

Short explanation of RIAA equalization.

The RIAA equalization curve was intended to operate as the global industry standard for records since 1954. However, it is almost impossible to say when the change actually took place.

RIAA equalization is a form of pre-emphasis on recording and de-emphasis on playback. A recording is made with the low frequencies reduced and the high frequencies boosted, and on playback the opposite occurs. The net result is a flat frequency response, but with attenuation of high frequency noise such as hiss and clicks that arise from the recording medium. Reducing the low frequencies also limits the excursions the cutter needs to make when cutting a groove. Groove width is thus reduced, allowing more grooves to fit into a given surface area, permitting longer recording times. This also reduces physical stresses on the stylus which might otherwise cause distortion or groove damage during playback.

What's in the box?

- 1 - Made in USA PA550
- 1 - 15V power supply PN PS27s
- 1 - This owners manual
- 1 - Love for great audio

Bellari

PA550 Pre Amplifier with RIAA Phono preamp and Headphone Amp



SPECIFICATIONS:

Gain:	Line 16.4 dB gain @ 1kHz Phono 56.6 dB gain @ 1kHz
Input Impedance:	22k line and 47k Phono
Output Impedance:	8 to 600 ohms Headphone, 47 ohms RCA
Frequency Response:	3Hz to 36kHz
Equalization:	RIAA +/- 1 dB, 14Hz to 23kHz
THD:	.005% @ 1KHz
S/N Ratio:	>94 dB unweighted
PWR:	15 VDC
Size:	5.5"w x 3.5"d x 1.25"h
Weight:	.8 lbs
Indicator:	1 Power LED

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Connection guide

Thank you for purchasing the Bellari PA550. We hope you enjoy using the PA550, and that it makes listening to your music collection rewarding. We sincerely appreciate the opportunity to build a product for you and participate in your love of quality music and sound. We love what we do and we're happy to help. All Bellari products are hand built in Salt Lake City, Utah by people who care about high quality music.

INTRODUCTION

The PA550 audio Pre Amplifier has three selectable stereo inputs: phonograph, RCA and 3.5mm (1/8") jack for phones, tablets or other. It features a very powerful headphone amplifier so it can be used as a stand alone headphone amp. Designed to have the highest level of sound quality, whether you are using it as a headphone amp or sending music to your amplifier. At every design stage we spent a considerable amount of time focused on one thing, sound quality.

OPERATION

The inputs and outputs of the PA550 are easy to understand. Plug a signal in, select the source, and connect to your desired headphones or amplifier.

One thing to note about the PA550 is that the RCA output's are the default output. When you plug a pair of headphones into the headphone jack on the front of the unit the RCA output section is then completely disconnected from the circuit. Meaning that when using the headphone output of the PA550 the unit is only functioning as a headphone amplifier.

FRONT PANEL

VOLUME: Adjusts the level of signal.

IN 1: 3.5mm jack for connection to a phone, music player or computer. TRS Stereo (left, right and ground).

HEADPHONE: 3.5mm stereo headphone output jack.

INPUT SELECTOR SWITCH: Selects the channel being used.

BASS and TREBLE: Perform as labeled. If you would like the tone not affected by the unit, set the controls at the '0' (half way up). This will then be the original signal.

Connecting to your Turntable

RCA phono input on the rear connects to your turntable. The ground post is where things can get complicated. Ground hums have always plagued the turntable. We recommend using the ground post to connect to your turntable's ground connection. In our experience we have never seen a situation where not using the ground would sound better than using it. Ground loops are a very common occurrence with audio. The more equipment you use, the higher likelihood you will have a ground loop. The term "loop" refers to your ground generating unwanted noise from traveling back and forth in a loop. The turntable is usually the most likely component to have a ground issue. Another thing to try if you have a ground loop is connecting the turntable ground to the RCA jack's ground if the ground post is not remedying the issue. One thing to keep in mind is that ground loops can be anywhere in a system, so try and isolate the components that are the issue before spending a lot of time looking at just one component.

The phono input of the PA550 requires that a turntable be connected to it to complete the circuit. If you do not have a turntable hooked up to the phono input do not select phono on the selector switch, as unwanted noise will be present.

REAR PANEL

RCA OUTPUT: For connection to your amplifier or other device.

PHONO: RCA for connection to a turntable.

INPUT 2: RCA stereo input.

15 VDC: For connection to the included power supply.

GROUND POST: Standard phono grounding post.

