

WARNING

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

USE AS LOW A VOLUME AS POSSIBLE

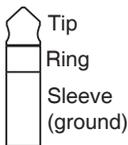
In order to use this system safely, avoid prolonged listening at excessive sound pressure levels. Please use the following guidelines established by the Occupational Safety Health Administration (OSHA) on maximum time exposure to sound pressure levels before hearing damage occurs.



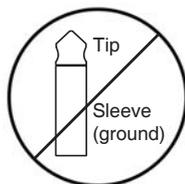
- 90 dB SPL at 8 hours
- 95 dB SPL at 4 hours
- 100 dB SPL at 2 hours
- 105 dB SPL at 1 hour
- 110 dB SPL at 1/2 hour
- 115 dB SPL at 15 minutes
- 120 dB SPL - avoid or damage may occur

CAUTION: Plugging a mono 1/4" or 1/8" TS plug into the Stereo Headphone Outputs on the HA540 will 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 THE HA540 WILL BE PERMANENTLY DAMAGED.**

This is a TRS or stereo jack that is compatible with the HA540 Headphone Outputs.



This is a MONO jack and should never be plugged into the Headphone Output of a HA540.



WARNING: THE MINIMUM HEADPHONE IMPEDANCE FOR THE HA540 IS 16 OHMS. THE MAXIMUM HEADPHONE IMPEDANCE IS 2000 OHMS.

IF YOU CONNECT AND USE THE HA540 WITH A LOWER HEADPHONE IMPEDANCE THAN LISTED ABOVE YOU WILL DAMAGE THE UNIT AND POSSIBLY OTHER EQUIPMENT THAT IS CONNECTED TO THE HA540.

DO NOT OPEN THE HA540. REMOVING THE UNITS COVER COULD POTENTIALLY DAMAGE THE UNIT OR CAUSE HARM TO UNQUALIFIED PERSONS. HIGH VOLTAGES EXIST INSIDE THE UNIT EVEN WHEN THE UNIT IS NOT POWERED ON. ALL WARRANTIES ARE VOID IF ANY INTERNAL COMPONENTS ARE DAMAGED DUE TO USER ERROR.

Bellari is a division of Rolls Corporation
Salt Lake City, UT
9/12

HA540 Class A Headphone Amp



SPECIFICATIONS

Input Impedance:	47k ohms
Output Impedance:	16 ohms
Max Output Level:	+15dBv @ 1kHz at .1% dist.
THD:	.05% @ 1KHz
S/N Ratio:	>80 dB unweighted
Indicator:	1 Power LED
Max Output Power:	up to 500 mW/side, 1 W/Stereo (@ 16 Ohms)
Frequency Response:	5 Hz - 30 kHz
Phase Shift (In to Out):	0 db
Crosstalk:	- 75 dB
Headphone impedance:	16 Ohms to 2000 Ohms
Max Input Level:	+15 dBV
Input Connectors:	LOW: RCA, 1/8" (3.5mm)Stereo; HIGH: RCA
Outputs:	1: 1/4" TRS Stereo jack 1: 1/8" (3.5 mm) TRS Stereo jack
PWR:	12 - 15 VDC
Size:	6"w x 2.5"h x 5.4"d
Weight:	2 lb.

NOTE: THIS GUIDE ASSUMES THE USER HAS A WORKING KNOWLEDGE OF AUDIO ELECTRONICS AND PROPER SIGNAL LEVEL SETTING.

QUICK START OPERATION GUIDE

INTRODUCTION

Thank you for your purchase of the Bellari HA540 Pure Class A Headphone Amplifier. The HA540 is a stereo headphone amplifier with separate high and low level inputs.

INSPECTION/WARRANTY

1. Unpack and inspect the HA540 box and package.

Your HA540 was carefully packed at the factory in a protective carton. Nonetheless, be sure to examine the unit and the carton for any signs of damage that may have occurred during shipping. 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 web site at www.rolls.com and click on the Register Your Warranty Here text. Fill out the warranty information to ensure coverage of your new Rolls product.

Disclaimer:

Training and operation is the dealers responsibility. At Bellari we do not sell directly to customers. We have factory authorized dealers and it is the dealers responsibility to gather your equipment list and recommend proper products to the consumer. Do not call the Bellari factory and expect help with your setup. We rely on our dealers to do such work. There is only so much that can be done over the phone, so PLEASE CONTACT YOUR LOCAL DEALER WITH QUESTIONS. If you have purchased your item online or used, you are on your own. WE HIGHLY RECOMMEND THAT IF YOU ARE NOT FAMILIAR WITH SUCH PRODUCTS TO PLEASE BUY THEM FROM A REPUTABLE, FACTORY AUTHORIZED DEALER THAT OFFERS CUSTOMER SUPPORT.

FAQ:

Q:What is a N.O.S. tube?

A: N.O.S. refers to (new old stock) it is a tube that was manufactured long ago and never used. These tubes are very sought after. They may or may not sound any better, but it is generally thought that most N.O.S. tubes are better in many ways over new foreign manufactured tubes.

Q: What kind of tubes can I use in the HA540?

A: Tubes that can be used in the HA540 are:

12AX7 - The industry standard for preamp tubes.

12AX7A - Same as a 12AX7 but generally has a slightly higher output.

7025 - This is the Military part number for a 12AX7.

ECC83 - This is the same as a 12AX7 it is the European part number.

12AX7WA - This is a 12AX7 with slightly lower output.

5751 - This is a Military part number for a 12AX7WA.

There are many other tubes that can be used, but you get where this is going they are essentially the same tube with different part numbers doing almost exactly the same thing.

Q: What is the best sounding tube I can get for the HA540?

A: This is an unanswerable question. Everyone has different tastes. It is up to the individual to decide as all tubes sound slightly different. For me the best tube I have ever heard in a HA540 was a N.O.S. Telefunken tube.

DESCRIPTION/CONNECTION:

LOW LEVEL INPUTS: RCA's or 1/8" stereo input for connection to Ipod or other low line level inputs.

HIGH INPUT: RCA's for connection to your CD player or other line level inputs.

STEREO HEADPHONE OUTPUTS: 1/4" stereo and 1/8" stereo jacks for connection to stereo headphones.

HIGH/LOW SELECTOR SWITCH: This switch selects between the HIGH INPUT or LOW INPUTS.

HEADPHONE LEVEL: This volume control is for the STEREO HEADPHONE OUTPUT LEVEL.

VDC: For connection to the included power supply. WARNING: USE ONLY THE FACTORY SUPPLIED POWER SUPPLY. USING A IMPROPERLY POLARIZED OR WRONG VOLTAGE SUPPLY MAY DAMAGE THE HA540.

POWER: For turning the power on or off to the HA540.

pwr: When lit indicates that power is supplied to the HA540.

HIGH-LOW EXPLANATION: The LOW is a more sensitive input to pick up the output of devices that have a lower level like an Ipod or Zune players. These devices usually run off an internal battery and have a lower output than traditional line level. The HIGH level is designed to be used with CD players, Phonograph Preamps or other equipment that has a proper line level output. These devices tend to be higher in level than an Ipod or other battery operated device and would work better when using the HIGH INPUT. Again it is best to use the HIGH or LOW input that sounds best for your application. Let your ears be the judge not product specs.

BUZZING: Your HA540 will buzz when you listen to headphones with nothing plugged into the input selected. The unit needs something to be plugged into the input that is selected to complete the circuit. Without a device connected to the selected input the HA540 WILL BUZZ AND GENERATE A VERY UNPLEASANT SOUND THRU THE HEADPHONES. IT IS RECOMMENDED THAT YOU CONNECT ALL THE INPUTS AND OUTPUT BEFORE POWERING ON THE UNIT. AGAIN IT IS NORMAL OPERATION TO BUZZ WITHOUT AN INPUT!

FAQ:

Q: Does the tube need time to warm up before use?

A: Yes, it will be usable in about 30 seconds. Longer warm up times are not needed, there is no benefit to warming the tube up longer than 60 seconds. (warm up) simply means powering the unit on.

Q: What is the life expectancy of the vacuum tube in the HA540?

A: 10 to 50 years (or longer if you do not use the unit very often) if you use it more often it will have a shorter life, like a light bulb. 10 years if you have the unit on 24/7 every day all the time. 15 years if you use the unit once a day. 25 years if you use the unit a couple times a week. More than 40 years if you use the unit a few times a month.