

SPECIFICATIONS

Power Output, Stereo:	100 Watts RMS/ch. 4 Ω 70 Watts RMS/ch. 8 Ω Bridged - 200 Watts RMS or 70 Volt 8 Ω
Input Connectors:	1/4" TRS balanced and RCA
Output Connectors:	1/4" and 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 K Ω Balanced
Power:	120 VAC 60Hz 2.5A 230 VAC 50Hz
Size:	19" x 3.5" x 7.5" (48 x 9 x 19 cm)
Weight:	12 lbs (5.5 kg)

LIMITED WARRANTY

This product is warranted to the original consumer purchaser to be free from defects in materials and workmanship under normal installation, use and service for a period of one (1) year from the date of purchase as shown on the purchaser's receipt.

The obligation of Rolls Corporation under this warranty shall be limited to repair or replacement (at our option), during the warranty period of any part which proves defective in material or workmanship under normal installation, use and service, provided the product is returned to Rolls Corporation, TRANSPORTATION CHARGES PREPAID. Products returned to us or to an authorized Service Center must be accompanied by a copy of the purchase receipt. In the absence of such purchase receipt, the warranty period shall be one (1) year from the date of manufacture.

This warranty shall be invalid if the product is damaged as a result of defacement, misuse, abuse, neglect, accident, destruction or alteration of the serial number, improper electrical voltages or currents, repair, alteration or maintenance by any person or party other than our own service facility or an authorized Service Center, or any use violative of instructions furnished by us.

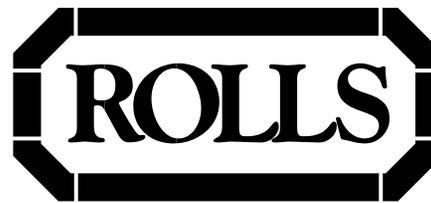
This one-year warranty is in lieu of all expressed warranties, obligations or liabilities. ANY IMPLIED WARRANTIES, OBLIGATIONS, OR LIABILITIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED IN DURATION TO THE ONE YEAR DURATION OF THIS WRITTEN LIMITED WARRANTY. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

IN NO EVENT SHALL WE BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, WHATSOEVER. Some states do not allow the exclusion or limitation of special, incidental or consequential damages so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



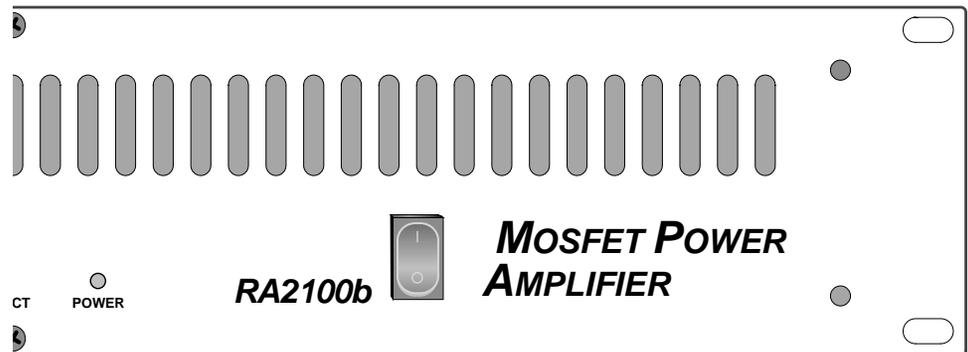
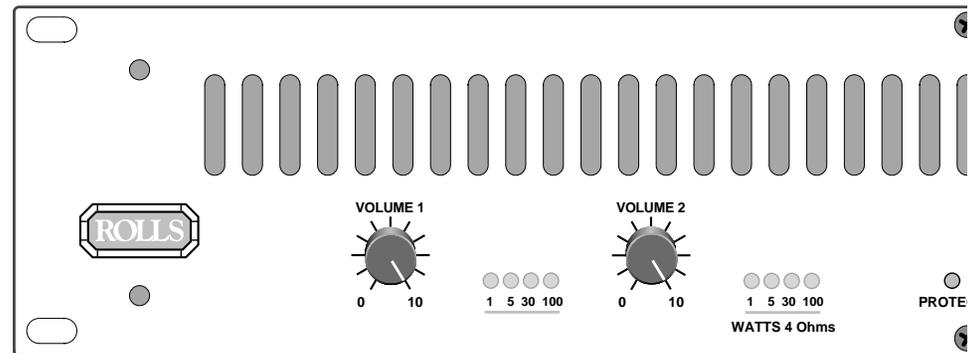
ROLLS CORPORATION
SALT LAKE CITY, UTAH

7/00



RA2100b Power Amplifier

100 WATT STEREO - 200 WATT BRIDGED
70 VOLT BRIDGED



OWNERS MANUAL

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

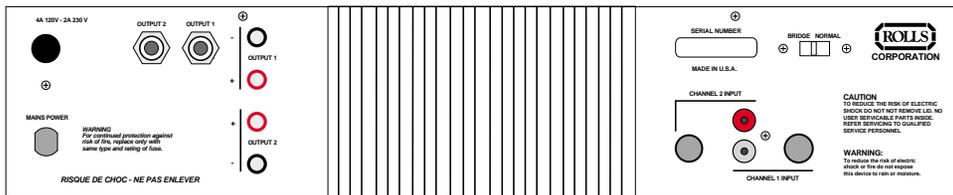
1. Unpack and inspect the RA2100b box and package.

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 Card and return it to the factory.

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 1/4" output jacks, or 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. Move 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. Make no connections to the black posts. The level meters will both light, and the output power into 8 ohms is the sum of the LEDs that light.

FAULT PROTECTION

The fault protection in the RA2100b limits the current to the output stage in the faulted channel and turns on all the LEDs in 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

