# Instruction Manual A-40AE

Preparations

Basic Operations

Others



INTEGRATED AMPLIFIER

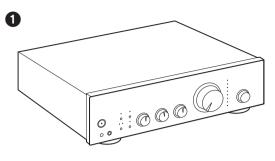


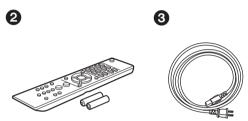
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# What's in the box





- 1. Main unit (1)
- 2. Remote controller (RC-969S) (1), batteries (AAA/R03) (2)
- 3. Power Cord (1)
- Instruction Manual (This document)
- Connect speakers with 4  $\Omega$  to 16  $\Omega$  impedance. When connecting two speaker systems for simultaneous output from both systems ( $\rightarrow$ p9), connect speakers with 8  $\Omega$  to 32  $\Omega$  impedance.
- The power cord must be connected only after all other cable connections are completed.
- We will not accept responsibility for damage arising from the connection of equipment manufactured by other companies.
- Specifications and appearance are subject to change without prior notice.

# **Safety Information**



WARNING RISK OF ELECTRIC SHOCK







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.

#### **CAUTION:**

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

#### **WARNING**

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

This equipment is not waterproof. To prevent a fire or shock hazard, do not place any container filled with liquid near this equipment (such as a vase or flower pot) or expose it to dripping, splashing, rain or moisture.

To prevent a fire hazard, do not place any naked flame sources (such as a lighted candle) on the equipment.

Store small parts out of the reach of children and infants. If accidentally swallowed, contact a doctor immediately.

Slots and openings in the cabinet are provided for ventilation to ensure reliable operation of the product, and to protect it from overheating. To prevent fire hazard, the openings should never be blocked or covered with items (such as newspapers, tablecloths, curtains) or by operating the equipment on thick carpet or a bed.

Do not use or store batteries in direct sunlight or other excessively hot place, such as inside a car or near a heater. This can cause batteries to leak, overheat, explode or catch fire. It can also reduce the life or performance of batteries.

Risk of explosion if battery is replaced by an incorrect type. Risk of explosion If disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery.

#### **Precautions**

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.

#### **Operating Environment**

Operating environment temperature and humidity: +5 °C to +35 °C (+41 °F to +95 °F); less than 85 %RH (cooling vents not blocked)

Do not install this unit in a poorly ventilated area, or in locations exposed to high humidity or direct sunlight (or strong artificial light).

#### **Important Notice**

The model number and serial number of this equipment are on the rear or bottom. Record these numbers on your enclosed warranty card and keep in a safe place for future reference.

#### CAUTION

The power switch on this unit will not completely shut off all power from the AC outlet. Since the power cord serves as the main disconnect device for the unit, you will need to unplug it from the AC outlet to shut down all power. Therefore, make sure the unit has been installed so that the power cord can be easily unplugged from the AC outlet in case of an accident. To avoid fire hazard, the power cord should also be unplugged from the AC outlet when left unused for a long period of time (for example, when on vacation).

This product is for general household purposes. Any failure due to use for other than household purposes (such as long-term use for business purposes in a restaurant or use in a car or ship) and which requires repair will be charged for even during the warranty period.

#### **Power-Cord Caution**

Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, etc., on the power cord, or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cords should be routed such that they are not likely to be stepped on. A damaged power cord can cause a fire or give you an electrical shock. Check the power cord once in a while. When you find it damaged, ask your nearest our authorized service center or your dealer for a replacement.

#### For European models

# Information for users on collection and disposal of old equipment and used batteries

Symbol examples for batteries

Symbol for equipment







These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries should not be mixed with general household waste.

For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points in accordance with your national legislation.

By disposing of these products and batteries correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.

For more information about collection and recycling of old products and batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.

# These symbols are only valid in the European Union. For countries outside the European Union:

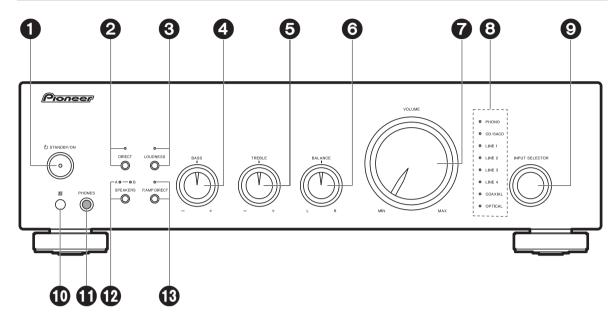
If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.

#### WEEE

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

# **Part Names**

## **Front Panel**

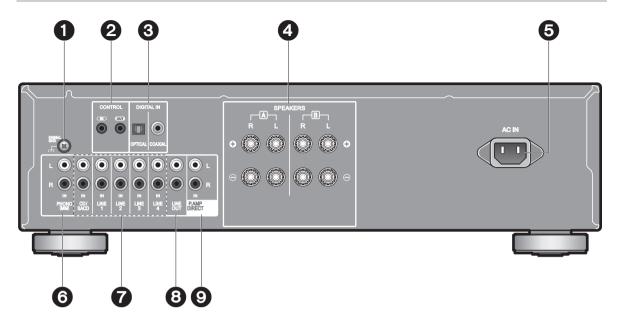


- 1. 也 STANDBY/ON button
- DIRECT button/indicator: Switch the DIRECT mode on and off. The indicator lights when the DIRECT mode is on. (-p17)
- 3. LOUDNESS button/indicator: Switch the LOUDNESS mode on and off. The indicator lights when the LOUDNESS mode is on. (→p18)
- BASS -/+ controller: Enhance or moderate the bass range of the speakers. (→p18)
- TREBLE -/+ controller: Enhance or moderate the treble range of the speakers. (→p18)
- 6. BALANCE L/R controller: Adjust the left/right audio balance. (→p18)
- 7. VOLUME controller
- 8. Input source indicators: The indicator corresponding to the selected input source lights.
  - The indicator for the selected input source blinks when MUTE (→p7) is active.
- INPUT SELECTOR dial: Switches the input source to be played.
- Remote control sensor: Receives signals from the remote controller.
  - The signal range of the remote controller is within about 23'/7 m, at an angle of 30° to either side.
- 11. PHONES jack: Connect stereo headphones with a standard plug (Ø1/4"/6.3 mm diameter).
- SPEAKERS button/indicators: Selects Speakers A, Speakers B, or both. The indicator matching the selected speaker output lights. (→p17)
  - The SPEAKERS indicator blinks when MUTE (→p7) is active.
- 13. P.AMP DIRECT button/indicator: Button for making settings when this unit is used as a power amplifier. The indicator lights when the mode to use this unit as a power

amplifier is on. (→p18)

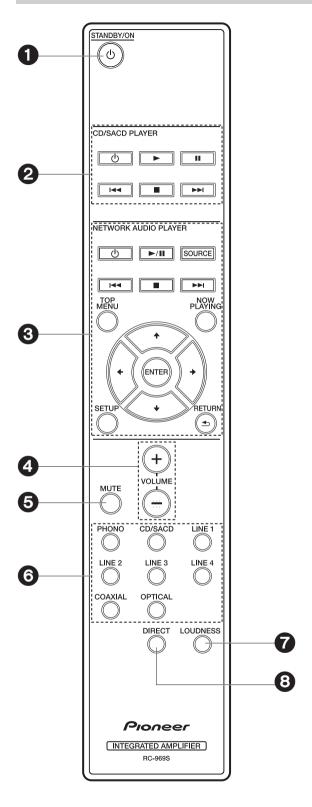
• P.AMP is an abbreviation of POWER AMP.

## **Rear Panel**



- 1. SIGNAL GND terminal: The ground wire of the turntable is connected.
- CONTROL IN/OUT jacks: By connecting Pioneer brand audio devices, centralized control is possible, for example you can control other audio devices with this unit's remote controller. (→p12)
- DIGITAL IN OPTICAL/COAXIAL jacks: Input digital audio signals from a playback device with a digital optical cable or digital coaxial cable. (→p11)
- SPEAKERS terminals: Connect speakers with speaker cables. (Not compatible with connection using banana plugs or Y plugs.) (→p8, 9, 10)
- 5. AC IN: Connect the supplied power cord. (→p13)
- PHONO MM jack: Analog audio input jacks for connecting a turntable. (→p12)
- LINE IN jacks: Input audio signals from a playback device with an analog audio cable. (→p11)
- 8. LINE OUT jacks: Connect a recording device, such as a cassette tape deck. Connect to the LINE IN jacks on the recording device using analog audio cable. To select the input source for recording, use the INPUT SELECTOR dial on this unit or use the remote controller.
- P.AMP DIRECT jacks: When using this unit as a power amplifier, connect the pre-amplifier here. (→p13)
  - P.AMP is an abbreviation of POWER AMP.

# **Remote Controller**

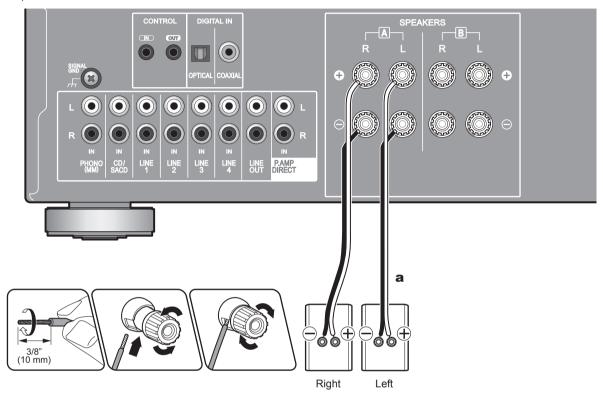


- 1. 也 STANDBY/ON button
- Buttons to control play on a CD/SACD player: Enable you to control a Pioneer brand CD/SACD player.
- 3. Buttons to control play on a network audio player: Enable you to control a Pioneer brand network audio player.
- 4. VOLUME buttons
- 5. MUTE button: Temporarily mutes audio. Press again to cancel muting.
- 6. input selector buttons: Switches the input source to be played.
- LOUDNESS button: Switch the LOUDNESS mode on and off. (→p18)
- DIRECT button: Switch the DIRECT mode on and off. (→p17)

# **Setup and connection**

# **Connecting 1 speaker system**

a Speaker Cable



# (Note) Speaker Impedance

Connect speakers with an impedance of 4  $\Omega$  to 16  $\Omega$ .

• Setup: You have to change the setting on this unit if any of the connected speakers have 4  $\Omega$  or more to less than 8  $\Omega$  impedance. Change the speaker impedance setting to 4  $\Omega$ . ( $\rightarrow$ p15)

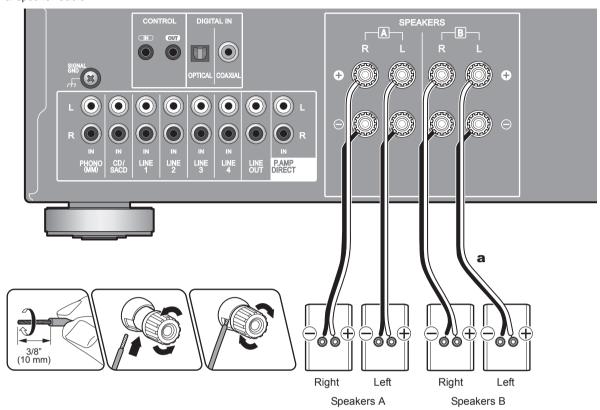
## **Connect the Speaker Cables**

Make correct connection between the unit's jacks and speaker's jacks (+ side to + side, and - side to - side) for each channel. If the connection is wrong, a bass sound will not be reproduced properly due to reverse phase. Twist the wires exposed from the tip of the speaker cable so that the wires do not stick out of the speaker terminal when connecting. If the exposed wires touch the rear panel, or the + side and - side wires touch each other, the protection circuit will be activated.



# **Connecting 2 speaker systems**

#### a Speaker Cable



You can connect another speaker system set to the SPEAKERS B jacks.

 You can output the same audio as Speaker A System by switching with A/B/A+B. Press SPEAKERS on the main unit to switch. The selection changes in the order SPEAKERS A, SPEAKERS B, SPEAKERS A+B with each press. Refer to "Switching speaker output" (→p17) for details.

#### (Note) Speaker Impedance

# When outputting audio simultaneously from 2 speaker systems

Connect speakers with an impedance of 8  $\Omega$  to 32  $\Omega$ .

Setup: You have to change the setting on this unit if any
of the connected speakers have 8 Ω or more to less than
16 Ω impedance. Change the speaker impedance setting
to 4 Ω. (→p15)

#### When switching to either A or B for audio output

Connect speakers with an impedance of 4  $\Omega$  to 16  $\Omega$ .

Setup: You have to change the setting on this unit if any
of the connected speakers have 4 Ω or more to less than
8 Ω impedance. Change the speaker impedance setting
to 4 Ω. (→p15)

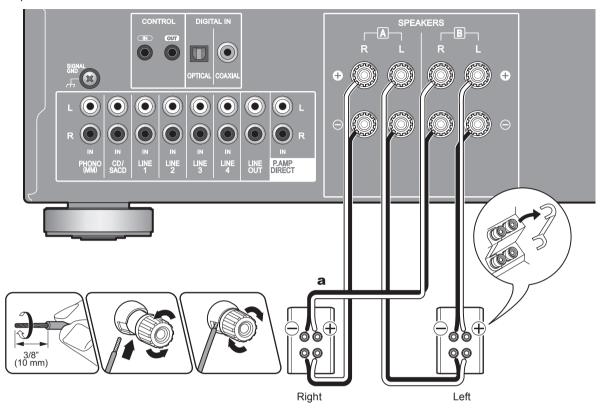
## **Connect the Speaker Cables**

Make correct connection between the unit's jacks and speaker's jacks (+ side to + side, and - side to - side) for each channel. If the connection is wrong, a bass sound will not be reproduced properly due to reverse phase. Twist the wires exposed from the tip of the speaker cable so that the wires do not stick out of the speaker terminal when connecting. If the exposed wires touch the rear panel, or the + side and - side wires touch each other, the protection circuit will be activated.



# **Bi-wiring connections**

a Speaker Cable



You can connect speakers that support bi-wiring to this unit. Connect the treble and bass correctly.

- When connecting, be sure to remove the jumper bar that connects the tweeter jack and the woofer jack on the speaker.
- As shown on the illustration, the wiring terminals of SPEAKERS B are connected to the tweeter and SPEAKERS A are connected to the woofer. However, wiring them the other way around is also possible.
- Change the setting so that audio is output from both SPEAKERS A/B. Refer to "Switching speaker output" (→p17) for details.

#### (Note) Speaker Impedance

Connect speakers with an impedance of 4  $\Omega$  to 16  $\Omega$ .

• Setup: You have to change the setting on this unit if any of the connected speakers have 4  $\Omega$  or more to less than 8  $\Omega$  impedance. Change the speaker impedance setting to 4  $\Omega$ . ( $\rightarrow$ p15)

#### **Connect the Speaker Cables**

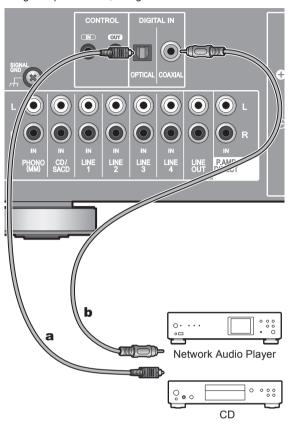
Make correct connection between the unit's jacks and speaker's jacks (+ side to + side, and - side to - side) for each channel. If the connection is wrong, a bass sound will not be reproduced properly due to reverse phase. Twist the wires exposed from the tip of the speaker cable so that the wires do not stick out of the speaker terminal when

connecting. If the exposed wires touch the rear panel, or the + side and - side wires touch each other, the protection circuit will be activated.



# Connecting players (DIGITAL IN connection)

a Digital Optical Cable, b Digital Coaxial Cable

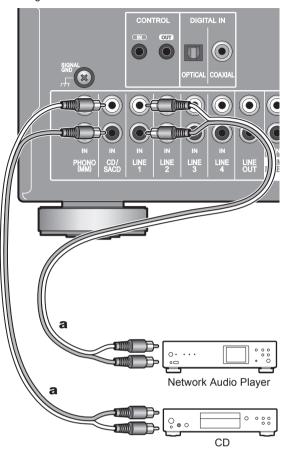


Connect a playback device with a digital optical cable or digital coaxial cable.

- Only PCM audio is supported for input through the DIGITAL IN OPTICAL/COAXIAL jacks. Set the audio output on the playback device to output PCM.
- Refer to "Connecting devices to link with the control function" (→p12) to use the centralized control function.

# Connecting players (LINE IN connection)

a Analog Audio Cable

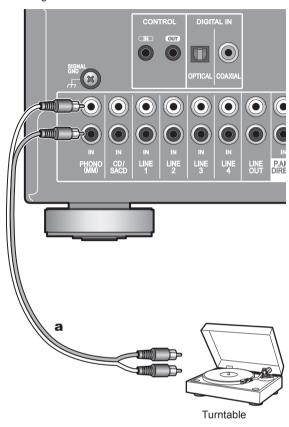


Connect a playback device with an analog audio cable.

 Refer to "Connecting devices to link with the control function" (→p12) to use the centralized control function.

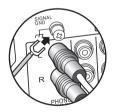
# Connecting players (Turntable connection)

a Analog Audio Cable



Use an analog audio cable to connect a turntable that uses an MM-type cartridge to the PHONO jack.

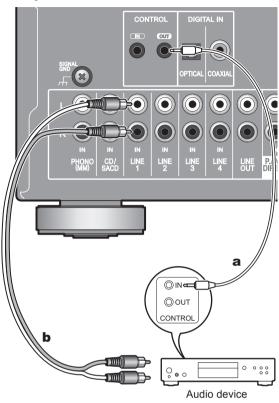
If the turntable has a ground wire, connect it to the SIGNAL GND terminal. With some turntables, connecting the ground wire may cause hum, in which case it should be disconnected.



 If the turntable has a built-in audio equalizer, connect it to an LINE IN jack other than the PHONO jack. Also, if the turntable uses an MC type cartridge, install an audio equalizer compatible with the MC type cartridge between the unit and the turntable, then connect to any LINE IN jack other than the PHONO jack.

# Connecting devices to link with the control function

- a Monaural Miniplug Cables (without resistors),
- **b** Analog Audio Cable

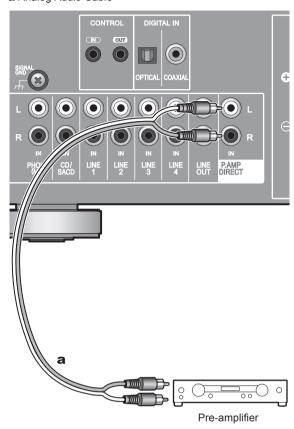


If you have multiple Pioneer brand devices, and if they have CONTROL IN/OUT jacks, you can centrally control them through the remote controller sensor on this unit. By connecting with monaural miniplug cables (without resistors) as shown in the illustration, operation with the remote controller is possible even if devices are installed where they cannot receive the signal from the remote controller.

- Also make sure to connect with the analog audio cable. Centralized control cannot work correctly with only the control jack connection. When connecting a player using either a digital optical cable or digital coaxial cable, also make sure to connect with an analog audio cable.
- The remote controller sensors on the other devices stop working if you connect a monaural miniplug cable (without resistor) to the CONTROL OUT jack of this unit.
- The remote controller sensor on this unit stops working if you connect a monaural miniplug cable (without resistor) to the CONTROL IN jack of this unit.

# Using this unit as a power amplifier

#### a Analog Audio Cable

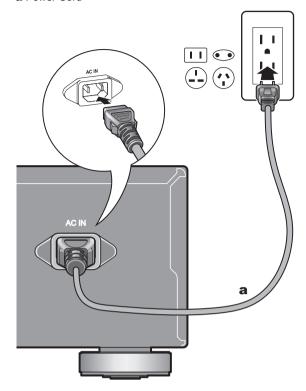


Connect your pre-amplifier and you can use this unit as a power amplifier. Connect the P.AMP DIRECT jacks of the unit and the PRE OUT jacks of the pre-amplifier with an analog audio cable.

- Do not connect a source device (CD device, etc.) to the P.AMP DIRECT jack. Doing so may produce high-volume sound that can damage the unit, speakers, and various other devices.
- Setup: Switch the unit to power amplifier mode to use this unit as a power amplifier. (→p18)

# **Power Cord Hookup**

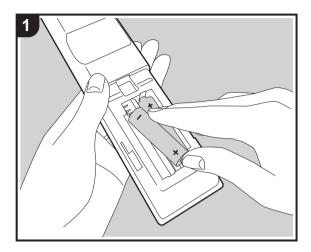
a Power Cord



This model includes a removable power cord. The power cord must be connected only after all other connections are completed. Make sure you first connect the power cord to AC IN terminal of the unit and then connect to the outlet. Always disconnect the outlet side first when disconnecting the power cord.

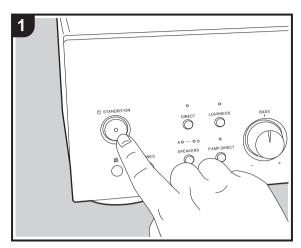
# Before play

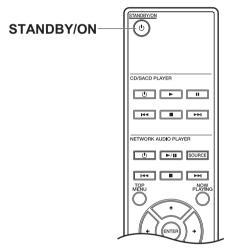
# Remote controller preparations



Match the polarity when inserting the batteries.

# Turn on the power of the unit

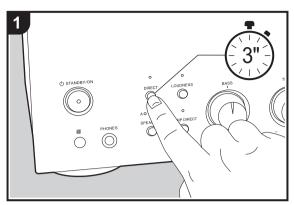


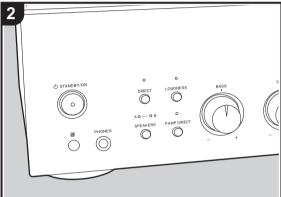


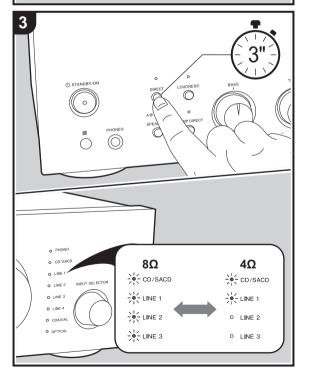
Press  $\ensuremath{\Phi}$  STANDBY/ON on this unit or  $\ensuremath{\Phi}$  STANDBY/ON on the remote controller.

# **Preparations**

# Speaker impedance settings





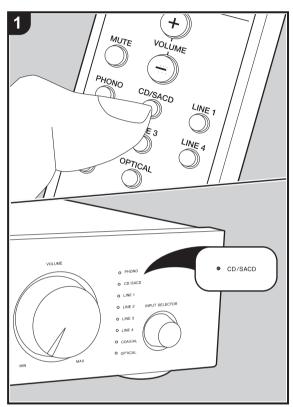


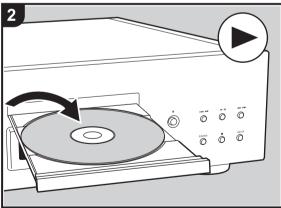
Depending on the speakers you connect and how you connect them, you may need to change the speaker impedance setting on this unit. Refer to the page describing speaker connection (→p8, 9, 10) and do the following procedures if the change is required.

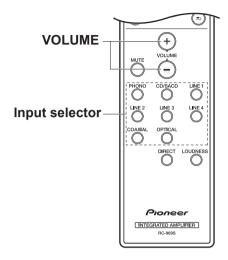
- Press and hold DIRECT until some indicators, such as the input source indicators "CD/SACD" and "LINE 1", start blinking on the unit.
  - The unit has switched to the setting mode when the indicators blink and the current setting is displayed.
- 2. Take your finger off DIRECT for a moment.
- Press and hold DIRECT again to change the setting. The following content switches alternately by pressing and holding the button.
  - 4 Ω: "CD/SACD" and "LINE 1" indicators are blinking
  - 8  $\Omega$  (default value): "CD/SACD", "LINE 1", "LINE 2", and "LINE 3" indicators are blinking
- The setting mode ends after 5 seconds elapse with no operations performed.

# **Playback**

# Switching input and adjusting the volume







Perform the following procedure when the unit is on.

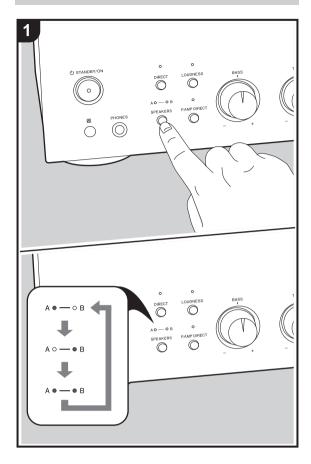
 Press the input selector on the remote controller with the same name as the jack to which the player is connected to switch the input.

For example, press CD/SACD to play the device connected to the CD/SACD jack.

When operating on the main unit, turn the INPUT SELECTOR dial to switch the input.

- The indicator for the selected input source lights.
- If there is no digital audio signal input while COAXIAL or OPTICAL is selected, the indicator blinks while the source is selected.
- 2. Start play on the connected player.
- 3. Press VOLUME on the remote controller or turn the VOLUME controller on the main unit to adjust the volume.

# Switching speaker output

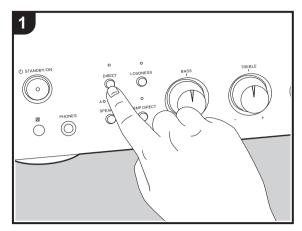


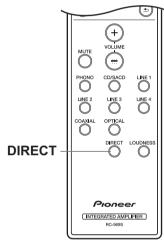
When connecting two speaker systems ( $\rightarrow$ p9), or when using bi-wiring connection ( $\rightarrow$ p10), switch the speakers to output from by switching to Speakers A or Speakers B, or to both.

When you have used bi-wiring connection ( $\rightarrow$ p10), switch to SPEAKERS A+B.

- Press SPEAKERS on the main unit.
   The selection changes in the order SPEAKERS A, SPEAKERS B, SPEAKERS A+B with each press. The selected speaker indicator lights.
- There is no audio output from the speakers when headphones are connected.

# **Using the Direct Function**

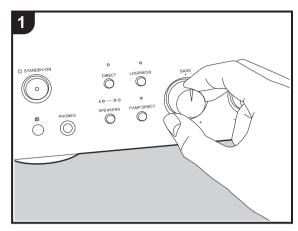


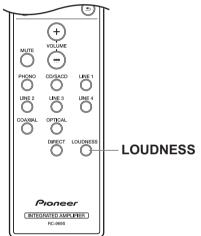


When you turn the DIRECT feature on (default value), the unit bi-passes the tone control circuits that adjust the bass and treble, taking the shortest route which favors sound quality.

- LOUDNESS/BASS/TREBLE (→p18) cannot be adjusted when DIRECT mode is on.
- Press DIRECT on the main unit or the remote controller to switch on or off. The DIRECT indicator lights when on.

# Adjusting the sound quality and balance





#### LOUDNESS

When the LOUDNESS function is on, the bass and treble are emphasized to enable powerful playback audio even at low volumes

- This cannot be set when DIRECT (→p17) is on (default value). Press DIRECT to turn the DIRECT indicator off before operating. Note that the LOUDNESS setting reverts to the previous setting when the DIRECT function is turned off.
- Press LOUDNESS on the main unit or the remote controller to switch on or off. The LOUDNESS indicator lights when on.

## BASS (main unit only)

- This cannot be set when DIRECT (→p17) is on (default value). Press DIRECT to turn the DIRECT indicator off before operating.
- Turn the BASS -/+ controller to enhance or moderate the bass.

#### TREBLE (main unit only)

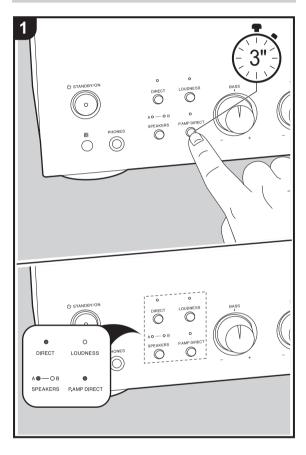
- This cannot be set when DIRECT (→p17) is on (default value). Press DIRECT to turn the DIRECT indicator off before operating.
- 1. Turn the TREBLE -/+ controller to enhance or moderate

the treble.

#### **BALANCE** (main unit only)

 Turn the BALANCE L/R controller on the main unit to adjust the balance of the sounds output from the left and right speakers.

# Switching the unit to power amplifier mode



Perform the following operations to switch the unit to power amplifier mode to use this unit as a power amplifier when you have connected a pre-amplifier to the P.AMP DIRECT jack on this unit (→p13).

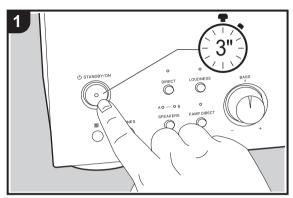
- Power amplifier modes settings are not available if headphones are connected.
- Press and hold P.AMP DIRECT until the "DIRECT", "SPEAKERS", and "P.AMP DIRECT" indicators light on the main unit. Press and hold P.AMP DIRECT to cancel the power amplifier mode.
  - Note that the power amplifier mode is not canceled even if this unit goes to standby mode.
- When you cancel the power amplifier mode, BASS, TREBLE, BALANCE, DIRECT, and LOUDNESS revert to the settings prior to changing to the power amplifier mode.
- There is no audio output from the PHONES jack and LINE OUT jacks while the power amplifier mode is engaged. The following functions are also unavailable while the power amplifier mode is on.

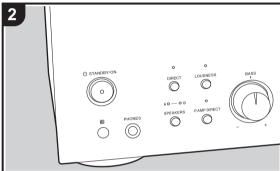
# **Basic Operations**

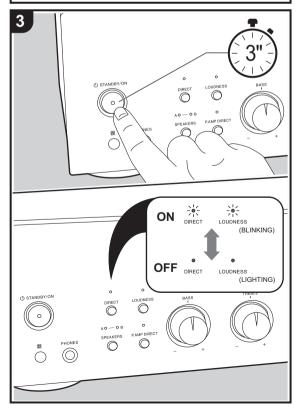
- "Speaker impedance settings" (→p15)/ "Switching input and adjusting the volume" (→p16) / "Adjusting the sound quality and balance" (→p18) / "Setting auto standby" (→p20)
- · When switched to power amplifier mode, if the volume of the connected pre-amplifier is low, auto standby (→p20) may function and the power may automatically switch to standby. If this happens, you may be able to fix it by increasing the volume on the pre-amplifier.
- Also read the instruction manual of the pre-amplifier you connected to this unit.

# **Useful functions**

# Setting auto standby







When automatic standby is on (default value), the unit automatically switches to standby mode after 20 minutes of no audio input without any operations.

- 1. Press and hold 也 STANDBY/ON on the main unit until the "DIRECT" and "LOUDNESS" indicators either blink or light.
  - The unit has switched to the setting mode when the indicators blink or light and the current setting is displayed.
- 2. Take your finger off  $\circlearrowleft$  STANDBY/ON for a moment.
- - On (default value): "DIRECT" and "LOUDNESS" indicators are blinking
  - Off: "DIRECT" and "LOUDNESS" indicators light
- The setting mode ends after 5 seconds elapse with no operations performed.
- 60 seconds before switching to standby mode, the SPEAKERS indicator and the indicator for the selected source start blinking.
- Depending on the connected device, the auto standby feature may not engage due to factors such as noise.

# **Troubleshooting**

# Before starting the procedure

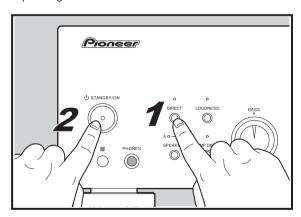
Problems may be solved by simply turning the power on/off or disconnecting/connecting the power cord, which is easier than working on the connection, setting and operating procedure. Try the simple measures on both the unit and the connected device. After reconnecting, turn off and on the unit and the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

- This unit contains a microPC 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 happens, unplug the power cord from the wall outlet, wait at least 5 seconds, and then plug it back in.
- We are not responsible for reparations 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.

#### Resetting the unit (this resets the unit settings to the default)

Resetting the unit to the status at the time of shipment may solve the problem. If the unit is reset, your settings are restored to the default values. Be sure to note down your setting contents before performing the following operations.

1. While the power is on, press & STANDBY/ON while pressing DIRECT.



## **Power**

#### Cannot turn on the unit

- Make sure that the power cord is properly plugged into the wall outlet.
- Unplug the power cord from the wall outlet, wait 5 seconds or more, then plug it in again.

#### ■ The unit turns off unexpectedly

- The unit automatically enters standby mode when auto standby (→p20) is activated.
- A speaker cable may have shorted and the protective circuit function may have been activated. Make sure bare

- speaker wires are not touching each other or the back panel of the unit, then turn the unit on again. If this unit does not turn on, immediately unplug the power cord from the wall outlet and contact your dealer.
- The protective circuit function may have been activated because the temperature of the unit rose abnormally. If this happens, then the power will continue to turn off after you have turned the unit on again. Make sure the unit has plenty of space for ventilation around it, wait for the unit to cool down sufficiently, and then try turning it on again.
- When switched to power amplifier mode, if the volume of the connected pre-amplifier is low, auto standby (→p20) may function and the power may automatically switch to standby. If this happens, you may be able to fix it by increasing the volume on the pre-amplifier.

**WARNING**: If smoke, smell or abnormal noise is produced by the unit, unplug the power cord from the wall outlet immediately and contact the dealer or customer support.

#### Audio

- Confirm that the connection between the output jack on the device and the input jack on this unit is correct.
- Make sure that none of the connecting cables are bent, twisted, or damaged.
- If MUTE is active, press MUTE on the remote controller to cancel. MUTE is active when the SPEAKERS indicator and the indicator for the selected input source are blinking
- While headphones are connected to the PHONES jack, no sound is output from the speakers.

#### Audio performance

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

#### ■ No sound from a connected playback device

- Change the input selector on this unit to the position of the terminal to which the playback device is connected.
- Only PCM audio is supported for input through the DIGITAL IN OPTICAL/COAXIAL jacks. Set the audio output on the playback device to output PCM.

#### A speaker produces no sound

 Make sure that the polarity of the speaker cables (+/-) is correct, and that no bare wires are in contact with the metal part of speaker terminals.

- Make sure that the speaker cables have not shorted.
- Make sure the speakers are connected correctly. (→p8, 9, 10)

#### ■ Noise can be heard

- Using cable ties to bundle analog audio cables, power cords, speaker cables, etc. may degrade the audio performance. Do not bundle cords.
- An audio cable may be picking up interference. Try repositioning your cables.

# Headphone output is intermittent or there's no sound

 The connection part may be dirty. Clean the headphones plug. See your headphones' instruction manual for cleaning information. Also, make sure that the headphones cable is not broken or damaged.

#### Remote Controller

- Make sure that the batteries are installed with the correct polarity.
- Install new batteries. Do not mix different types of batteries, or old and new batteries.
- Make sure that the unit is not subjected to direct sunshine or inverter-type fluorescent lights. Relocate if necessary.
- If the unit is installed in a rack or cabinet with coloredglass doors or if the doors are closed, the remote controller may not work reliably.

#### ■ The centralized control function doesn't work

- Make sure that the CONTROL IN/OUT jacks are properly connected.
- Also make sure to connect with the analog audio cable. Centralized control cannot work correctly with only the control jack connection. When connecting a player using either a digital optical cable or digital coaxial cable, also make sure to connect with an analog audio cable.

#### ■ Cannot switch the input source

 If this unit is set to be used as a power amplifier, you will be unable to switch the input source or adjust the sound quality. Check the setting. (→p18)

## **Others**

#### Strange noises can be heard from the unit

 If you have connected another unit to the same wall outlet as this unit, this noise may be an effect from the other unit. If the symptoms improve by unplugging the power cord of the other unit, use different wall outlets for this unit and the other unit.

# **Specifications**

# **Amplifier (Audio) section**

Rated Output Power (IEC)

2 ch  $\times$  76 W at 4 ohms, 1 kHz, 2 ch driven of 0.9% THD

2 ch  $\times$  52 W at 8 ohms, 1 kHz, 2 ch driven of 0.9% THD

Input Sensitivity and Impedance

200 mV/47 k $\Omega$  (LINE (RCA))

4 mV/47 kΩ (PHONO MM)

Phono Maximum Input Signal Voltage

70 mV (MM 1 kHz, 0.5%)

Frequency Response

10 Hz - 100 kHz/+1 dB, -3 dB (DIRECT)

**Tone Control Characteristics** 

 $\pm$ 10 dB, 100 Hz (BASS)

 $\pm$ 10 dB, 10 kHz (TREBLE)

Signal to Noise Ratio

106 dB (IHF-A, LINE IN, SP OUT)

81 dB (IHF-A, PHONO IN, SP OUT)

Speaker Impedance

A, B: 4  $\Omega$  - 16  $\Omega$ 

Α+ Β: 8 Ω - 32 Ω

Bi-wiring: 4  $\Omega$  - 16  $\Omega$ Supported impedance of Headphones

8 Ω - 600 Ω

Headphones Frequency Response

30 Hz -100 kHz

## General

Power Supply

AC 220-230 V, 50/60 Hz

**Power Consumption** 

150 W

0.2 W (Stand-by)

Dimensions (W  $\times$  H  $\times$  D)

435 mm × 129 mm × 323 mm

17-1/8" × 5-1/16" × 12-11/16"

Weight

8.2 kg (18.1 lbs)

# **Audio Inputs**

Digital

OPTICAL

Maximum Fs: 192 kHz

COAXIAL

Maximum Fs: 192 kHz

Analog

PHONO, CD/SACD, LINE1, LINE2, LINE3, LINE4, P.AMP

DIRECT

# **Audio Outputs**

Analog

LINE OUT L/R

Speaker Outputs

SPEAKERS A: L/R SPEAKERS B: L/R

Phones

PHONES (Ø6.3 mm)

#### **Others**

CONTROL IN: 1 CONTROL OUT: 1