

RAY TUBES

CORE EL84
Product Media Kit

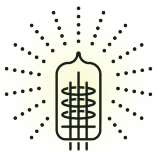


1. The Product
2. The Company
3. The Numbers



CORE EL84

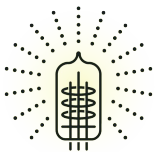
The **EL84 is a power pentode vacuum tube introduced in 1953**. Its original purpose was to eliminate the need for a separate driver tube in cheap radio equipment, but it quickly found a place in music history as **a component in guitar amps like the legendary Vox AC30**, favoured by The Beatles, The Rolling Stones, Queen, and countless other bands.



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.

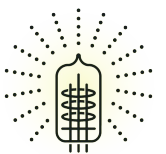
- Designed and manufactured by a team with decades of experience
- Hand-selected specifically for use in audio applications
- Substantially more consistent performance than New Old Stock
- Unlike NOS and most other new production, covered by the Ray Tubes One Year Warranty



Sound Characteristics

The CORE EL84 **offers a natural and clean sonic experience, ideal for users who value vocal clarity and tonal balance.** It pairs well with a variety of low- to mid-power systems.

- The bass is tight, with a clean and punchy response. Good for genres like pop and light rock.
- The midrange frequencies are smooth and warm, bringing out the charm in small ensemble instruments and vocals, especially female vocals.
- The treble performance is detailed and non-fatiguing, making it smooth and easy on the ears over longer listening sessions.
- The dynamics are a good fit for simpler arrangements, while the soundstage is focused and precise.



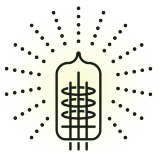
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Our Philosophy

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.

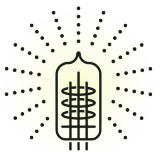
The bottom line: Ray Tubes puts in the work so you can experience the warm, vintage sound of tube audio **without the hassle**.



Our Quality Control

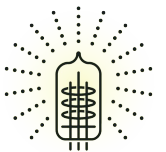
Each tube undergoes **a seven-step quality control process**, including a 24-hour burn-in period, stress tests to minimise microphonics, and critical parameters that are carefully measured to ensure consistency and accurate matching. Finally, sound engineers assess each tube **under real-world listening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

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



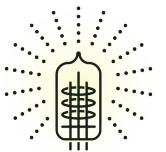
Our Warranty

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**.



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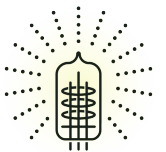


Technical Specification

- **Tube Type:** EL84 / 6BQ5
- **Tube Socket:** 9-pin

Heater

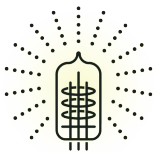
- **Heater Voltage:** 6.3 V
- **Heater Current:** 0.76 A



Technical Specification

Maximum Ratings

- **Anode Voltage:** 500 V
- **Anode Dissipation Power:** 12 W
- **Screen Grid Voltage:** 300 V
- **Screen Grid Dissipation Power:** 2 W
- **Cathode Current:** 65 mA
- **Control Grid Voltage:** -100 V
- **Heater-Cathode Voltage:** ± 100 V



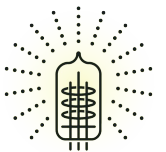
Technical Specification

Grid Circuit Resistance

- **Fixed Bias:** 0.3 M Ω
- **Self Bias:** 1 M Ω

Interelectrode Capacitance

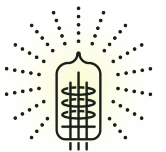
- **Input Capacitance:** 10.8 pF
- **Output Capacitance:** 6.5 pF
- **Transfer Capacitance:** 0.5 pF
- **Grid-to-Heater Capacitance:** 0.25 pF



Technical Specification

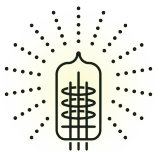
Operating Parameters

- **Anode Voltage:** 256 V
- **Screen Voltage:** 256 V
- **Cathode Resistor:** 120 Ω
- **Anode Current:** 48 mA
- **Screen Current:** 7 mA
- **Transconductance:** ≥ 9 mA/V
- **Internal Resistance:** 38 k Ω
- **Amplification Factor:** 19



Package Contents

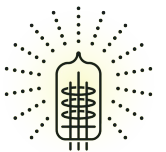
- Pair of matched vacuum tubes OR single vacuum tube
- User handbook featuring burn-in guidelines
- Certificate of authenticity and warranty



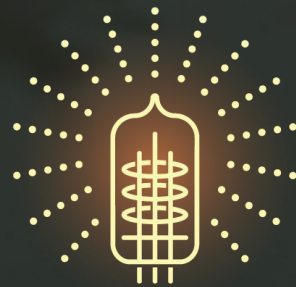
Ray Tubes Retail Partners

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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