

ESOTERIC

A-100

Stereo Tube Power Amplifier

OWNER'S MANUAL 2

MANUEL DU PROPRIÉTAIRE ... 15



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 appliance.

IMPORTANT SAFETY INSTRUCTIONS

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



- Do not expose this apparatus to drips or splashes.
- Do not place any objects filled with liquids, such as vases, on the apparatus.
- Do not install this apparatus in a confined space such as a book case or similar unit.
- The apparatus draws nominal non-operating power from the AC outlet even with its POWER switch turned off.
- The apparatus should be located close enough to the AC outlet so that you can easily reach the power cord plug at any time.
- An apparatus with Class I construction shall be connected to an AC outlet with a protective grounding connection.
- Batteries (battery pack or batteries installed) shall not be exposed to excessive heat such as sunshine, fire or other heat sources.
- Excessive sound pressure from earphones and headphones can cause hearing loss.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION

- DO NOT REMOVE THE EXTERNAL CASES OR CABINETS TO EXPOSE THE ELECTRONICS. NO USER SERVICEABLE PARTS ARE INSIDE!
- IF YOU ARE EXPERIENCING PROBLEMS WITH THIS PRODUCT, CONTACT TEAC FOR A SERVICE REFERRAL. DO NOT USE THE PRODUCT UNTIL IT HAS BEEN REPAIRED.

For U.S.A.

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 equipment and/or 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.

CAUTION

Changes or modifications to this equipments not expressly approved by TEAC CORPORATION for compliance will void the user's warranty.

CAUTION Regarding Placement

To maintain proper ventilation, be sure to leave a space around the unit (from the largest outer dimensions including projections) equal to, or greater than, shown below.

Left and Right Panels: 20 cm (8")
Rear Panel: 10 cm (4")
Top Panel: 5 cm (2")

For European customers

Disposal of your old appliance

1. When this crossed-out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC.



2. All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.

3. The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.

4. For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.

Contents

Thank you for choosing Esoteric. Read this manual carefully to get the best performance from this unit.

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What's in the box

Please confirm that the following accessories are in the box when you open it.

- Power cord x 1
- Remote control unit (RC-1156) x 1
- Batteries (AA, R6, SUM-3) x 2
- Felt pads x 3
- Owner's manual x 1
- Warranty card x 1

Read this before operation

- Place the unit in a stable location near the stereo system that you will use.
- Be careful to avoid injury when moving the unit due to its weight. Get someone to help you if necessary.
- To protect easily scratched furniture, you may stick the felt pads supplied with the unit to the feet.
- As the unit may become warm during operation, always leave sufficient space around the unit for ventilation. The ventilation holes should not be covered. Make sure there is at least 20 cm (8") of space above and at least 5 cm (2") of space on each side of the unit. Do NOT place anything such as CD, CD-R, cassette tape etc. on top of the unit.
- The voltage supplied to the unit should match the voltage as printed on the rear panel. If you are in any doubt regarding this matter, consult an electrician.
- Choose the installation location of your unit carefully. Avoid placing it in direct sunlight or close to a source of heat. Also avoid locations subject to vibrations and excessive dust, heat, cold or moisture.
- Do not open the cabinet as this might result in damage to the circuitry or electrical shock. If a foreign object should get into the unit, contact your dealer or service company.
- When removing the power plug from the wall outlet, always pull directly on the plug, never yank the cord.
- Do not attempt to clean the unit with chemical solvents as this might damage the finish. Use a clean, dry cloth.
- Keep this manual in a safe place for future reference.
- Specially selected tubes are used for this unit. Special measurement is necessary to adjust the tubes at the time of replacement. DO NOT replace the tubes by yourself.

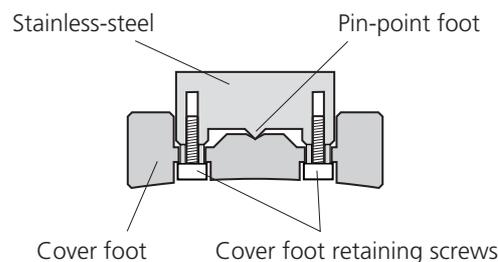
Maintenance

If the surface of the unit gets dirty, wipe with a soft cloth or use diluted neutral cleaning liquid. Be sure to remove any fluid completely. Do not use thinner, benzine (naphtha) or alcohol as they may damage the surface of the unit.

Placement of the unit

High-quality hardened tool stainless-steel is used for the pin-point feet attached to the bottom of the component. Although the outer feet may appear loose, the weight of the unit causes them to become firm and secure. The design effectively damps and reduces vibration.

- To protect the supporting furniture surface, you may stick the felt pads supplied with the unit to the bottom of the metal feet.



About the speaker cable

- Use commercially available speaker cables.
- Use the same length of speaker cables for the left and right speakers. Minimizing excess speaker cable length may allow an improvement in sound quality.

Connection method

Connect the unit's + terminal to the speaker's + terminal, and the unit's – terminal to the speaker's – terminal.

- This unit is equipped with WBT's speaker terminals. Turn the terminal cap counterclockwise to loosen and clockwise to tighten.
- The metal portions of the two separate wires (Positive and negative), should not touch or an electrical short can occur. Shorted wires can create a fire hazard or induce a failure in your equipment.
- Generally, the + side of the speaker cable is marked to make it distinguishable from the – side of the cable. Connect this marked side to the + terminal and the unmarked side to the black – terminal.

CAUTION:

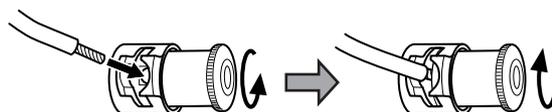
- Switch off the power to all equipment before making connection.
- Read the instructions of each component you intend to use with this unit.

About the speaker terminal

When your speaker cable is bare wire:

Twist the strands of the stripped wires tightly together.

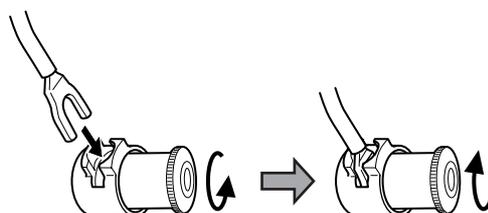
- The thickness of wires should be less than 4 mm (1/8").



When your speaker cable has spades:

Loosen the terminal cap and insert the spade into the terminal. Then turn the terminal cap clockwise to tighten it.

- The inside diameter of spades should be 8 mm or more.



Connection using speaker cables with banana plugs

Tighten the terminal cap and insert a banana plug.



For European customers

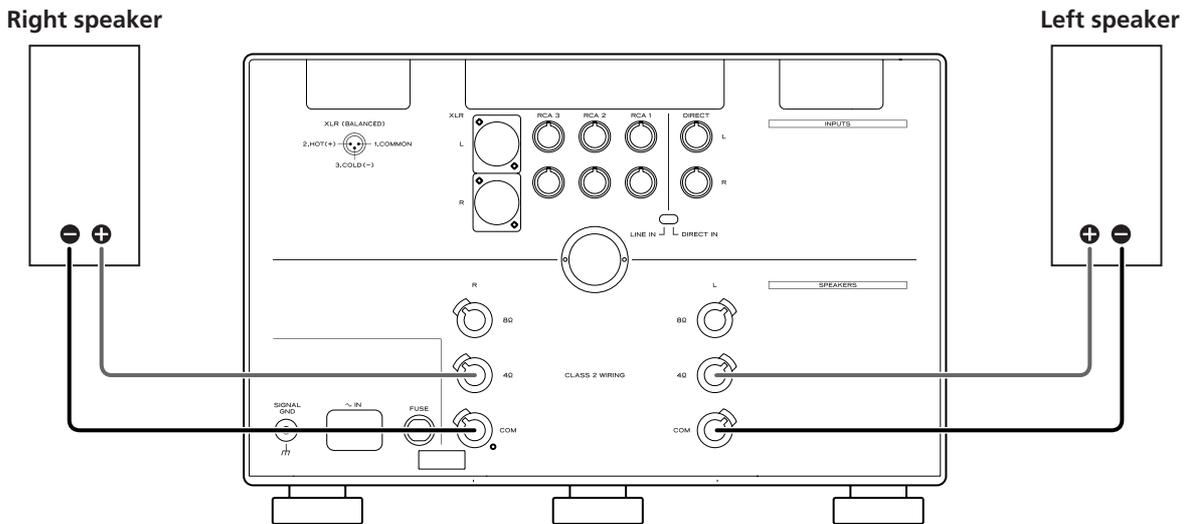
In accordance with European safety regulations, it is not possible to connect banana plugs into the speaker terminals on European models.

The holes into which banana plugs are inserted have been covered with black caps. Connect the speakers using spades or bare wires.

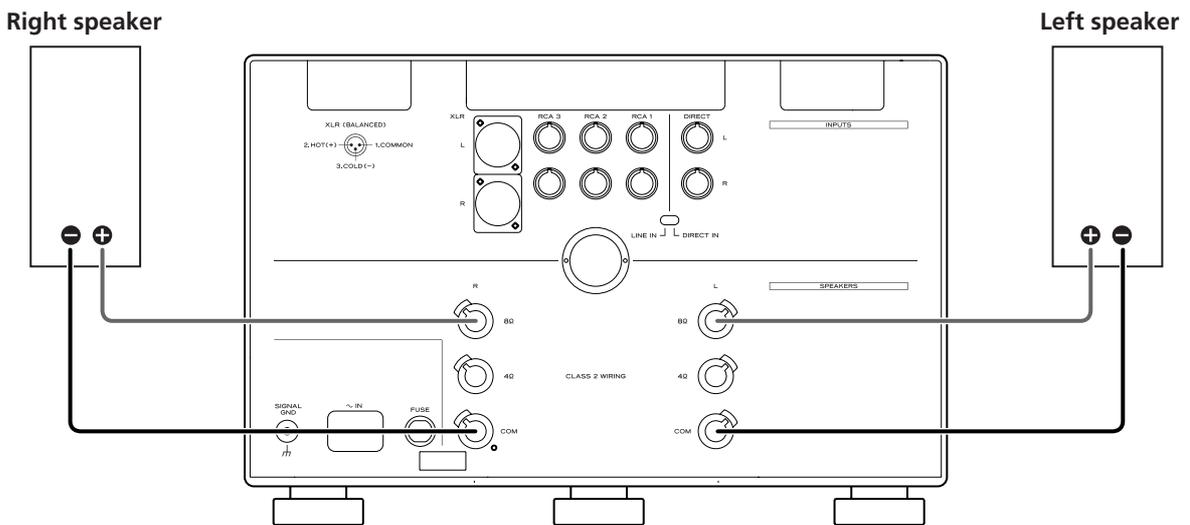
If the black caps become separated from the terminals, return them to their original position.

Connection example (Connecting speakers)

When 4Ω speakers are connected



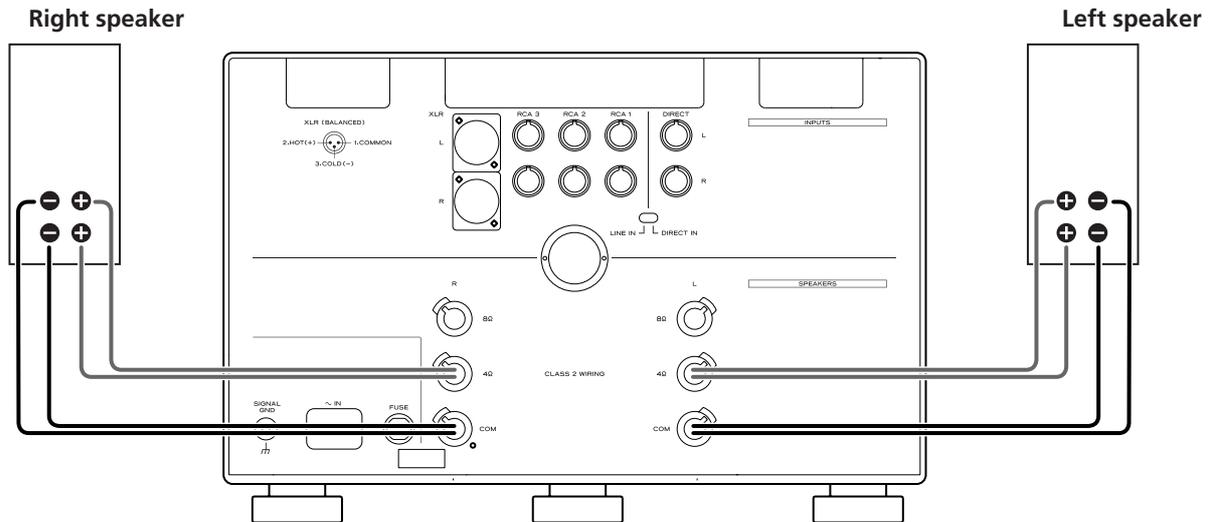
When 6Ω, 8Ω or 16Ω speakers are connected



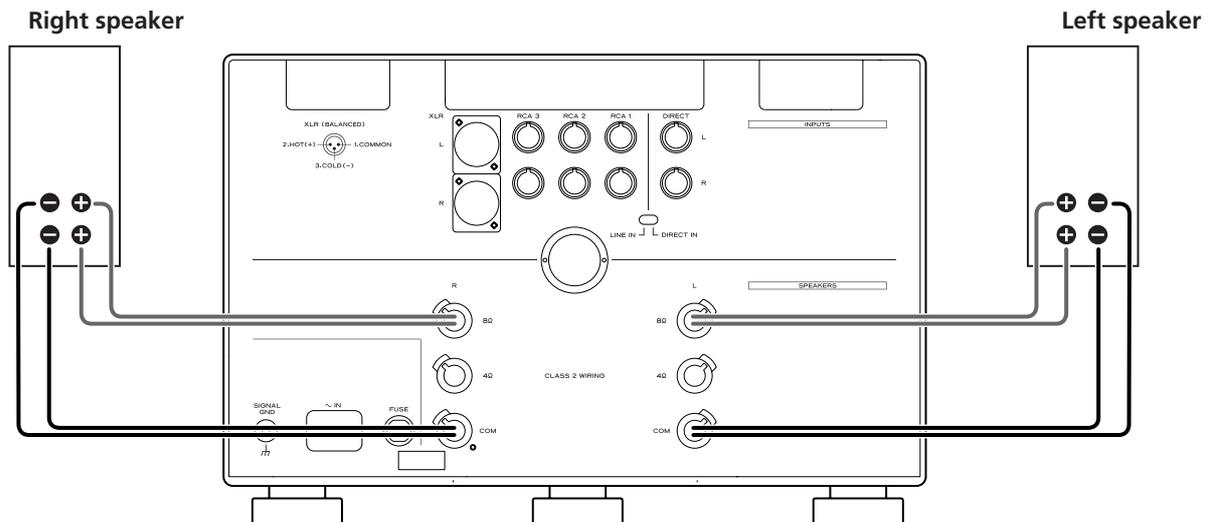
⚠ Note:

- Connect to a terminal which corresponds to the impedance of the speaker.
To connect 4Ω speakers to the unit, connect the unit's 4Ω terminals to the speaker's + terminals.
To connect the speakers of 6Ω, 8Ω, 16Ω or higher, connect the unit's 8Ω terminals to the speaker's + terminals.
Connect the unit's COM terminal to the speaker's - terminal.

When biwiring 4Ω speakers



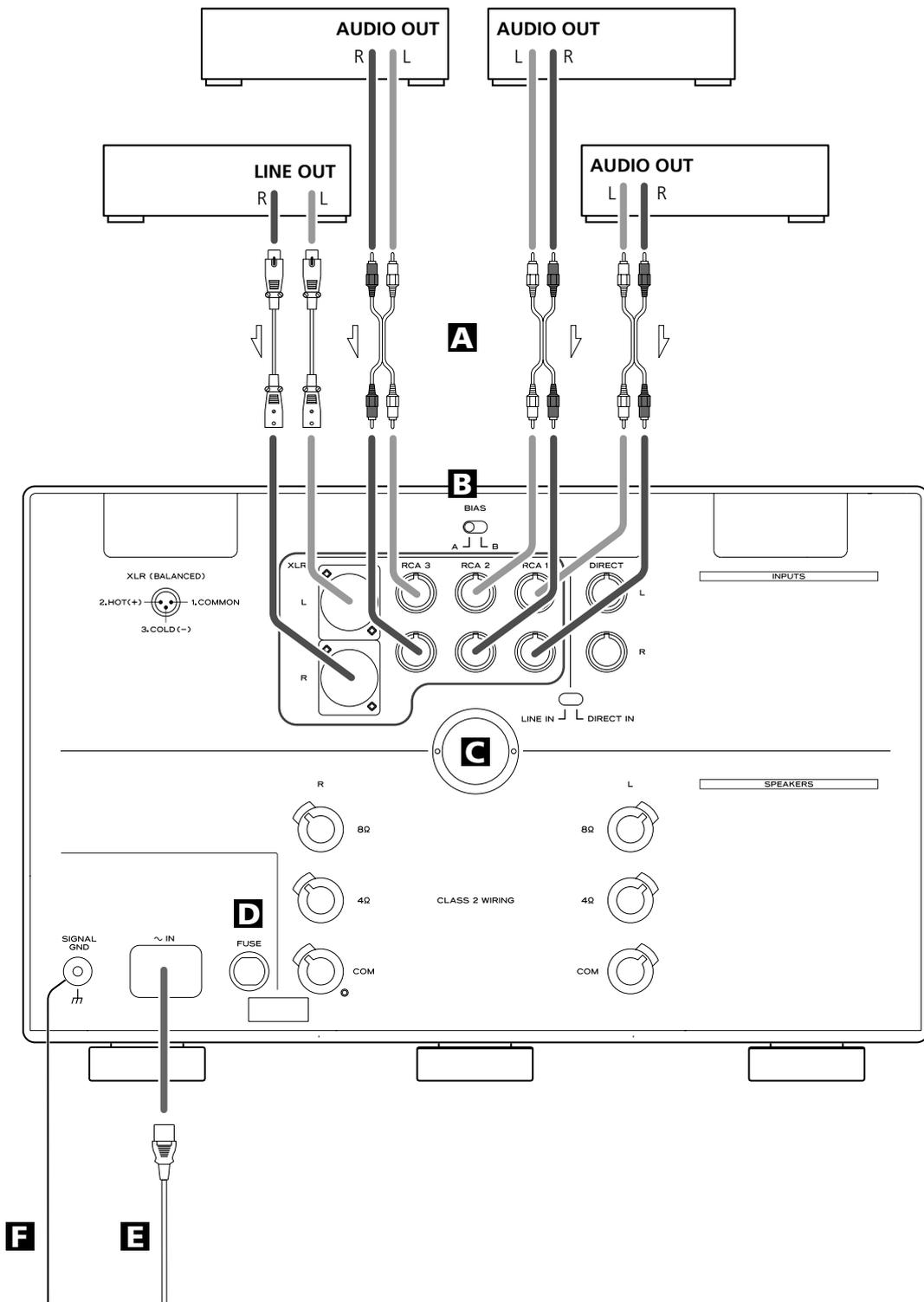
When biwiring 6Ω, 8Ω or 16Ω speakers



⚠ Note:

- To biwire this unit and speaker, use either one of the 8Ω terminal or 4Ω terminal. Do not connect the 4Ω terminal to a tweeter, 8Ω terminal to a woofer, etc.

Other connections



A Analog audio input terminals [LINE IN]

Used for the input of analog 2-channel audio signals. Connect these terminals to a Super Audio CD player (Example: SA-10, X-01SE, etc), DVD player, cassette tape deck, tuner, etc. using commercially available XLR or RCA audio cables. Connect the unit's R terminal to the player's R terminal, and the unit's L terminal to the player's L terminal.

To use line input, set the LINE IN/DIRECT IN switch to "LINE IN". Select an input with the INPUT button on the front panel and adjust the volume with the VOLUME control knob. The remote control can also be used in this "LINE IN" (Integrated amplifier), setting.

- Push in the XLR balanced plug until the lever is locked. To remove the balance plug, hold the lever and pull out the plug.
- XLR connector pin assignment:



B BIAS switch

It is possible to select the bias current for the KT-88 output tube with this switch.

A bias current is a current that continues to flow to a tube when there is no input signal. Depending on preset values, a bias current can cause distortions in sound quality. The standard setting is B. The bias current will decrease when set to A, and depending on the compatibility between the tube and the system it is connected to, sound quality may become slightly more delicate. There is a tendency to use this setting when playing classical music.

Depending on the accompanying machine, changes can be difficult to detect on the A setting. Please set to B if you cannot detect audible changes on the A setting.

C Volume control motor cover

This covers the motor that drives the volume control. This is not an operational control. Do not remove this cover.

D Fuse holder

The fuse used in this unit is 250V5A slow blow. Do not use other fuses.

- Unplug the power cord when you replace the fuse.
- If the fuse blows out even if you replace it, consult your dealer.

E AC inlet

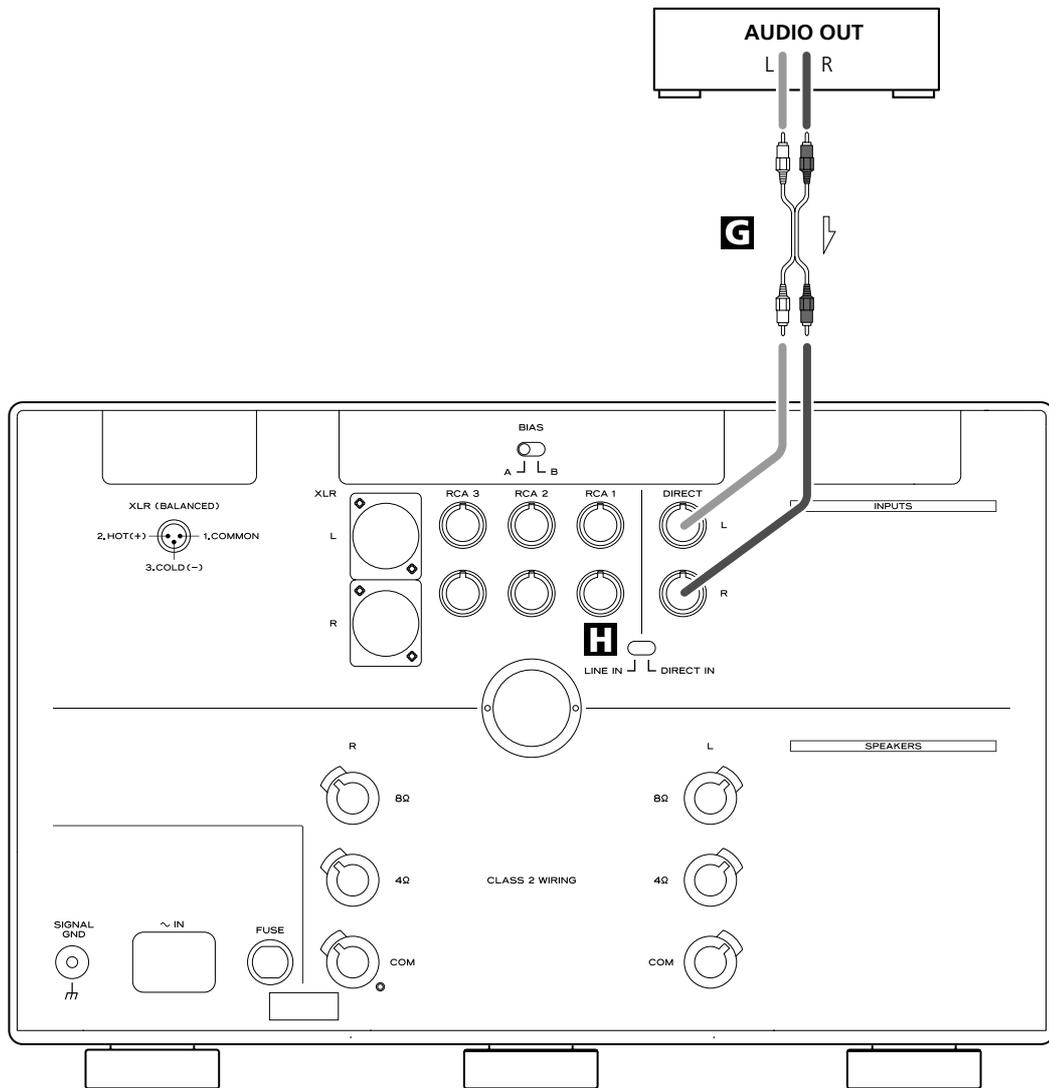
Use only the supplied Esoteric power cord. Use of other power cords may result in fire or electric shock. Unplug the power cord when you are not going to use the unit for an extended period of time.

F SIGNAL GND connection

Use a commercially available PVC-covered cord to connect the signal ground terminal on the unit to the player's signal ground.

- Note that this is NOT an electrical safety ground (earth).

Connection (Direct)



When using an external preamplifier, use the DIRECT terminal, and set the LINE IN/DIRECT IN switch to "DIRECT IN". (This setting allows you to use this device as a direct power amplifier bypassing its pre-amplifier stage.)

- Your remote control cannot be used in this setting.

G DIRECT terminal

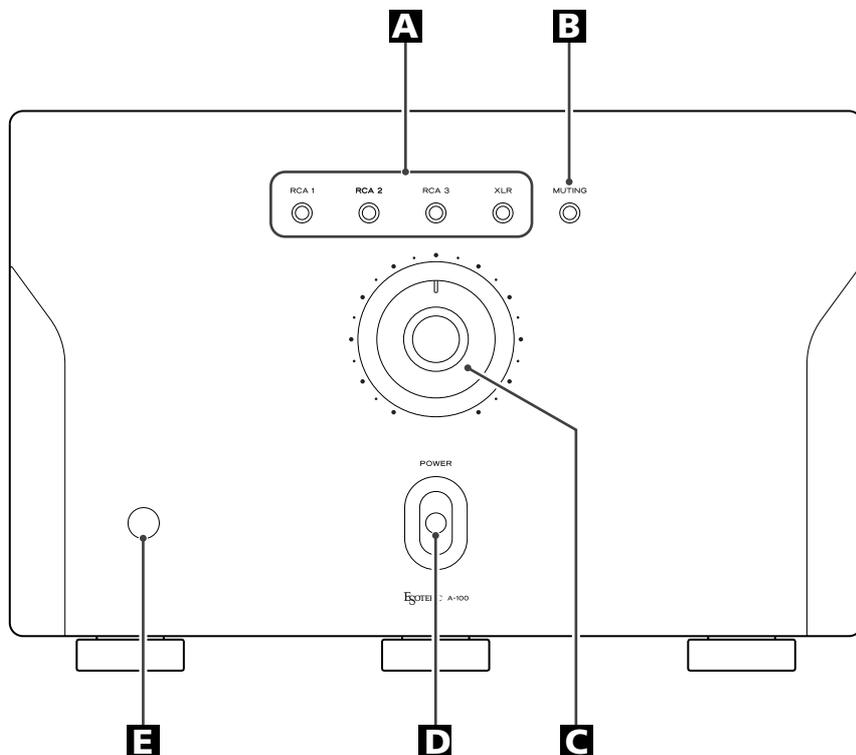
Connect to an external preamplifier's output port using an RCA audio cable.

H LINE IN/DIRECT IN switch

This switch changes between LINE IN and DIRECT IN.

- The "LINE IN" setting allows this amplifier to operate as an integrated amplifier.

Front panel features



When the LINE IN/DIRECT IN switch on the rear panel is set to "DIRECT IN", the front panel buttons will not work except for the POWER switch. This is normal for DIRECT mode operation.

Note: The following 3 controls will only work in the "LINE IN" (Integrated amplifier) mode.

A INPUT

Select the terminal to which the equipment to play is connected.

B MUTING

Use this button to mute the sound.

C VOLUME

Turn this knob to adjust the volume.

D POWER

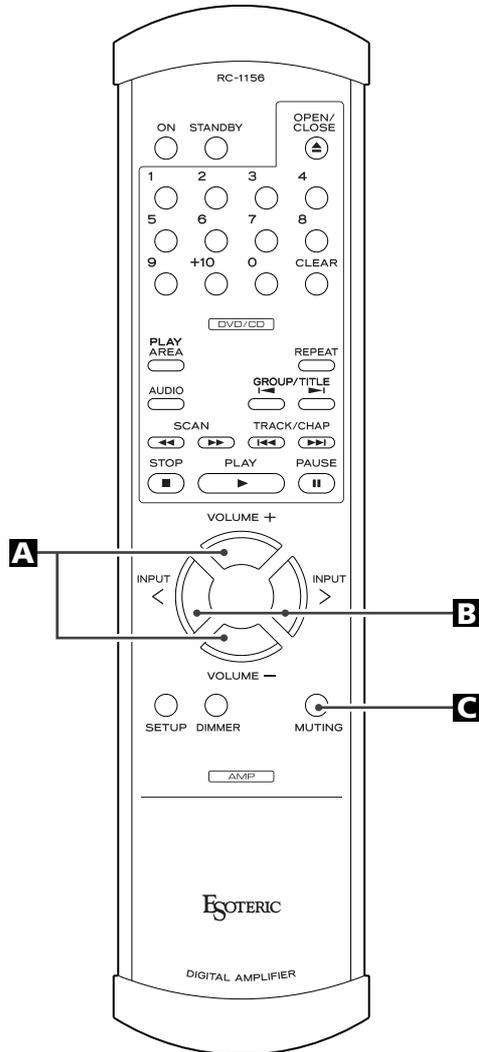
Use this switch to turn the unit on and off.

The indicator lights in red once when you turn on the unit. Then the indicator lights in blue after 1 minute and audio is output. The indicator lights in red also when the protection circuit is operating (page 14).

- Once the unit is turned off, wait for at least 5 minutes to turn it on again in order to protect the tubes.

E Remote control sensor

Receives signals from the remote control unit. Point the remote control unit at this sensor when operating the remote control unit (This works in the rear panel "LINE IN" setting only).



The remote control unit RC-1156 is used in common with Esoteric digital amplifiers and certain CD/DVD players (other than P-01/D-01).

When configured as an integrated amplifier, you can use the following buttons for A-100:

VOLUME, INPUT, MUTING

- The remote control unit is available only when the LINE IN/DIRECT IN switch on the rear panel is set to "LINE IN".

A VOLUME

Use these buttons to adjust the volume.

B INPUT

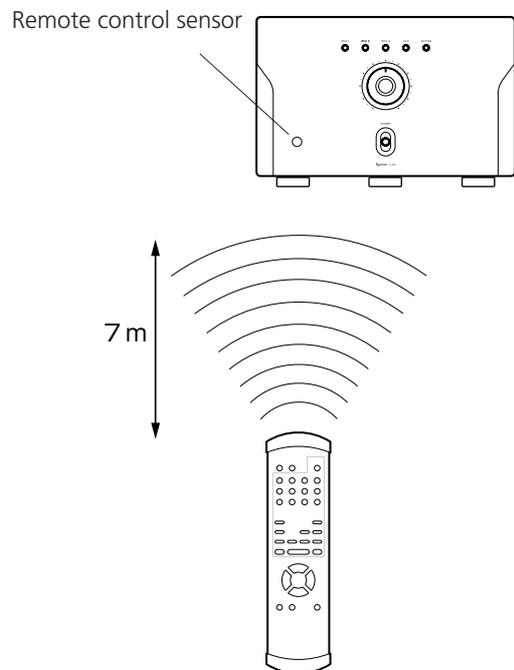
Use these buttons to select an input.

C MUTING

Use this button to mute the sound. Note that A, B and C above only operate in the "LINE IN" (Integrated amp), mode.

Notes on use

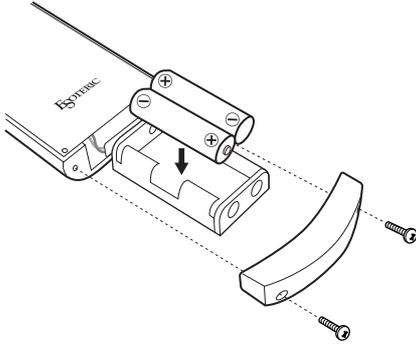
- Point the remote control unit at the amplifier's remote sensor within seven meters (23 feet) of the amplifier. There should not be any obstacles between the amplifier and the remote control unit.
- Do not allow direct sun or other light to shine on the remote sensor part of the amplifier. This may cause the remote control unit to work incorrectly.
- Note that other units with remote controls may operate incorrectly because of infrared light "overspill" when you operate this remote control unit.
- To use the remote control unit, set the LINE IN/DIRECT IN switch on the rear panel to "LINE IN".



How to insert the batteries

Remove the cover of the remote control unit with a screwdriver. After checking the polarity (⊕/⊖) of two AA batteries, insert the batteries, replace the cover and replace the screws.

- Take care not to pinch cables with the battery case.



Battery Replacement

If the distance required between the remote control unit and main unit decreases, the batteries are exhausted. In this case replace the batteries with new ones.

Precautions concerning batteries

- Be sure to insert the batteries with correct positive "⊕" and negative "⊖" polarities.
- Use batteries of the same type. Never use different types of batteries together.
- Rechargeable or non-rechargeable batteries can be used but not mixed together. Refer to the precautions on their labels.
- When the remote control unit is not to be used for a long time (more than a month), remove the batteries from the remote control unit to prevent them from leaking. If they leak, wipe away the liquid inside the battery compartment and replace the batteries with new ones.
- Do not heat or disassemble batteries and never dispose of old batteries by throwing them in a fire.

In order to protect the output level to the tubes, this unit is equipped with a protection circuit to detect overcurrents.

When an overcurrent is detected, the protection circuit will shut off the output tube's current and continue to do so until the power is switched off.

Presumably, the main cause of a protection circuit activating is when the speaker cord connected to the output port short circuits. The protection circuit may also activate when it is connected to a speaker with lower impedance than allowed, resulting in a large input that creates an overcurrent.

When the protection circuit has activated, look at the output port and the speaker it is connected to and remove the cause of the overcurrent. Following this action, wait 5 minutes and then turn the power back on. Should the protection circuit continue to activate even after removing the cause of the overcurrent, please contact your dealer or contact TEAC for service instructions.

When a large signal is input while a protection circuit is functioning, a very slight electrical noise from the current may be heard. This is not cause for alarm. This is the circuit maintaining its protection of the output tubes.

Troubleshooting

If you experience any problem with this unit, please take the time to look through this chart and see if you can solve the problem yourself before you call your dealer.

General

No power

- ➔ Check the connection to the AC power supply. Check and make sure the AC source is not a switched outlet and that, if it is, the switch is turned on.
- ➔ Insert the power cord into the AC inlet of this unit.

Remote control doesn't work.

- ➔ Press the POWER switch of the main unit to turn it on (page 13).
- ➔ If the batteries are dead, change the batteries (page 12).
- ➔ Use remote control unit within the range (7m/23ft) and point at the front panel (page 12).
- ➔ Set the LINE IN/DIRECT IN switch on the rear panel to "LINE IN" (page 10). The remote control for this amplifier will only work in the "LINE IN" (Integrated amp), mode.

There is no sound or only a very low-level sound is heard.

- ➔ Press the POWER switch to turn on the unit, your external pre-amplifier (if any), and disc player, etc.
- ➔ Make sure a signal is output from a pre-amplifier or a player, etc.
- ➔ Check if the pre-amplifier, speakers and source components are secure connected.
- ➔ Select input setting of the pre-amplifier correctly.
- ➔ Adjust the pre-amplifier volume.
- ➔ The protection circuit is in operation when the color of the indicator ring of the POWER switch changes from blue to red. Turn off the unit immediately if this indicator is red and solve the cause of problem.
- ➔ The speaker cord may be shorted out. Check your speaker connections.

Unstable sound.

- ➔ Speaker polarity (⊕/⊖) is reversed. Check all speakers for correct polarity.

If normal operation cannot be obtained, unplug the power cord from the outlet, wait about 60 seconds and plug it again. This resets the internal micro-computer which can be disturbed during electrical storms, power interruptions, etc.

Specifications

General

Power supply

Europe model AC 230 V, 50 Hz

U.S.A./Canada model AC 120 V, 60 Hz

Power consumption 200 W

Weight 40 kg (88 4/5 lb)

External dimensions (W x H x D)

382 x 252 x 486 mm (15 1/16" x 9 7/8" x 19 1/16")

Operating temperature +10°C - +30°C

Operating humidity 5% to 85% (no condensation)

Storage temperature -20°C - +55°C

Amplifier Section

Maximum useful output power 45 W + 45 W

(1 kHz, 8 ohms/4 ohms, JEITA)

Total Harmonic Distortion 0.1 % (at 1 W, 1 kHz, 8 ohms)

Frequency Response 20 Hz to 60 kHz

(at 1 W, 8 ohms, +1/-3 dB)

Signal-to-Noise Ratio more than 98 dB (JEITA)

Input Sensitivity (maximum output at maximum volume)

400 mVrms/45W (8Ω)

Input impedance LINE IN: 10 kΩ, DIRECT IN: 1 MΩ

Tube Section

First stage 12AT7 x 2

Drive stage 12AU7 x 4

Bottom stage KT88 x 4

Accessories

Power cord x 1

Remote control unit (RC-1156) x 1

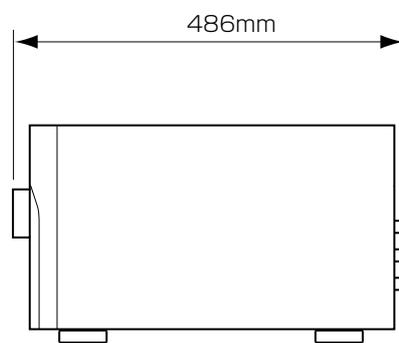
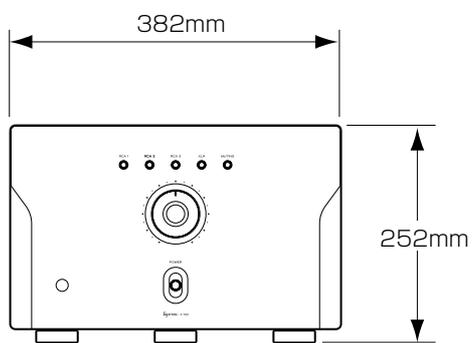
Batteries (AA, R6, SUM-3) x 2

Felt pads x 3

Owner's manual x 1

Warranty card x 1

- Design and specifications are subject to change without notice.
- Weight and dimensions are approximate.
- Illustrations may differ slightly from production models.



ESOTERIC

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This appliance has a serial number located on the rear panel. Please record the model number and serial number and retain them for your records.

Model number _____ Serial number _____

1207·MA-1313A