

What's in the box?

- 1 - Made in USA BA525
- 1 - 15V power supply PN PS27s
- 1 - This owners manual
- 1 - Love for great audio

Bellari

BA525 Tube Buffer



SPECIFICATIONS

Tubes:	12AX7
Input Impedance:	470K ohms
THD:	0.09%
S/N Ratio:	102 db, unweighted
Indicator:	1 Power LED
Frequency Response:	7 Hz - 129 KHz +0 db / -.3 db
Crosstalk:	-91 dB
Output impedance:	10K Ohms
Output Connector:	RCA Stereo jack
Input Connectors:	RCA Stereo jack
PWR:	15 VDC 500mA
Size:	6"w x 2.5"h x 5.4"d
Weight:	2 lb.

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CE

Salt Lake City, UT
7/25

Connection guide

Thank you for purchasing the BA525. We hope it enhances your enjoyment of your music collection and delivers a truly rewarding listening experience. We're honored to have the opportunity to craft this product for you and to be part of your passion for high-quality music and sound. At Bellari, we love what we do and are always here to help. Every Bellari product is hand-built with care in Salt Lake City, Utah by people who are dedicated to exceptional sound.

The BA525 features two 12AX7 tubes operating at 150 volts—one for the left channel and one for the right. The input signal is fed directly to the grid of each tube, with all amplification provided exclusively by the 12AX7s. The BA525 uses a pure analog design with no feedback circuitry or integrated circuits in the audio path, ensuring a clean and natural sound.

CONNECTION INSTRUCTIONS:

Connect your audio source or preamplifier to the BA525 using the RCA input jack stereo input.

Plug the included PS27s power adapter into the jack labeled “power” Do not use any other power supply, as doing so may damage the unit and require repair.

Connect your amplifier or preamplifier to the BA525's RCA output jack.

Sit back and enjoy your music.

Q: Do different tubes have different gain?

A: Yes, different tubes can produce different gain levels. If you replace the 12AX7 tubes in the BA525 with other 12AX7 variants, you may notice a change in output level. For instance, using a 5751 (also known as 12AX7WA), which has a gain factor of 70 compared to the 12AX7's gain factor of 100, will result in noticeably lower gain. Even among different brands of 12AX7 tubes, slight variations in gain can occur, and you may hear subtle differences in sound.

Q: Do different tube brands have different specs?

A: Yes, some tube brands perform better than others in certain areas. In our testing with the BA525, the best results came from a N.O.S. 1960s Mullard long plate 12AX7 made in Great Britain. It significantly improved total harmonic distortion (THD), though crosstalk remained unchanged due to the BA525's use of independent tubes for each channel. For most tubes, frequency response and signal-to-noise ratio are very similar.

The downside of the Mullard is its cost—around \$220 when purchased from a reputable source. That said, the included 12AX7 is a great-sounding tube with a smooth, rich bass response. Swapping tubes can be fun for experimentation, but it's definitely not required. All published specs for the BA525 are based on the stock 12AX7.

TUBE TEMPERATURE:

The tubes in the BA525 typically reaches around 140°F, making it warm to the touch. As a result, the top of the chassis will also warm up—usually about 25°F above room temperature. After a few hours of use, the chassis may feel hot, but this is completely normal and not a cause for concern.

Some tubes naturally run hotter than others. In our testing, the warmest tube was a NOS RCA 5751 made in Canada, which reached about 147°F. It caused the top of the BA525 to feel noticeably warmer after extended use, but again, this is expected and poses no issue.

Q: Do tubes need a burn-in period?

A: Yes. In our testing, new tubes typically require 30 to 50 hours of use to fully burn in. The change in sound is subtle, but we recommend allowing a few hours of playtime for the tube to settle. NOS (New Old Stock) tubes generally don't require burn-in, or need far less time, likely because they were pre-burned during their original manufacturing process.

Q: What tube comes with my BA525?

A: Your BA525 comes with a RUBY 12AX7, also known as the Chinese Grey Plate. It delivers excellent bass response and offers a warm, inviting sound. We chose this tube because it strikes a great balance between performance and affordability. Using NOS tubes would significantly increase the cost of the BA525.

Personally, I really like the stock RUBY tube—it has rich bass response that some NOS tubes will lack. Swapping tubes is part of the fun of owning tube gear. If you're ever craving a new sound, trying a different tube can refresh your listening experience without replacing your equipment.

Q: Does the BA525 power supply need to be upgraded?

A: No. The included PS27s is the optimal power supply for the BA525. There's no need to replace or upgrade it.

Q: What is the life expectancy of the vacuum tube in the BA525?

A: Tube life depends on how often you use the unit. On average:

If used a few times per month: 40+ years

A couple of times per week: 25 years

Once a day: Around 15 years

Left on 24/7: Less than 10 years

Think of a tube like a light bulb—the more it's on, the shorter its life. We don't recommend leaving tube gear powered on continuously, as it generates unnecessary heat that can affect other components over time.

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

A: N.O.S. stands for New Old Stock. These are vintage tubes that were manufactured decades ago but never used. They're highly sought after for their build quality and potential tonal advantages. While opinions vary, many believe N.O.S. tubes often outperform newly manufactured tubes, especially those made overseas.

Q: What kind of tubes can I use in the BA525?

A: The BA525 is compatible with a variety of 12AX7-type tubes, including:

12AX7 – The industry-standard preamp tube.

12AX7A – Similar to the 12AX7, often with slightly higher output and faster warm-up (especially in N.O.S. versions).

7025 – The military designation for a low-noise 12AX7.

ECC83 – The European equivalent of the 12AX7.

12AX7WA – A 12AX7 variant with slightly lower gain.

5751 – A military version of the 12AX7WA with about 70% of the gain.

There are many other variants that are essentially the same tube with different part numbers. Most will work just fine in the BA525.

Q: What is the best sounding tube for the BA525?

A: That depends entirely on personal preference. Every tube sounds slightly different, and what sounds best to one person may not appeal to another. In our experience, a N.O.S. 5751 Telefunken stood out as one of the finest-sounding tubes in the BA525—but your favorite may differ.

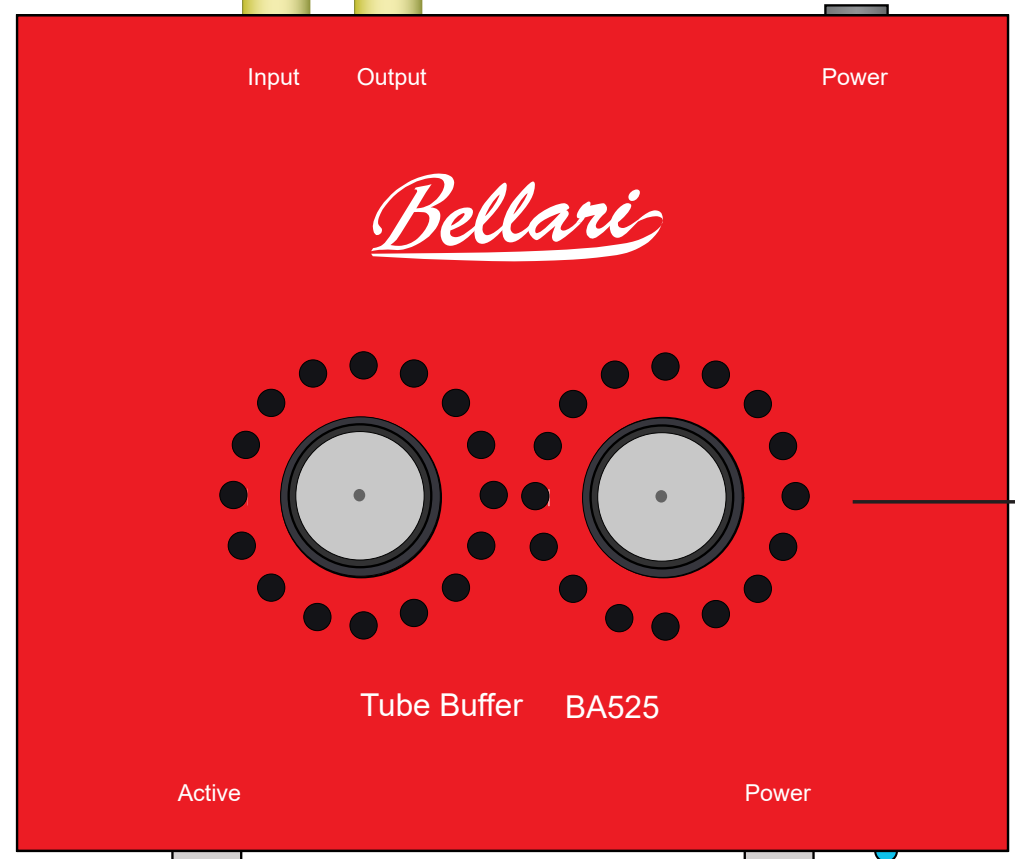
Q: Does the tube need time to warm up before use?

A: Yes, but only briefly. The tube is ready to use in about 30 seconds after powering on. Longer warm-up times don't provide any added benefit—just power it on and you're good to go.

INPUT: Stereo RCA jacks for connection to an audio source or output of a preamp.

OUTPUT: Stereo RCA jacks for connection to a preamplifier or amplifier.

Power input is 15 VDC for connection to the external PS27s power adapter.



12AX7 Tubes

This switch selects between active and true bypass.

Hard wired power switch. When out the connection from the power adapter is completely disconnected.

Power LED.