

P-3H User Guide

PREAMPLIFIER

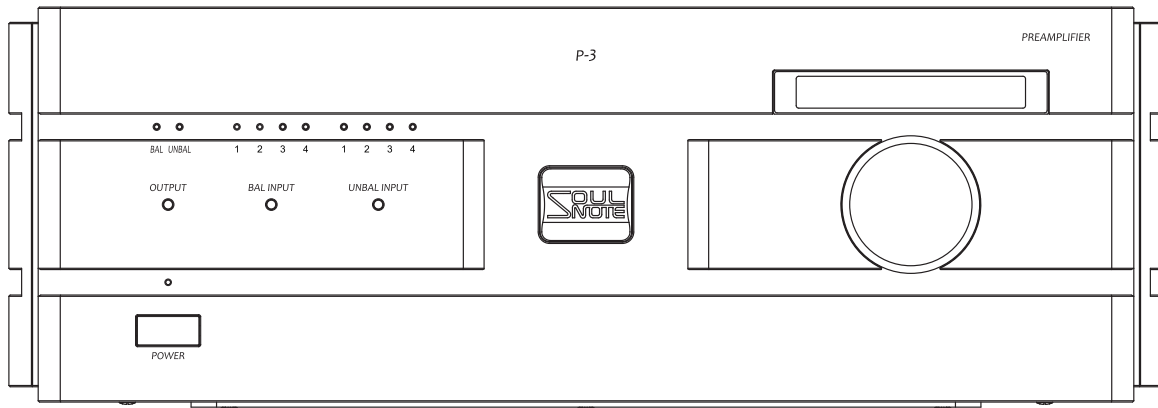


Table of Contents

Safety Precautions.....	3
Front Panel Names and Functions	6
Rear Panel Names and Functions.....	8
Remote Control Button Names and Functions	10
Remote Control.....	11
DISPLAY button.....	12
Power Cable Connection.....	12
Balanced Input/Output.....	12
Attaching the Spike Pins.....	12
Troubleshooting.....	13
Maintenance	13
Specifications.....	14

Supplied Accessories

• User Guide (this manual)	1	• Spike pin	3
• Power cable	2	• Remote control.....	1
• Spike-receiving board	1		

Safety Precautions



CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN



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.



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 product.

WARNING

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

A warning that an apparatus with CLASS I construction shall be connected to a MAINS socket outlet with a protective earthing connection.

IMPORTANT SAFETY INSTRUCTIONS

READ BEFORE OPERATING EQUIPMENT

This product was designed and manufactured to meet strict quality and safety standards. There are, however, some installation and operation precautions which you should be particularly aware of.

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. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
10. Only use attachments/accessories specified by the manufacturer.
11. 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.
12. Unplug this apparatus during lightning storms or when unused for long periods of time.
13. 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.
14. Batteries shall not be exposed to excessive heat such as sunshine, fire or the like.



CAUTION:

- To completely disconnect this product from the mains, disconnect the plug from the wall socket outlet. The mains plug is used to completely interrupt the power supply to the unit and must be within easy access by the user.
- Never use the unit with any other cord except the supplied power cord.

NOTE ON USE

WARNINGS

- Avoid high temperatures.
Allow for sufficient heat dispersion when installed in a rack.
- Handle the power cord carefully.
Hold the plug when unplugging the cord.
- Keep the unit free from moisture, water, and dust.
- Unplug the power cord when not using the unit for long periods of time.
- Do not obstruct the ventilation holes.
- Do not let foreign objects into the unit.
- Do not let insecticides, benzene, and thinner come in contact with the unit.
- Never disassemble or modify the unit in any way.
- Ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, tablecloths or curtains.
- Naked flame sources such as lighted candles should not be placed on the unit.
- Observe and follow local regulations regarding battery disposal.
- Do not expose the unit to dripping or splashing fluids.
- Do not place objects filled with liquids, such as vases, on the unit.
- Do not handle the mains cord with wet hands.
- When the switch is in the OFF position, the equipment is not completely switched off from MAINS.
- The equipment shall be installed near the power supply so that the power supply is easily accessible.

DECLARATION OF CONFORMITY

We declare under our sole responsibility that this product, to which this declaration relates, is in conformity with the following standards:

EN60065, EN55032, EN55020.

Following the provisions of Low Voltage Directive 2014/35/EU and EMC Directive 2014/30/EU.

A NOTE ABOUT RECYCLING:

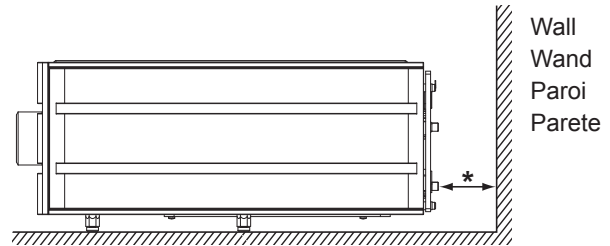
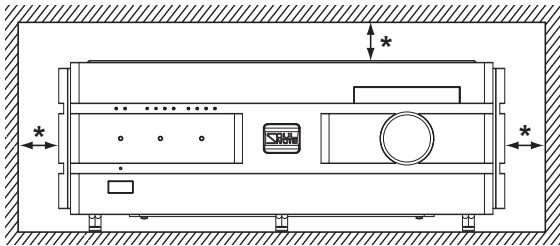
This product's packaging materials are recyclable and can be reused. Please dispose of any materials in accordance with the local recycling regulations. When discarding the unit, comply with local rules or regulations.

Batteries should never be thrown away or incinerated but disposed of in accordance with the local regulations concerning battery disposal. This product and the supplied accessories, excluding the batteries, constitute the applicable product according to the WEEE directive.



Pb

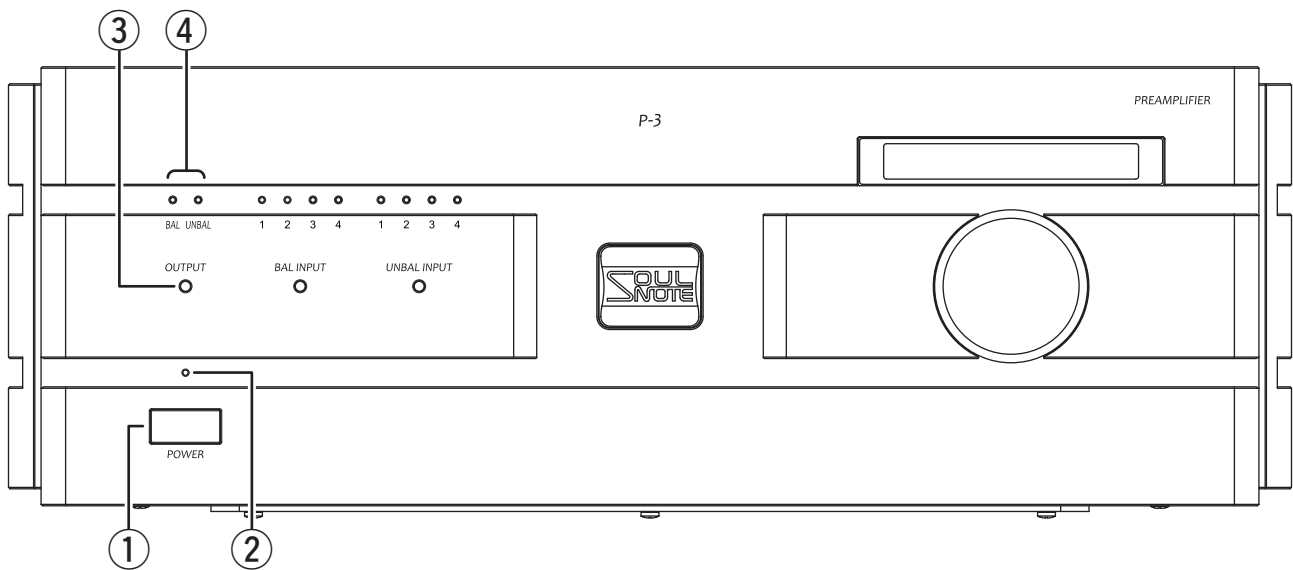
CAUTIONS ON INSTALLATION



*** For proper heat dispersal, do not install this unit in a confined space, such as a bookcase or similar enclosure.**

- Leave sufficient clearance (at least 10 cm) from the wall, (at least 5 cm) from top surface of the unit.
- Do not place any other equipment on this unit.

Front Panel Names and Functions



① Power Switch (POWER)

Press to turn on the power, and press again to turn off. For about 6 seconds after turning on the power, no sound is output and only the Power Indicator is lit.

② Power Indicator (POWER)

While the power is turned on, the indicator is lit.

Notes:

- Master mode: While in GND separation mode, the indicator is lit blue. While in GND connection mode, the indicator is lit red.
- Slave mode: While in GND separation mode, the indicator is lit light-blue. While in GND connection mode, the indicator is lit yellow.

③ Output Selection Switch (OUTPUT)

Pressing the switch toggles between balanced output and unbalanced output.

Note:

- Balanced output and unbalanced output cannot be performed simultaneously.

④ Output Indicators (BAL/UNBAL)

The selected output is lit.

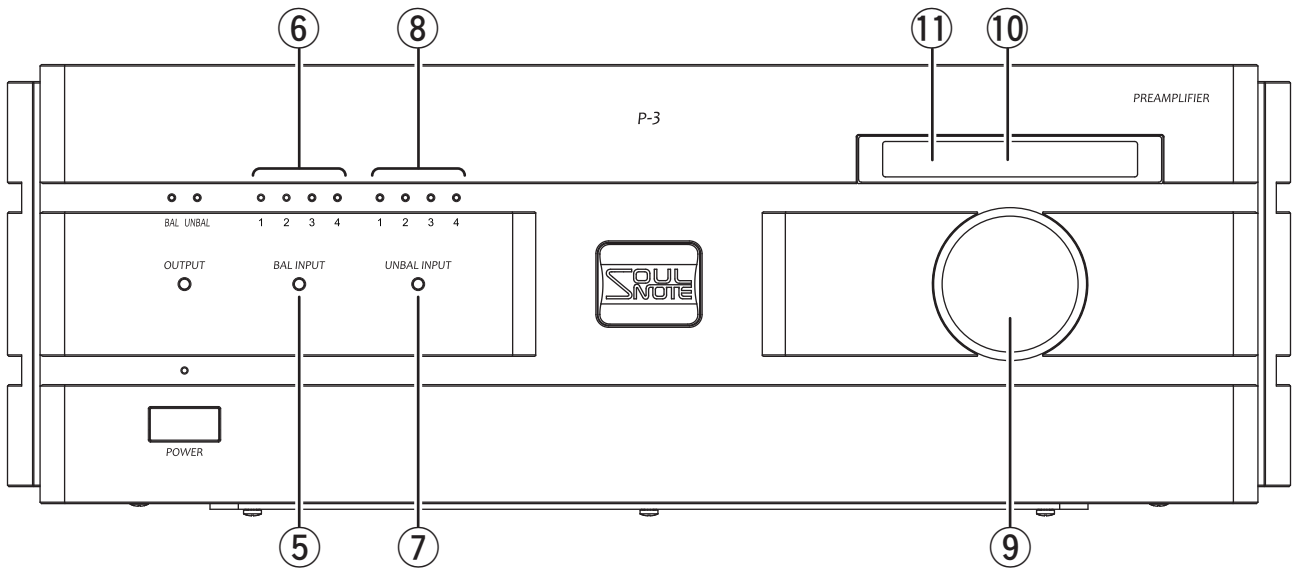
Phase settings for balanced output and Output Indicator colors

- The absolute phase can be reversed with the PROGRAM button on the remote control.
- The indicator is lit red while the phase is positive, and the indicator is lit yellow while the phase is negative.
- The phase (positive/negative) can be set for each selected input, and the setting is retained even after the power is turned off.

- When the pin 2 = HOT is used for the device connected to the output terminals
 - When the balanced terminal, pin 2 = HOT is used for the selected input device
Set the indicator to red by using the PROGRAM button on the remote control.
 - When the balanced terminal, pin 3 = HOT is used for the selected input device
Set the indicator to yellow by using the PROGRAM button on the remote control.
 - When the unbalanced terminal is used for the selected input device
Set the indicator to red by using the PROGRAM button on the remote control.

- When the pin 3 = HOT is used for the device connected to the output terminals
 - When the balanced terminal, pin 2 = HOT is used for the selected input device
Set the indicator to yellow by using the PROGRAM button on the remote control.
 - When the balanced terminal, pin 3 = HOT is used for the selected input device
Set the indicator to red by using the PROGRAM button on the remote control.
 - When the unbalanced terminal is used for the selected input device
Set the indicator to yellow by using the PROGRAM button on the remote control.

		Device connected to the output terminals	
		pin 2 = HOT	pin 3 = HOT
Device connected to the input terminals	pin 2 = HOT	Red (positive phase)	Yellow (negative phase)
	pin 3 = HOT	Yellow (negative phase)	Red (positive phase)
	Unbalanced	Red (positive phase)	Yellow (negative phase)



⑤ **Balanced Input Selection Button (BAL INPUT)**

Press repeatedly to select a desired balanced input.

⑥ **Balanced Input Selection Indicator (1/2/3/4)**

The selected input is lit red.

Notes:

- While the Balanced 4 Bypass Switch is on, Balanced Input 4 is lit light-blue.
- While Balanced 4 is selected, the indicator is lit pale-red.

⑦ **Unbalanced Input Selection Button (UNBAL INPUT)**

Press repeatedly to select a desired unbalanced input.

⑧ **Unbalanced Input Selection Indicator (1/2/3/4)**

The selected input is lit red.

Notes:

- While the Unbalanced 4 Bypass Switch is on, Unbalanced Input 4 is lit light-blue.
- While Unbalanced 4 is selected, the indicator is lit pale-red.

⑨ **Volume Adjustment Dial**

Adjust the volume. Turn the dial clockwise to increase the volume. Even after the power is turned off, the last-used volume setting made with the dial remains in the memory.

Note:

- If the volume setting remaining in the memory is -20dB or higher, the volume will be -20dB when the power is turned on again.

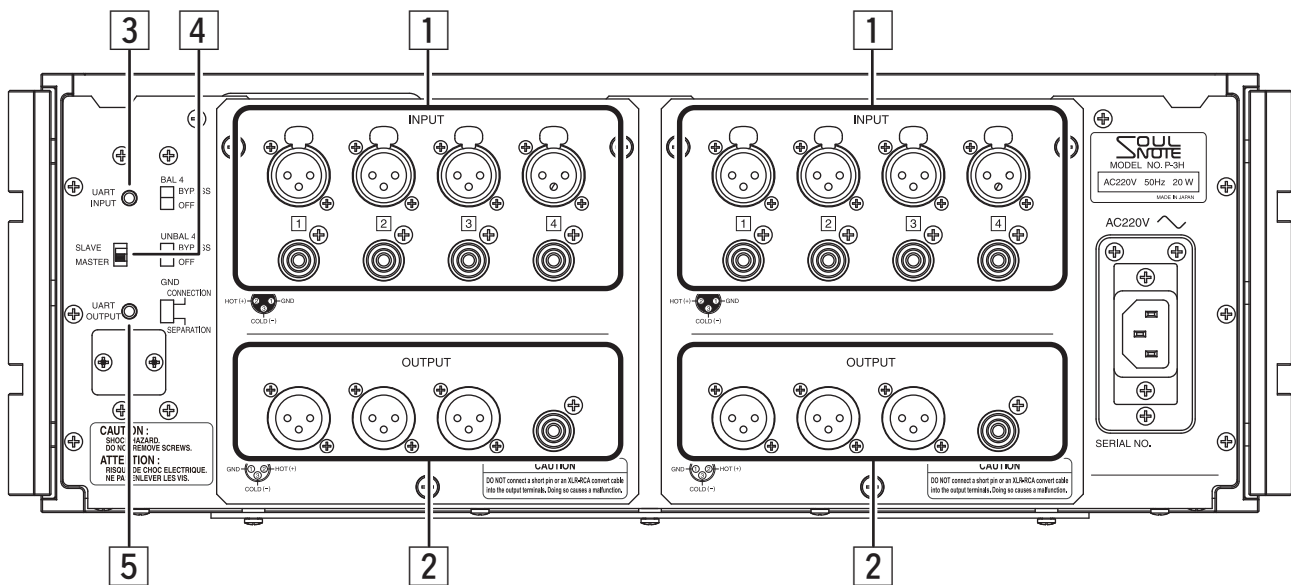
⑩ **Volume Display**

Displays the volume in the unit of dB. The maximum volume is displayed as “-0.0” and the minimum volume (-∞) is displayed as “---”.

⑪ **IR Sensor**

Receives infrared signals from the remote control.

Rear Panel Names and Functions



1 Audio Input Terminals (INPUT)

Use these terminals to input analog audio signals.

Note:

- When connecting a connector cable, turn off the power or set the volume to the minimum (---).

2 Pre-Out Terminals

Use these terminals to output pre-out audio signals.

Notes:

- The 3 types of balanced output are parallelly connected and the signals are output simultaneously.
- Balanced output and unbalanced output cannot be performed simultaneously.

3 UART Input Terminal (UART INPUT)

Use this input terminal for control signals when using multiple units of this product.

When in slave mode, connect a 3.5Φ stereo mini plug cable (sold separately) to this terminal.

Cautions when using the UART communication function

- While plugging/unplugging the communication cable or switching between master and slave mode, be sure to keep the power off.
- Do not leave the communication cable with only one end of the cable connected to this product.
- Do not touch both ends of the communication cable.
- When turning on the power, first turn on the slave units.
- When turning off the power, first turn off the master unit.

4 Mode Change Switch (MASTER/SLAVE)

When using multiple units of this product, use this switch to select Master or Slave.

Notes:

- While in slave mode, the Power Indicator is lit light-blue or yellow.
- While in slave mode, the setting is configured based on that of the master.
- While in slave mode, the difference in value with the master can be set by adjusting the volume while pressing the Output Selection Switch (OUTPUT). The same difference in volume value with the master is retained even after the power is turned off.

Display example

When the difference with the master is set to -6dB,

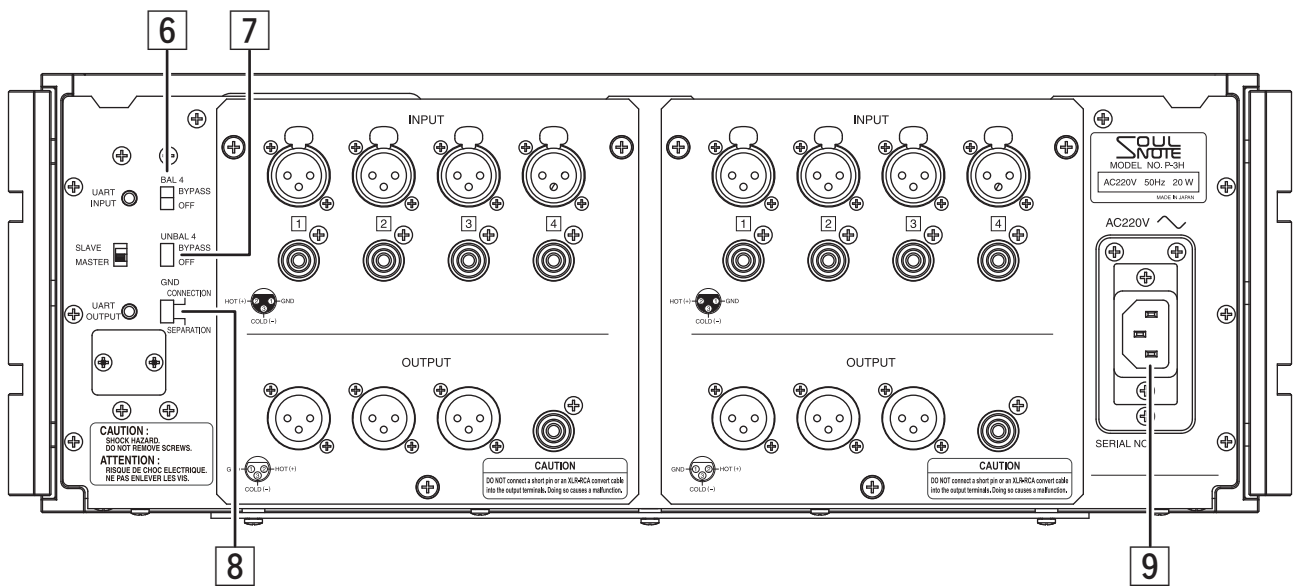


is displayed.

5 UART Output Terminal (UART OUTPUT)

Use this output terminal for control signals when using multiple units of this product. When in master mode, connect a 3.5Φ stereo mini plug cable (sold separately) to this terminal.

Using this output terminal allows you to connect 3 or more units with a stack connection.



6 Balanced 4 Bypass Switch (BAL 4 BYPASS)

While balanced 4 is selected, the same level as the input is output regardless of the volume setting. Use this switch such as when connecting an AV preamplifier. While bypass is set to on, Balanced Input Selection Indicator 4 is lit light-blue.

Note:

- While a device such as a CD player is connected, always keep bypass set to off.

7 Unbalanced 4 Bypass Switch (UNBAL 4 BYPASS)

While unbalanced 4 is selected, the same level as the input is output regardless of the volume setting. Use this switch such as when connecting an AV preamplifier. While bypass is set to on, Unbalanced Input Selection Indicator 4 is lit light-blue.

Note:

- While a device such as a CD player is connected, always keep bypass set to off.

8 GND Switch (SEPARATION/CONNECTION)

This switch connects separated right and left analog GND to the main chassis.

SEPARATION:

Separates the right and left analog GND from the main chassis. To obtain better audio quality, keep the switch in this position.

CONNECTION:

Connects analog GND to the main chassis. When noise or the like occurs, set the switch to this position.

9 AC Inlet (AC220V)

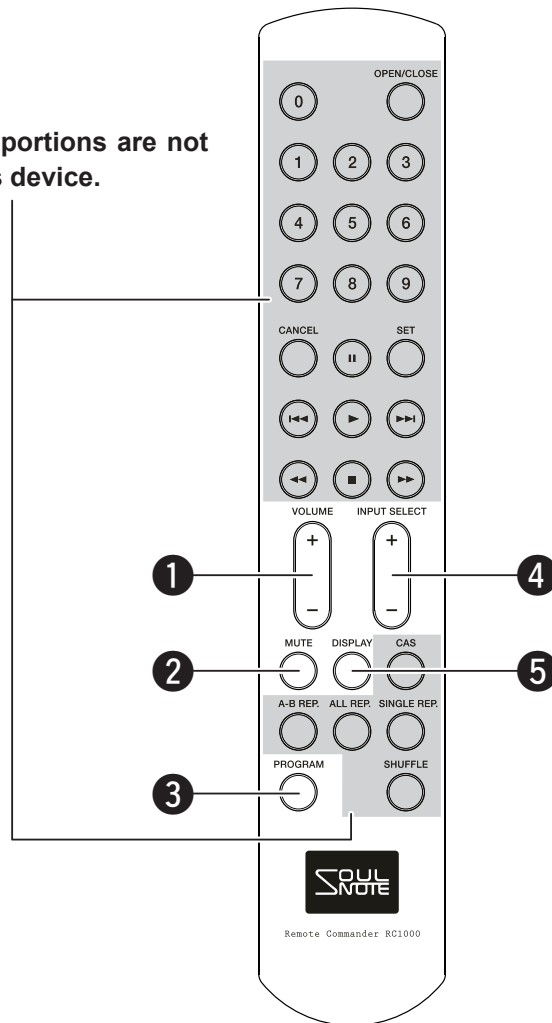
Connect to a 220 V AC wall outlet (mains). Using the supplied power cable is recommended to obtain better audio quality.

Notes:

- Connect the side with OO engraved to the ground side (with a longer hole).
- The aluminum base of the AC inlet is not secured in order to obtain better audio quality.

Remote Control Button Names and Functions

The grayed out portions are not available on this device.



1 VOLUME Button

Press to adjust the volume. Each time you press the button, the volume increases/decreases in the increment of 0.5dB. Press and hold the button to continuously increase/decrease the volume.

Notes:

- When increasing the volume, you cannot continuously increase the volume if the volume level is -20dB or higher.
- When decreasing the volume, you can continuously decrease the volume regardless of the volume level.

2 MUTE Button

Press to mute the sound and press again to cancel mute.

While muted, the Volume Display flashes.

3 PROGRAM Button

Press to set the balanced output phase corresponding to the currently selected input.

Note:

- Refer to “4 Output Indicators (BAL/UNBAL)”.

4 INPUT SELECT Button

Press to select a desired input.

BAL1 →→→ BAL4 → UNBAL1 →→→ UNBAL4 → BAL1...

5 DISPLAY button

Press to turn off the indicators and the display and press again to turn on.

Notes:

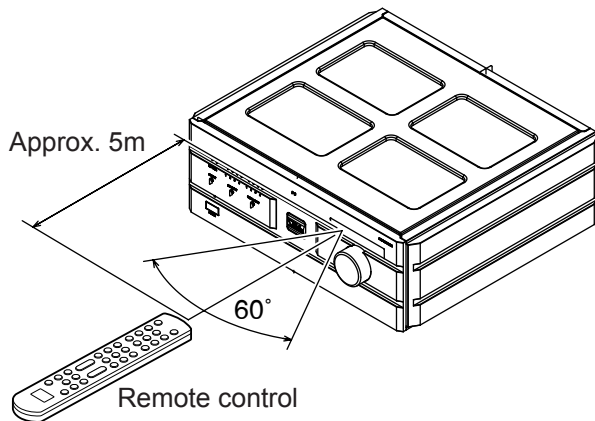
- While the indicators and the display are off, pressing any button first causes the indicators and the display to turn on. After doing so, any desired operation can be performed.

If any operation is not performed for about 2 seconds, the indicators and the display automatically turn off.

- The Power Indicator does not turn off.

Remote Control

■ Notes on Operation

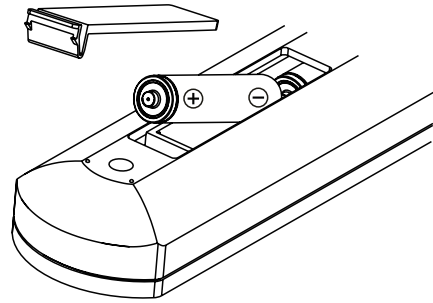


Operate the remote control within approx. 5 m distance from the front panel of the main unit within an angle of 60° to the remote sensor.

- Prevent the remote sensor from being exposed to strong light.
- Do not place any obstacles between the remote control and the remote sensor.
- Do not use other remote controls while using the remote control for the main unit.

■ How to Change the Batteries

Remove the lid on the rear side of the remote control and insert 2 AAA (LR03/R03) batteries as indicated inside the battery compartment. After inserting the batteries, attach the cover again.



Cautions on Batteries

- Use AAA (LR03/R03) batteries for the remote control.
- Replace the remote control batteries with new ones after approx. 1 year has passed.
- If you cannot operate the main unit by using the remote control at a short distance from the main unit, change the batteries with new ones even if 1 year has not yet passed.
- Insert batteries with the correct polarity as indicated by the “+” and “-” symbols inside the battery compartment.
- Do not use old and new batteries at the same time. Doing so may cause battery leakage or rupture. Furthermore, do not use different types of batteries together.
- Do not short-circuit, disassemble, or heat batteries. Do not throw batteries into a fire.
- When not using the remote control for a long period of time, remove the batteries.
- If battery leakage occurs, wipe the battery liquid from the battery compartment and then insert new batteries.
- When disposing of batteries, follow appropriate local guidelines and regulations such as ordinances.

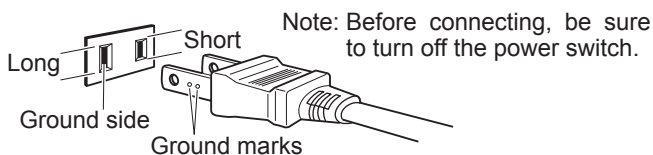
DISPLAY button

The display and indicators other than the power indicator can be turned off by pressing the DISPLAY button on the remote control.

Turning off the display can reduce noise inside the unit thereby improving the audio signal quality.

Power Cable Connection

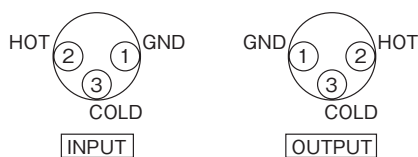
When you connect the power cable, be sure to insert the ground-mark side (the side with 2 engraved circles) of the plug into the ground side (the side with a longer insertion hole) of the AC wall outlet (mains). If the plug is connected with the polarity reversed, this product may not be able to deliver its utmost performance.



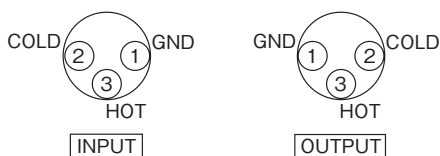
Balanced Input/Output

The XLR Connector is used for Balanced Input/Output. There are two types of connection, “European Type” and “USA Type”.

1. European Type (adapter for this unit) (pin 2 = HOT, pin 3 = COLD)



2. USA Type (pin 2 = COLD, pin 3 = HOT)

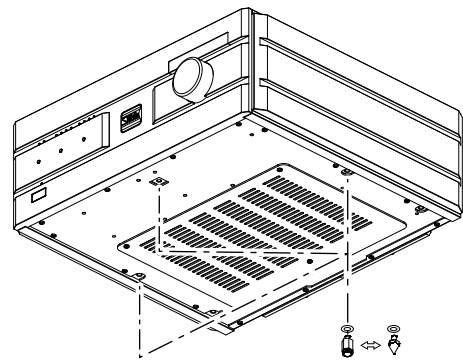


Attaching the Spike Pins

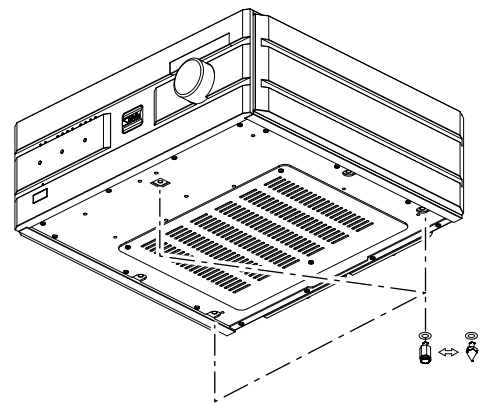
By replacing the feet with the supplied spike pins, you can tune the audio quality. Point grounding makes the sound focus and auditory lateralization sharper. Furthermore, the audio quality can be subtly tuned by changing the material of the surface on which this equipment is installed.

Note:

- When the spike pins are attached, it may be difficult to keep weight balance stable. Take great care not to carelessly apply a force on the corners of the main unit.



The feet can also be attached to the back-side holes. If the front side of the device is not stable, attach the feet to the back-side holes.



⚠ Cautions

- When using the spike pins, be extremely careful not to get injured, etc.
- When using the spike pins, be careful that the surface on which the main unit is installed such as the surface of a table, shelf, etc., may become damaged. Using the spike-receiving board is highly recommended in order to protect the installation surface.

Troubleshooting

No sound is output.

- Check that the power of the main unit is on.
- Check that the appropriate input source is selected.
- Check that the Output Selection Switch is set properly.
- Check that the Mode Change Switch is set properly.
- Check the connections of the external devices.
- Check that the power of the external devices is on.
- Check that the operations and settings on the external devices are correct.
- Check the connections of the speaker system.

The remote control does not operate.

- Check that the remote control batteries are not worn out.
- Check that the distance between the remote control and the main unit is not too far or that there is no obstacle between the remote control and the main unit.
- Keep the tip of the remote control facing the IR Sensor (Volume Display).

Maintenance

When the unit has become dirty, wipe it clean using a soft cloth. To remove stubborn stains, dilute some dish-washing liquid in 5 or 6 times as much water, soak a soft cloth in the solution, wring it out well, wipe away the stains, and then wipe the surfaces dry with a dry cloth.

Never use alcohol, paint thinners, benzine, insecticides or other volatile substances since they may mar or remove the surface gloss.

Bear in mind that rubbing surfaces with a chemical cleaning cloth or leaving such a cloth in contact with a surface for an extended time may result in deterioration.

Specifications

Input XLR x 4, RCA x 4
Output..... XLR x 3, RCA x 1
(selectable XLR or RCA)
Total harmonic distortion 0.0015% (1.5 Vrms)
Frequency characteristic2 Hz to 1 MHz (± 3.0 dB)
Residual noise 13 μ V (20 kHz L.P.F.)
Maximum output 21 Vrms
Output impedance 6.8 ohms
Maximum gain 11dB
Power voltage..... 220 V AC, 50 Hz
Power consumption 20 W
Maximum external dimensions
..... 454 mm (W) x 174 mm (H) x 430 mm (D)
Weight 25 kg



CSR International Ltd.