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.

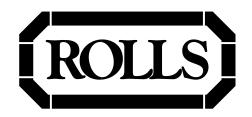
The obligation of Rolls Corporation under this warranty shall be limited to repair or replacement (at our option), during the warranty period of any part which proves defective in material or workmanship under normal installation, use and service, provided the product is returned to Rolls Corporation, TRANSPORTATION CHARGES PRE-PAID. 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.

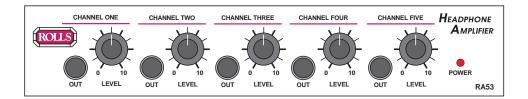
This one-year warranty is in lieu of all expressed warranties, obligations or liabilities. ANY IMPLIED WARRANTIES, OBLIGATIONS, OR LIABILITIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED IN DURATION TO THE ONE YEAR DURATION 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.





RA53 Stereo Headphone Amplifier



INTRODUCTION

Thank you for your purchase of the Rolls RA53 Stereo Headphone Amplifier. This unit was designed to provide years of dependable service. Please read this manual carefully to ensure proper operation.

The RA53 is a five-channel headphone amplifier with a variety of input options. In addition to the four master mix inputs, three separate mixes may be monitored using the main inputs and the two Insert jacks on Channels 1 and 2.

A 1/4" Link Input/Output jack is provided for connecting two RA53 units together, providing up to ten channels of headphone monitoring.

Finally - the RA53 is loud. It has plenty of gain for operation in noisy environments, and works with most any headphone impedance.

INSPECTION

1. Unpack and inspect the RA53 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.

TABLE OF CONTENTS

Introduction	1
Inspection	1
Table of Contents	1
Description	
Front Panel	2
Rear Panel	2
Connection	3
Operation	4
Schematic	5
Specifications	6
Warranty	Back Cover

SPECIFICATIONS

Input Impedance: $10 \text{ K}\Omega$ Max Input Level: +18 dBV

Max Gain: 26 dB per channel Maximum Output Power: 300 mW per channel

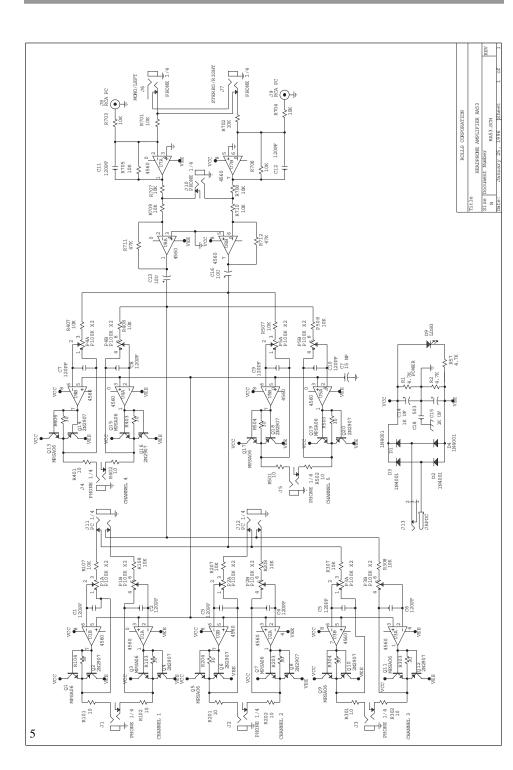
 $\begin{array}{lll} \text{Output Impedance:} & 10 \ \Omega \\ \text{S/N Ratio:} & > 90 \ \text{dB} \\ \text{THD:} & < .08\% \\ \text{IMD (SMPTE):} & < .08\% \\ \text{Power:} & 12 \ \text{VAC} \\ \end{array}$

(Adapter Provided)
Size: 8.4" x 1.7" x 5"

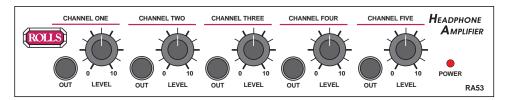
(21.3 x 4.3 x 13 cm)

Weight: 2.5 lbs (1.14 kg)

SCHEMATIC DESCRIPTION



FRONT PANEL



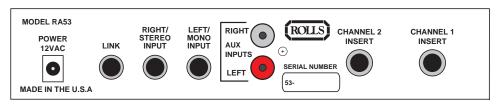
Note: Descriptions for Channel One through Channel Five are identical.

OUT: 1/4" Tip-Ring-Sleeve jack for connection to a standard pair of headphones.

LEVEL: Controls the amount of output signal from the indicated channel.

POWER LED: Indicates that the RA53 is connected to the power supply and is on.

REAR PANEL



POWER: For connection to a Rolls PS12, or 12 VAC 300mA.

LINK: 1/4" TRS jack for connection to another RA53 LINK jack. Linking two units together provides 10 channels of monitoring from a master stereo signal, with four channels having an insert option.

RIGHT/STEREO INPUT: 1/4" TRS jack for connecting the "Right" side of a stereo signal. If used alone, a 1/4" TRS plug with the "Right" side of the program material on the tip, and the "Left" side on the ring may be connected for stereo operation. For example, a stereo headphone output from a mixing console may be directly connected to the Right/Stereo jack via a stereo TRS cable.

LEFT/MONO INPUT: 1/4" TS jack for connecting to the "Left" side of a stereo signal. If used alone, a 1/4" TS plug with a mono signal will feed both sides of the RA53 Outputs.

AUX INPUTS: RCA input jacks for connection to a signal source such as a CD or cassette player.

CHANNEL 2 INSERT: 1/4" TRS jack for receiving a stereo signal and directly accessing Channel Two output.

CHANNEL 1 INSERT: 1/4" TRS jack for receiving a stereo signal and directly accessing Channel One output.

Connect the Rolls PS12 Power Supply to the POWER jack on the RA53 rear panel. Connect the power supply to an ac outlet.

Determine which input configuration you will use; either discreet right/left, TRS stereo, or mono.

For a discreet right/left input configuration, connect a 1/4"TS plug containing the "Right" portion of the stereo signal to the Right/Stereo Input. Connect a 1/4"TS plug containing the "Left" portion of the stereo signal to the Left/Mono Input.

For a TRS stereo input configuration, connect a Tip-Ring-Sleeve stereo plug into the Right/Stereo input. This cable may come from a mixer's headphone output for example.

To send a mono signal to the RA53, connect a 1/4" Tip-Sleeve plug into the Left/ Mono Input. This mono signal will be fed to both the right and left sides of the headphone outputs.

The RCA Aux Inputs are connected in the same manner as the discreet right/left input configuration listed above.

To LINK another RA53, simply connect a 1/4" TRS stereo cable to both LINK jacks on two RA53 units.

INSERTS

The Channel 1 and Channel 2 inserts have been provided so you can directly access Channel 1 and Channel 2 headphone outputs with their own program material.

The inserts require Tip-Ring-Sleeve connectors, with right and left signals on the tip and ring respectively.

When these insert jacks are used, the main Right/Stereo and Left/Mono, as well as the Aux Inputs - are disconnected. Only the stereo signals sent to the Insert jacks go to the corresponding outputs.

Shown below is a possible operation example for the RA53. Headphones are connected to the Outputs on the front panel, and the other equipment is connected to the rear panel as shown. The Left and Right Inputs to the RA53 are connected to the mixer's sub outputs, but could be connected to auxiliary sends or even main outputs. The RCA Auxiliary Inputs are connected to a playback deck. For individual monitoring, a stereo TRS connector could be plugged into a stereo auxiliary send from the mixer to an Insert jack on the RA53. This way, different material may be monitored on Channels 1 and/or 2 than that of the main inputs.

