

SpeakerPower

Installation and Operation Instructions for SP Series Rack Mount Amplifiers

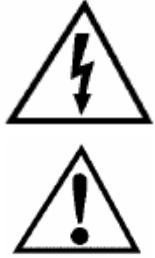
SpeakerPower Inc. 3001 S HARBOR BLVD, SANTA ANA CA USA 92704

I. 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.

15. WARNING To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.



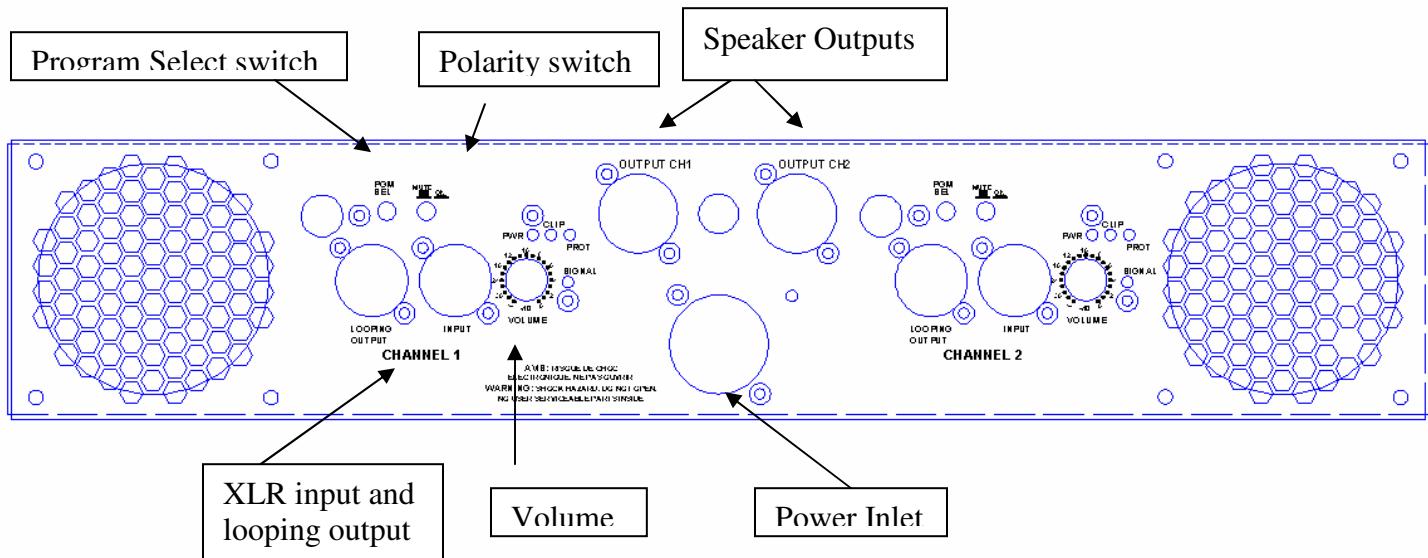
16. The lightning flash with arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to humans.
17. The exclamation point 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.

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 to 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 the 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.

I. Introduction

1. Intended Application. To Be Installed Only in Restricted Access Areas (Dedicated Equipment Rooms, Equipment Closets, or the like) in Accordance with Articles 110-18, 110-26, and 110-27 of the National Electrical Code, ANSI/NFPA 70. The amplifier is intended for installation in a 19" rack. The equipment must be operated and maintained only by trained personnel.
2. Parts Check List. The amplifier comes with an AC power cord and gaskets. The user must provide input and speaker cabling appropriate for the application.
3. Installation in the rack. The airflow through the amplifier is from back to front. The rack must allow sufficient air intake for cooling. Do not block the circulation of air around the amplifier. Do not place flammable materials near the amplifier.
4. Panel Layout. The arrangement of the connectors may differ from model to model.



II. Getting Started

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1. Speaker Connections. Speakers are connected to the internal amplifiers by Neutrik Speakon connectors on the rear panel. Class 1 wiring shall be used
 2. We recommend using twisted pair wiring to the speakers of at least 16 gauge. **Both + and – wires are “hot”, so they should not be allowed to touch any other wire, the amplifier cabinet, or ground.**
 3. AC mains connection. The mains disconnect of the amplifier is the AC plug. It must be removed from the AC service to completely remove power from the amplifier. The AC mains power cord is connected through either a Neutrik Powercon or IEC320 connector.
 4. Signal connection. Signal input is through locking XLR connectors. The input is balanced. If an unbalanced source is connected, make sure that the signal is connected between pins 2 and 3. The input impedance is 45K Ohms.

III. Basic Operation



1. Powering up the amplifier. **Before turning on the amplifier, check to make sure the AC mains voltage is the proper range for your equipment.** Connect the input, lower the volume control, and turn on all preceding equipment in the signal chain. **To turn on power, press the side of the power switch marked “ON”.** After applying the power, check that the mute switches are in the “out” position and slowly raise the volume.
2. LED Indicators. “CLIP” indicates when Channel 1 is clipping. “PROT” indicates when the power supply protective circuitry has been engaged. It may be necessary to cycle the power to reset the protective circuitry. “PWR” indicates that power is present in the amplifier. “SIG” indicates that signal is present at the input of the amplifier.
3. Polarity switch. This switch invert the polarity of the channel
4. Volume control. This lowers in the volume in 1 dB steps down to –12dB, then the steps are larger until the input signal is completely shut off.
5. Program Select switch. This switch allows the selection of either a sub bandpass filter 28Hz 24dB/oct to 80Hz 24dB/oct Linkwitz-Riley or flat frequency response.