**SPECIFICATIONS**

| | |
|---|---|
| Power Output, Stereo: | 100 Watts RMS/ch. 4 Ω<br>70 Watts RMS/ch. 8 Ω<br>Bridged - 200 Watts RMS or 70 Volt 8 Ω |
| Input Connectors: | 1/4" TRS balanced and RCA |
| Output Connectors: | 5-way binding posts |
| Sensitivity: | <1 VRMS for full output |
| THD: | <.08% (1kHz @ 1 Watt) |
| S/N Ratio: | 106 dBU |
| Power Bandwidth: | 50 Hz - 25 kHz, +/- 1 dB |
| Damping Factor: | > 150 |
| Slew Rate: | 100 Volts/microSecond |
| Phase Shift: | <10 Deg., 20Hz - 20kHz |
| Input Impedance: | 10 KΩ Balanced |
| Power: | 120 VAC 60Hz 2.5A<br>230 VAC 50Hz |
| Size: | 19” x 3.5” x 7.5”<br>(48 x 9 x 19 cm) |
| Weight: | 12 lbs (5.5 kg) |

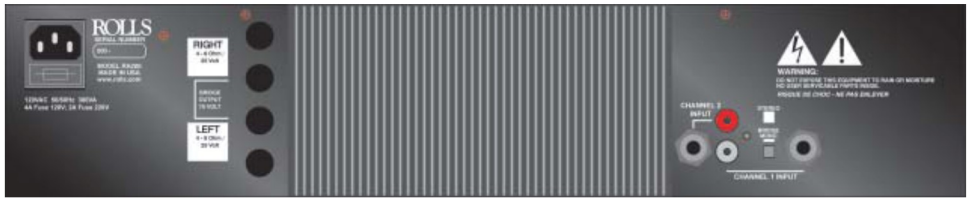
ROLLS

ROLLS CORPORATION
SALT LAKE CITY, UTAH
09/10

ROLLS

# RA2100b Power Amplifer

## 100 WATT STEREO - 200 WATT BRIDGED


Quick Start Guide

## INTRODUCTION

Thank you for your purchase of the ROLLS RA2100b Power Amplifier. The RA2100b is a stereo 100W/channel RMS power amplifier in a standard 2 rack space format. It is intended for professional audio and distributed musical applications. The unit features 100 Watts per channel RMS into four ohms, 85 Watts per channel into eight ohms, and for the contractor - 70 Volts / eight ohms.
The unit also features MOSFET drivers in a voltage and current gain circuit, a one-second input turn-on delay, and LED power output meters. The RA2100b will drive 25 Volt speaker lines directly from each channel, or 70 Volt lines bridged.

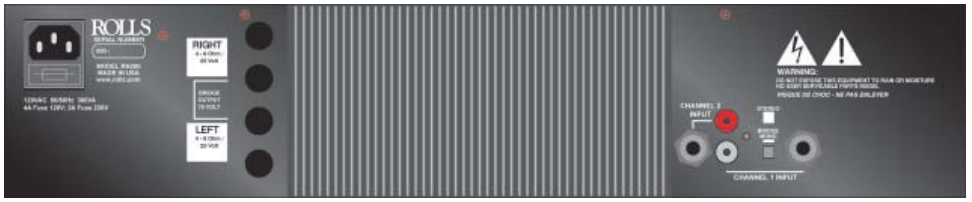
## INSPECTION

1. Unpack and inspect the RA2100b box and package.
If obvious physical damage is noticed, contact the carrier immediately to make a damage claim. We suggest saving the shipping carton and packing materials for safely transporting the unit in the future.

2. Please complete the Warranty Registration at www.rolls.com.

## INSTALLATION

Connect the power cord to an AC power source, connect the input to the signal source and to the RA2100b via the RCA or 1/4" input jacks. Speakers may be connected by using the dual banana posts. Turn the
Volume controls fully counterclockwise (off), and turn on the power switch, the power LED should light. With the program material running, slowly increase the Volume controls until the desired level of sound is present. There is a one second turn-on delay provided to prevent possible speaker damage in case all equipment is on a signal power strip.




## BRIDGING

To bridge the RA2100b, first ensure the power is off. Switch the Bridging switch to the "Bridge" position. The Channel 1 Volume control will be the master volume, Channel two Volume is inactive.
Connect the input to Channel 1 input, then connect the load (speakers) to the two positive (red) banana jacks (CH1 + is + and CH2 + is now -).
Make no connections to the black posts.

## FAULT PROTECTION

The fault protection in the RA2100b limits the current to the output stage in the faulted channel and turns on the CLIP LED for that channel. This mode is entered whenever the output stage is called upon for too much power, it may also be fooled by impedances lower than four ohms - which may cause the output stage to overheat and burn up the MOSFETs.
Since the RA2100b is convection cooled, the unit radiates heat from the rear panel and , depending on the load demand, it may become very hot if drawn upon heavily.

DRIVING 25 OR 70 VOLT LINES

The RA2100b will drive 25 or 70 Volt lines directly with no added transformers when used the following way:

- Each channel will drive 25 volt lines directly.
- A single 70 volt line may be driven when the RA2100b is in Bridged mode. In order to drive two 70 volt lines, two 8 ohms to 70 Volt conversion transformers will be needed.

## SCHEMATIC