



HC 4S

HEADPHONE CONSOLE



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 a dry cloth.
 7. Do not block any ventilation openings. Install in accordance with manufacturer's instructions.
 8. Do not install near any heat sources such as radiators, 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 third prong is 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 and plug from being walked on or pinched particularly at plugs, convenience receptacles, and the point where it exits from the apparatus.
 11. Only use attachments and accessories specified by Rane.
 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.
 15. The plug on the power cord is the AC mains disconnect device and must remain readily operable. To completely disconnect this apparatus from the AC mains, disconnect the power supply cord plug from the AC receptacle.
 16. This apparatus shall be connected to a mains socket outlet with a protective earthing connection.
 17. When permanently connected, an all-pole mains switch with a contact separation of at least 3 mm in each pole shall be incorporated in the electrical installation of the building.
 18. If rackmounting, provide adequate ventilation. Equipment may be located above or below this apparatus, but some equipment (like large power amplifiers) may cause an unacceptable amount of hum or may generate too much heat and degrade the performance of this apparatus.
 19. This apparatus may be installed in an industry standard equipment rack. Use screws through all mounting holes to provide the best support.
- WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

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:

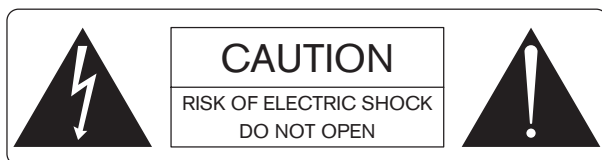
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION: Changes or modifications not expressly approved by Rane Corporation could void the user's authority to operate the equipment.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

WARNING



To reduce the risk of electrical shock, do not open the unit. No user serviceable parts inside. Refer servicing to qualified service personnel.

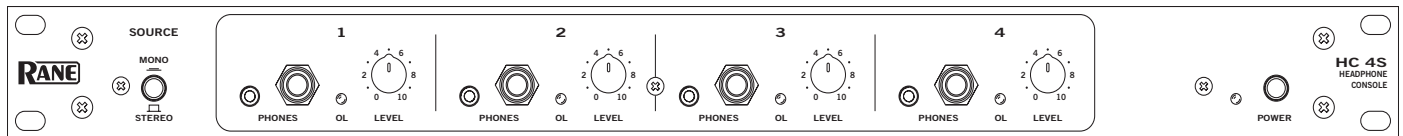
The symbols shown below are internationally accepted symbols that warn of potential hazards with electrical products.



This symbol indicates that a dangerous voltage constituting a risk of electric shock is present within this unit.



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.



Quick Start

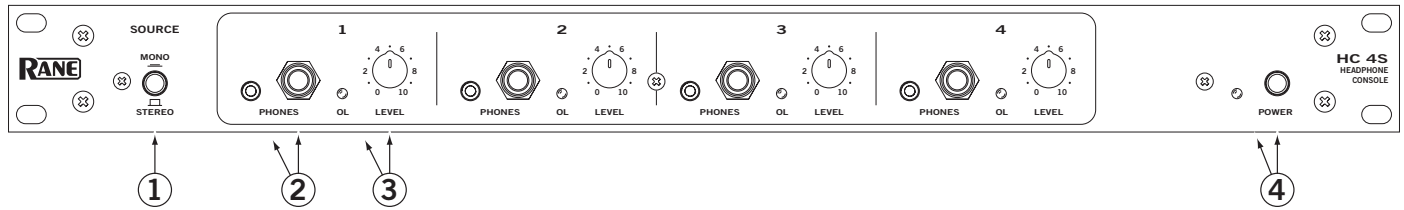
With the power switch in the *off* (out) position, plug the power cord into an appropriate AC power source.

Begin with all LEVEL controls counterclockwise at “0.” Connect the output from any stereo source such as a mixer, CD or MP 3 player, and plug the left and right inputs into the respective **INPUT** jacks. The Inputs accept balanced or unbalanced sources. Just plug them in. This source is now routed to each of the four Outputs.

See the *Sound System Interconnection* RaneNote for information on proper cable wiring between devices that have different connector types and grounding schemes.

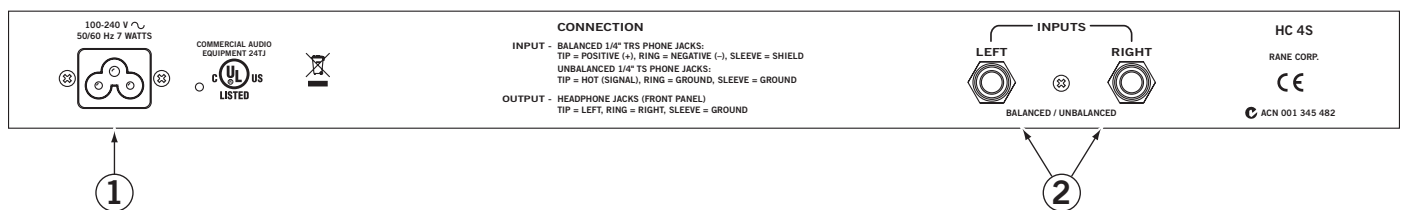
For a single mono source feeding all headphones, connect it to either one of the **INPUT** jacks and push the **MONO / STEREO SOURCE** switch *in*. Set the **LEVEL** controls for individual headphone levels.

Front Panel Description



- ① **STEREO / MONO switch** converts the INPUTS from stereo to mono so that a single input cable drives both sides of the headphones. In some instances a STEREO program may be confusing for live monitoring purposes, and switching to MONO improves intelligibility by summing the Left and Right signals.
- ② **PHONES** jacks accept standard 1/4" and 3.5mm TRS (tip-ring-sleeve) stereo headphone plugs.
- ③ **LEVEL** controls adjust the volume for each set of headphones as they are driven from the rear INPUTS. It's always a good idea to keep this control turned down before plugging in a pair of phones, then turn it up slowly. The red **OL** indicators light when the input signal exceeds the HC 4S's output capability (3 dB below maximum). Occasional flickering is acceptable, but a steady glow recommends turning the LEVEL control down. The overload point automatically varies with the headphones used.
- ④ **POWER** switch is your basic, straightforward power switch. When the yellow indicator is lit, the HC 4S is ready to go.

Rear Panel Description



- ① **Universal Voltage Input:** via a miniature IEC 60320 C6 appliance inlet. This mates with an IEC 60320 C5 line cord (USA domestic). Do **not** lift the ground connection!
- ② **INPUTS** are automatic balanced or unbalanced, accepting either a 1/4" TRS (Tip-Ring-Sleeve) plug for balanced operation, or a 1/4" TS (Tip-Sleeve) plug for unbalanced operation. A balanced line is best when connecting a cable over 10 feet (3 meters) in length. You do nothing different when hooking up balanced or unbalanced lines. The HC 4S is one smart animal.