Amplifier.

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- Make sure that the power cord is properly plugged into the wall outlet (→ [page 16](#)).
- Unplug the power cord from the wall outlet, wait 5 seconds or more, then plug it in again.

### The Integrated Amplifier turns off unexpectedly.

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- When the Auto Standby function is activated, the integrated amplifier will automatically enter Standby mode (→ [page 38](#)).
- When the protection circuit is activated (because of speaker short-circuit, overload, or over-current), the integrated amplifier enters Standby mode. Remove the source of the problem and turn the integrated amplifier back on.

## Audio

### There's no sound.

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- Make sure the integrated amplifier's volume control is not set to minimum (→ [page 27](#)).
- Make sure the correct input source is selected (→ [page 28](#)).
- Make sure the integrated amplifier is not muted (→ [page 31](#)).
- Make sure the speakers are connected correctly (→ [page 13](#)).
- Check all connections and correct as necessary (→ [page 13](#)).
- While headphones are connected, the speakers and **PRE OUT** output no sound (→ [page 31](#)).
- The integrated amplifier does not support digital formats other than PCM. Inputting a digital format other than PCM will cause loud noise.
- If "**ROUTE**" is set to anything other than "**NORMAL**", make sure that each component is connected accordingly (→ [page 23](#) to [25, 39](#)).

### The sound quality is not good.

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- Make sure the speaker cables are connected with the correct polarity (→ [page 13](#)).
- Make sure all audio connecting plugs are pushed in all the way (→ [page 16](#)).
- The sound quality can be affected by strong magnetic fields, such as those from a TV. Try moving any such devices away from the integrated amplifier.
- If you have any devices that emit high-intensity radio waves near the integrated amplifier, such as a cellular phone that's being used to make a call, the integrated amplifier may output noise.

### Headphone output is intermittent or there's no sound.

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- This may be due to dirty contacts. Clean the headphones plug. See your headphones' instruction manual for cleaning information. Also, make sure that the headphones cable is not broken or damaged.
- Make sure that "**ROUTE**" is not set to "**MAIN**" (→ [page 39](#)).

### Audio performance

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- Audio performance will be at its best about 10 to 30 minutes after the integrated amplifier has been turned on and had time to warm up.
- Using cable ties to bundle audio cables with speaker or power cables may degrade the sound quality, so refrain from doing it.
- Depending on the country, the integrated amplifier may be polarity-sensitive. In this case, plug the power cord in a way that provides the best sound quality.
- Install the integrated amplifier on a sturdy rack or shelf. Position it so that its weight is evenly dispersed on its four legs. Do not install the integrated amplifier in a place with vibration or an unstable location.
- Plug the power cord into an AC wall outlet.

## Onkyo Dock

### There's no sound.

- Make sure that the Onkyo Dock is connected to the integrated amplifier properly.
- Make sure that no video content is being played.
- Reset the iPod.

### Other

- When the Auto Standby (ASb) function is activated, the power of the Onkyo Dock connected via **RI** is automatically turned off (→ **page 38**).

### Can't control properly by using the remote controller.

- Make sure that the **RI** cable is connected to the integrated amplifier correctly.  
You need to change the input name to use **RI** function (→ **page 35**).

## External Components

### No sound is heard from a connected component.

- Make sure the correct input source is selected (→ **page 28**).
- If "ROUTE" is set to anything other than "NORMAL", make sure that each component is connected accordingly (→ **page 23 to 25, 39**).
- Make sure the analog audio cable is connected correctly (→ **page 16**).

### The sound from turntable is distorted.

- If your turntable (MM/MC) has a built-in phono preamp, connect to other analog inputs such as **LINE IN**.
- If your turntable (MM/MC) does not have a built-in phono preamp, connect a turntable to **PHONO** (→ **page 21**).
- Make sure that the ground wire is connected. Otherwise, it may produce an audible hum and noise.
- Make sure the MM/MC selector is set in accordance with the cartridge format of your turntable.

### A popping noise is produced when the power is set to on or off.

- Turn each of the components' power on or off in the following order.

When turning the power on:

1. Source component
2. Integrated amplifier (A-9070)

When turning the power off:

1. Integrated amplifier (A-9070)
2. Source component

## Remote Controller

### The remote controller doesn't work properly.

- Make sure the batteries have been installed with the correct polarity (+/-) (→ **page 7**).
- Replace both batteries with new ones. (Do not mix different types of batteries or new and old batteries.)
- The remote controller is too far away from the integrated amplifier, or there's an obstacle between them (→ **page 7**).
- The integrated amplifier's remote control sensor is being subjected to bright light (inverter-type fluorescent light or sunlight).
- The integrated amplifier is located behind the glass doors of an audio rack or cabinet.

**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 integrated amplifier 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.**

**Before disconnecting the power cord from the wall outlet, set the integrated amplifier to Standby.**

**If during idling the cover is too hot to touch, then ventilation needs to be improved.**

# Specifications

<b>Rated Output Power (Stereo):</b>	<b>(North American)</b> 75 watts minimum continuous power per channel, 8 ohm loads, 2 channels driven from 20 Hz to 20 kHz, with a maximum total harmonic distortion of 0.05 % (FTC) <b>140 watts minimum continuous power per channel, 4 ohm loads, 2 channels driven from 20 Hz to 20 kHz, with a maximum total harmonic distortion of 0.05 % (FTC)</b> <b>(European)</b> 2 ch × 75 W at 8 ohms, 20 Hz - 20 kHz, 0.05 %, 2 ch driven (IEC) 2 ch × 140 W at 4 ohms, 20 Hz - 20 kHz, 0.05 %, 2 ch driven (IEC)
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<b>Dynamic Power*</b>	
* IEC60268-Short-term maximum output power	
	450 W (1 Ω)
	310 W (2 Ω)
	230 W (3 Ω)
	180 W (4 Ω)
	100 W (8 Ω)

<b>THD+N (Total Harmonic Distortion+Noise)</b>	
	0.006 % (1 kHz, half power)
	0.008 % (20 Hz - 20 kHz, half power)

<b>Damping Factor</b>	130 (1 kHz, 8 Ω)
-----------------------	------------------

<b>Input Sensitivity and Impedance (Unbalance)</b>	
	150 mV/47 kΩ (LINE)
	2.25 mV/47 kΩ (PHONO MM)
	0.18 mV/100 Ω (PHONO MC)

<b>Rated RCA Output Level and Impedance</b>	
	1 V/300 Ω (PRE OUT)

<b>Maximum RCA Output Level and Impedance</b>	
	5 V/300 Ω (PRE OUT)

<b>Phono Overload</b>	70 mV (MM 1 kHz 0.5 %)
	5.2 mV (MC 1 kHz 0.5 %)

<b>Frequency Response</b>	10 Hz - 100 kHz/+0 dB, -1 dB 1 W/8 Ω
	1 Hz - 250 kHz/+0 dB, -3 dB 1 W/8 Ω

<b>Tone Control Characteristics</b>	
	±10 dB, 80 Hz (BASS)
	±10 dB, 10 kHz (TREBLE)

<b>Signal to Noise Ratio</b>	107 dB (LINE, IHF-A)
	60 dB (PHONO MM, IHF-A)
	70 dB (PHONO MC, IHF-A)

<b>Speaker Impedance</b>	4 Ω - 16 Ω (Speakers A or B)
	8 Ω - 16 Ω (Speakers A + B)

<b>HICC</b>	100 A
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<b>Power Supply</b>	<b>(North American)</b> AC 120 V, 60 Hz
	<b>(European)</b> AC 230 V, 50 Hz

<b>Power Consumption</b>	<b>(North American)</b> 3.3 A
	<b>(European)</b> 290 W

<b>No-sound Power Consumption</b>	80 W
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<b>Standby Power Consumption</b>	
	<b>(North American)</b> 0.1 W
	<b>(European)</b> 0.2 W

<b>Dimensions (W × H × D)</b>	
	435 mm × 174.5 mm × 431 mm
	17-1/8" × 6-7/8" × 16-15/16"

<b>Weight</b>	18.1 kg (39.9 lbs.)
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## ■ Audio Inputs

<b>Digital Inputs</b>	Optical: 1
	Coaxial: 2

<b>Digital Input Format</b>	2ch PCM
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<b>Digital Input Sampling Rate</b>	32 kHz/44.1 kHz/48 kHz/88.2 kHz/96 kHz compatible (OPT)
	32 kHz/44.1 kHz/48 kHz/88.2 kHz/96 kHz/176.4 kHz/192 kHz compatible (COAX)

<b>Analog Stereo Inputs</b>	LINE 1, LINE 2, LINE 3, PHONO (MM/MC), MAIN IN
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## ■ Audio Outputs

<b>Analog Outputs</b>	LINE OUT, PRE OUT
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<b>Speaker Outputs</b>	4
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<b>Phones</b>	1 (6.3 ø)
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## ■ Others

<b>RI</b>	2
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Specifications and features are subject to change without notice.

# ONKYO

## ONKYO SOUND & VISION CORPORATION

2-1, Nisshin-cho, Neyagawa-shi, OSAKA 572-8540, JAPAN  
Tel: 072-831-8023 Fax: 072-831-8163  
<http://www.onkyo.com/>

## ONKYO U.S.A. CORPORATION

18 Park Way, Upper Saddle River, N.J. 07458, U.S.A.  
Tel: 800-229-1687, 201-785-2600 Fax: 201-785-2650  
<http://www.us.onkyo.com/>

## ONKYO EUROPE ELECTRONICS GmbH

Liegnitzerstrasse 6, 82194 Groebenzell, GERMANY  
Tel: +49-8142-4401-0 Fax: +49-8142-4401-555  
<http://www.eu.onkyo.com/>

## ONKYO EUROPE ELECTRONICS GmbH (UK BRANCH)

The Coach House 81A High Street, Marlow, Buckinghamshire, SL7 1AB, UK  
Tel: +44-(0)1628-473-350 Fax: +44-(0)1628-401-700

## ONKYO CHINA LIMITED

Unit 1033, 10/F, Star House, No 3, Salisbury Road, Tsim Sha Tsui Kowloon, Hong Kong.  
Tel: 852-2429-3118 Fax: 852-2428-9039  
<http://www.ch.onkyo.com/>

## ONKYO CHINA PRC

1301, 555 Tower, No.555 West NanJin Road, Jin an, Shanghai,  
China 200041, Tel: 86-21-52131366 Fax: 86-21-52130396

SN 29400849

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