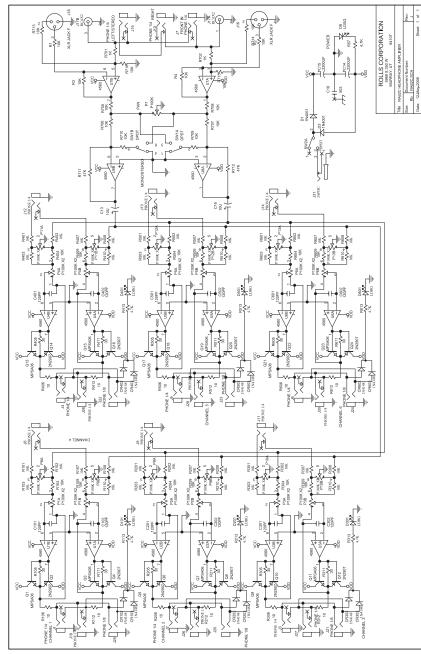
**SCHEMATIC** 



RA62c Headphone Amp





# ROLLS

## RA62c Six Channel Headphone Mixer/Amplifier



**SPECIFICATIONS** 

Input Impedance: 10K Ohms unbalanced

Max Input Level: +18 dBV

Input Connectors: 1/4" TRS stereo, R & L bal. / unbal. 1/4"

RCA, R & L balanced XLR 6: 1/4" TRS Direct Input jacks

Outputs: 12: 1/4" TRS Stereo jacks 6: 1/8" (3.5 mm) TRS Stereo jacks

Max Gain: 20 dB/Channel

Output Power: 972 mW/side, 1944 mW/Channel (@ 32 Ohms)

Frequency Response: DC - 30 kHz
S/N Ratio: 90 dB
THD: <.008%
IMD: <.008%
Phase Shift (In to Out): 0 deg.

Slew Rate: 25 V per microsecond Second

Crosstalk: - 65 dB

Power 12 VAC (Rolls Model PS12)

Weight: 7 lbs (3KG)

Size: 19" x 1.75" x 6.5" (48cm x 4.5cm x 17cm)

#### INTRODUCTION

Thank you for your purchase of the Rolls RA62c Stereo Headphone Amplifier. The ROLLS RA62c is a six-channel headphone/earphone amplifier for professional audio monitoring. A variety of input options are available including 1/4", RCA, and balanced XLR. Since the MONO/STEREO switch is after the pan control, it will mix 2 MONO signals and their balance can be adjusted with the Pan control. With the addition of rear panel Direct Input connectors, each channel may mix a second stereo signal.

This manual assumes the user has a basic knowledge of audio electronic equipment.

#### INSPECTION/WARRANTY

1. Unpack and inspect the RA62c 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 visit our website at www.rolls.com and click on the Register Your Warranty Here text. Fill out the warranty information to ensure coverage of your new RA62b.

#### DESCRIPTION

#### **FRONT PANEL**



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

OUTPUTS 1 - 6:1/4" and 1/8" (3.5 mm) Tip-Ring-Sleeve jacks for connection to a standard pair of headphones or earphones. These jacks may be used simultaneously.

CLIP: Red LED indicating circuit overload in that channel.

MIX: Adjusts the relative amount of signal from the Main Inputs and the Direct Input of that channel.

VOLUME 1 - 6: Controls the amount of output signal from the indicated channel.

MONO/STEREO SWITCH: When this switch is pressed in, the Right and Left channels are summed together providing a mono output signal.

MAIN INPUT PAN: Controls the relative amount of Right/Left signal sent to the Output channels from the Main Input.

MAIN INPUT: 1/4" TRS input jack - parallels the rear panel Right and Left 1/4' Input jacks.

POWER: Push switch - turns the RA62c on and off.

POWER LED: Indicates that the RA62c is connected to the power supply and is on.

#### **REAR PANEL**



12 VAC INPUT: Connects to the Rolls PS12 AC adapter (Included).

**INPUTS:Left and Right** 

- Balanced XLR jacks
- 1/4" Balanced / Unbalanced jacks
- RCA Unbalanced jacks

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

DIRECT INPUT: 1/4" TRS jacks which directly access the channel's heaphone output circuitry, and is mixed to the corresponding channel via the channel's MIX control. This is a stereo jack and requires a TRS stereo signal.

OUTPUT: 1/4" TRS jack - parallels the channel's front panel 1/4" Output jack.

Connect the AC adapter to an outlet with the proper voltage.

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

For a discreet right/left input configuration, connect a balanced XLR, 1/4", or RCA plug containing the "Right" portion of the stereo signal to the Right Main Input. Connect a balanced XLR, 1/4", or RCA plug containing the "Left" portion of the stereo signal to the Left Input.

For a TRS stereo input configuration, connect a Tip-Ring-Sleeve stereo plug into the front panel STEREO IN Input, <u>or the rear panel LEFT Input</u>. This cable may come from a mixer's headphone output for example.

To send a <u>mono</u> signal to the RA62c, connect an XLR jack to either Main Input, or a single 1/4" Tip-Sleeve plug into rear panel Right Input and press in the front panel MONO/STEREO switch. This mono signal will be fed to both the right and left sides of the headphone outputs.

#### **DIRECT INPUTS**

The unique RA62c Direct Inputs have been provided as a way for you to mix a separate, stereo signal with the Main Input signal - giving each listener their own custom headphone mix. To utilize this feature - connect a 1/4"TRS stereo signal, such as a monitor mix, to the listener's Direct Input. Mix the Main Input signal with this Direct Input signal via the front panel MIX control

CAUTION: Plugging a mono 1/4" TS plug into the Headphone Outputs may cause permanent damage to the unit because one side would be shorted to ground. NEVER PLUG A MONO PLUG INTO ANY OF THE HEADPHONE OUTPUTS.

### **WARNING**

USING THIS SYSTEM AT EXCESSIVE VOLUMES CAN CAUSE PERMANENT HEARING DAMAGE.

USE AS LOW A VOLUME AS POSSIBLE

In order to use this system safely, avoid prolonged listening at excessive sound pressure levels. Please use the following guidelines established by the Occupational Safety Health Administration (OSHA) on maximum time exposure to sound pressure levels before hearing damage occurs.



90 dB SPL at 8 hours 95 dB SPL at 4 hours 100 dB SPL at 2 hours 105 dB SPL at 1 hour 110 dB SPL at 1/2 hour 115 dB SPL at 15 minutes

120 dB SPL - avoid or damage may occur