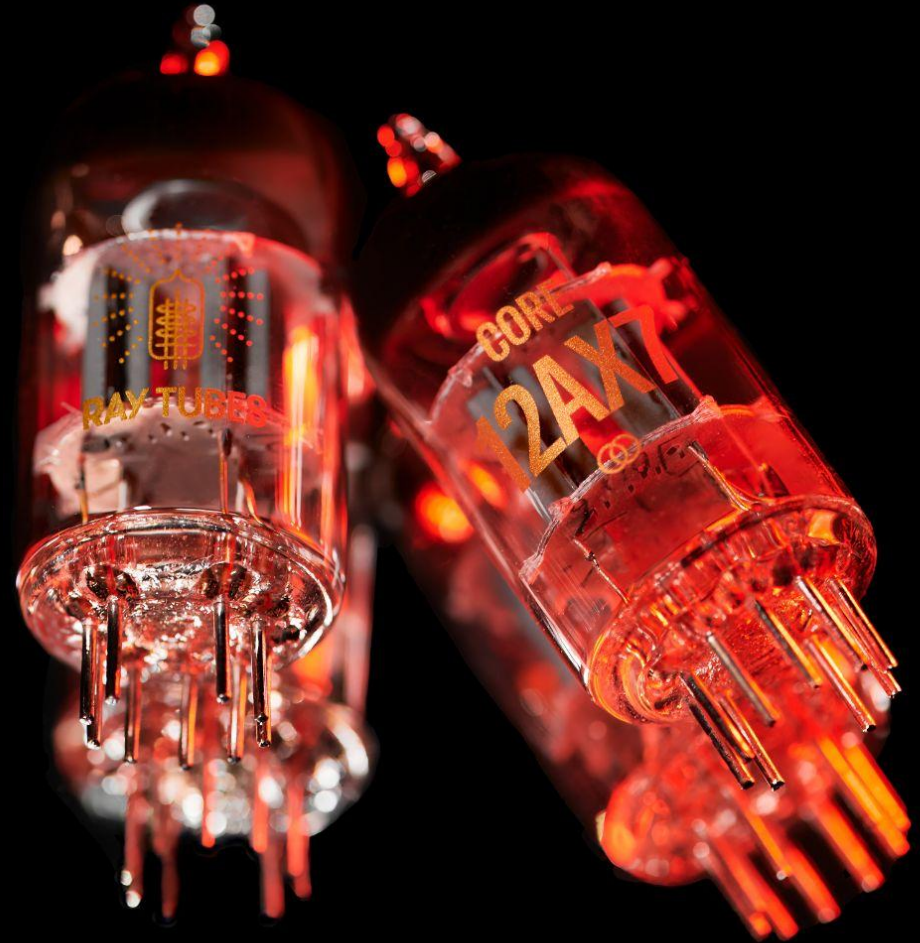


# RAY TUBES

CORE 12AX7  
Product Media Kit

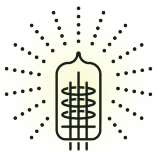


1. The Product
2. The Company
3. The Numbers



# CORE 12AX7

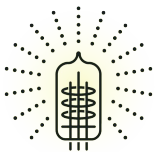
The 12AX7 vacuum tube was **introduced in 1947 as a replacement for the earlier 6SL7 family** of dual triodes, all of which were used extensively in audio applications. As one of a handful of small signal tubes that have remained in production since their first use, the 12AX7 is commonly found in the pre-amp stage of tube amplifiers and is **especially associated with the emerging electric guitar sound of the 1950s.**



# Product Highlights

The **Ray Tubes CORE Collection** delivers everything you know and love about tube audio with reliability and consistency. CORE is all you need for years of audio bliss.

- Designed and manufactured by a team with decades of experience
- Hand-selected specifically for use in audio applications
- Substantially more consistent performance than New Old Stock
- Unlike NOS and most other new production, covered by the Ray Tubes One Year Warranty

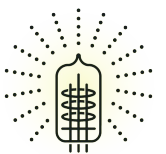


# Sound Characteristics

The CORE 12AX7 delivers a clear and natural sound profile, **perfect for users who prioritize expressive vocals and well-detailed sound.**

- The bass has an emphasis on clarity over depth, suited for music with a well-defined bass and less emphasis on the heavy low-end.
- The midrange frequencies offer excellent reproduction of vocals, especially female voices, with clear and prominent detail.
- The treble performance is clear without being overly prominent and remains fatigue-free over long listening sessions.
- The dynamics are well balanced, particularly for small to medium shifts.

The soundstage offers clear positioning of instruments and is ideal for small to medium-sized systems.



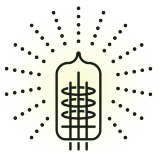
1. The Product
2. The Company
3. The Numbers



# Our Philosophy

Tube audio has brought audiophiles together for decades, but in recent years, it's **become more difficult to access than ever**. Ray Tubes is on a mission to change that. With rigorous quality control standards backed by the Ray Tubes One Year Warranty, **Ray Tubes is making reliable, consistent vacuum tubes accessible to everyone**—audiophiles old and new, musicians, retailers and amp designers around the world, and why not, even that one guy who just thinks tubes look cool on his shelf.

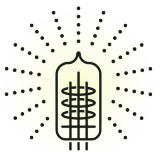
The bottom line: Ray Tubes puts in the work so you can experience the warm, vintage sound of tube audio **without the hassle**.



# Our Quality Control

Each tube undergoes **a seven-step quality control process**, including a 24-hour burn-in period, stress tests to minimise microphonics, and critical parameters that are carefully measured to ensure consistency and accurate matching. Finally, sound engineers assess each tube **under real-world listening conditions**.

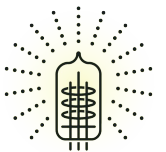
By the end of the quality control process, **only 5% of tubes commissioned for production meet Ray Tubes' standards**.





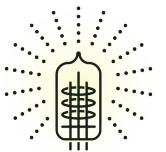
# Our Warranty

Books have been written about the countless ways vacuum tubes can and do fail. With most manufacturers, and all New Old Stock, a tube failure leaves the user high and dry. Ray Tubes is different. All Ray Tubes products are backed by the **Ray Tubes One Year Warranty**, which covers manufacturing defects for twelve months from the date of purchase.



# Partnership and Feedback

Ray Tubes is always looking to improve their products and expand their wonderful network of retail, brand, and studio partners. Is there a tube you'd love to see in the lineup? Are you interested in stocking Ray Tubes, collaborating on a product, or showing off Ray Tubes in your space? Or do you simply have a comment or question you'd like to share? Get in touch at **[help@raytubes.com](mailto:help@raytubes.com)**.

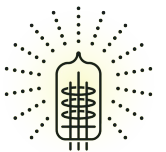


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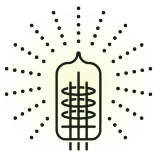
# Technical Specification

- **Tube Type:** 12AX7 / ECC83 / CV4004
- **Tube Socket:** 9-pin
- **Max Anode Dissipation Power:** 1 W
- **Max Screen Dissipation Power:** N/A
- **Output Power in Class A1 Amp (Single Tube):** N/A
- **Output Power in Class AB1 Amp:** N/A

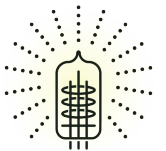
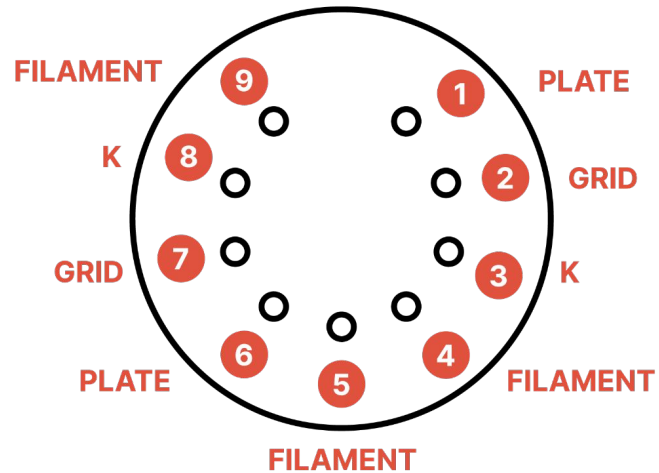
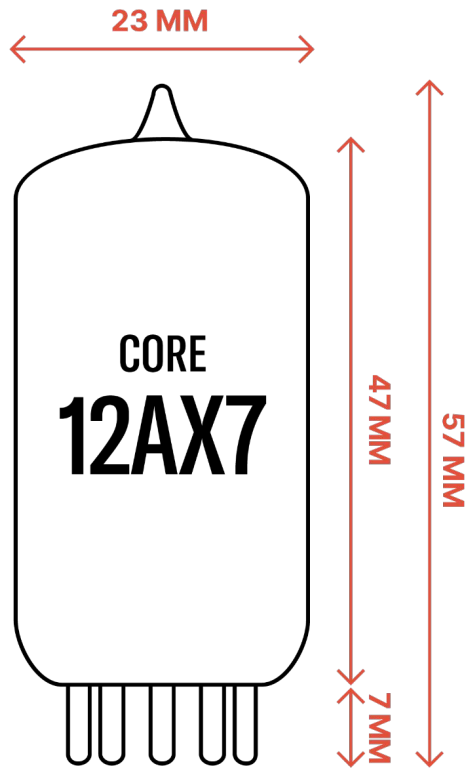


# Technical Specification

- **Max Anode Voltage:** 300 V
- **Max Screen Voltage:** N/A
- **Max Grid Voltage:** ~50 V
- **Heater Voltage:** 6.3 V
- **Heater Current:** 0.3 A
- **Transconductance:** 1.6 mA/V
- **Amplification Factor:** 100
- **Internal Resistance:** 62.5 k $\Omega$

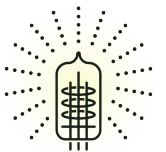


# Technical Specification



# Package Contents

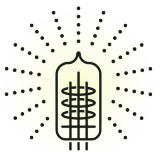
- Pair of matched vacuum tubes OR single vacuum tube
- User handbook featuring burn-in guidelines
- Certificate of authenticity and warranty



# Ray Tubes Retail Partners

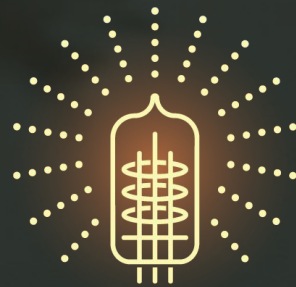
Local audio retailers are the beating heart of any community of audiophiles. No one's better placed to help you with every aspect of your purchase than your local retailer, and part of the Ray Tubes mission is to support those retailers in any way possible. That's why there are no direct sales through the Ray Tubes website. Instead, check out the extensive network of Ray Tubes retail partners at <https://raytubes.com/pages/retailers>.

You won't be disappointed.









# RAY TUBES

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Oakland, CA, 94608, USA

