


# RAY TUBES

SELECT 5U4  
Product Media Kit

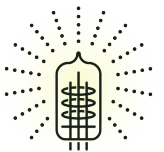


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1. The Product
  2. The Company
  3. The Numbers



# SELECT 5U4

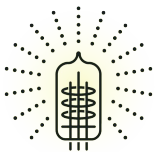
The 5U4 is a common full-wave rectifier tube used in power supplies to convert alternating current to direct current in. Its twin-diode design uses a shared cathode and two anodes to convert both halves of the AC cycle. Rectifiers like the 5U4 are **sometimes overlooked by audiophiles, but like power and signal tubes, they can greatly influence the sound of a tube amplifier.**



# Product Highlights

The **Ray Tubes SELECT Collection** offers the best tubes you'll ever need. It goes above and beyond the baseline to bring out the best in all your favourites.

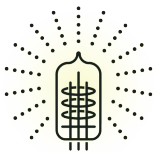
- Designed and manufactured by a team with decades of experience
- Hand-selected by engineers—only the top tubes make the cut
- Substantially more consistent performance than New Old Stock
- Unlike NOS and most other new production, covered by the Ray Tubes One Year Warranty




# Sound Characteristics

The SELECT 5U4 helps create a sonic profile that is smooth on top, full through the midrange, and grounded in natural, unforced bass. Its contribution is **subtle but essential, enhancing the musicality, depth, and coherence of any tube-based system.**

- The bass is characterized by composure and textural integrity, with excellent rhythm stability integrating seamlessly into the soundstage.
- The midrange frequencies impart a sense of richness and organic flow. The SELECT 5U4's inherent smoothness allows instruments like piano, guitar, and saxophone to show their warmth and clarity.
- The treble performance is smooth and refined, reducing the grain and edginess often associated with more aggressive rectifiers.



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- The background of the slide is a dark, semi-transparent image of various vacuum tubes. On the left, a tube is labeled 'SELECT EL84'. In the center, a tube is labeled 'RAY TUBES'. On the right, another tube is visible with some text that is partially obscured. The tubes are arranged in a way that they appear to be part of a larger electronic assembly.
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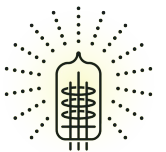




# Our Philosophy

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.

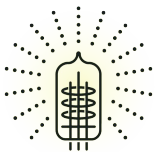
The bottom line: Ray Tubes puts in the work so you can experience the warm, vintage sound of tube audio **without the hassle**.



# 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**.

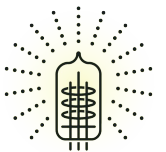
By the end of the quality control process, **only 5% of tubes commissioned for production meet Ray Tubes' standards**.





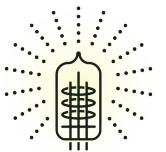
# Our Warranty

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](mailto:help@raytubes.com)**.

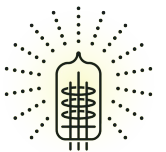


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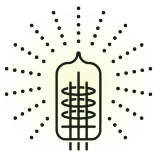
# Technical Specification

- **Tube Type:** 5U4
- **Tube Socket:** 4-pin
- **Filament (Heater) Ratings**
  - **Filament Voltage:** 5V
  - **Filament Current:** 3A



# Technical Specification

- **Maximum Ratings**
  - **Peak Inverse Plate Voltage:** 1550 V
  - **Peak Plate Current:** 800 mA
- **Absolute Maximum Ratings**
  - **Peak Reverse Plate Voltage:** 1500 V
  - **Peak Plate Current:** 750 mA

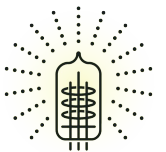


# Technical Specification

- **Recommended Operating Conditions With Capacitor Input Filter (for two typical ranges A, B)**
  - **AC RMS Voltage per Plate:** A: 300V, B: 450V
  - **Transformer Winding Resistance\*:** A:  $35\Omega$ , B:  $85\Omega$
  - **Input Filter Capacitance (Max):** A:  $40\ \mu\text{F}$ , B:  $40\ \mu\text{F}$
  - **DC Output Current\*\*:** A: 245mA, B: 220mA
  - **DC Output Voltage\*\*:** A: 290V, B: 470V

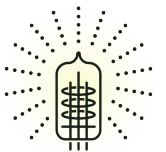
\*per plate winding resistance of the power transformer

\*\*assumes capacitor input filter configured with stated load



# Technical Specification

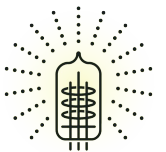
- **Recommended Operating Conditions With Choke Input Filter**
  - **AC RMS Voltage per Plate:** 550V
  - **Input Choke Inductance:** 10H
  - **DC Output Current:** 225mA
  - **DC Output Voltage:** 440V





# Package Contents

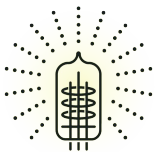
- Single vacuum tube
- User handbook featuring burn-in guidelines
- Certificate of authenticity and warranty



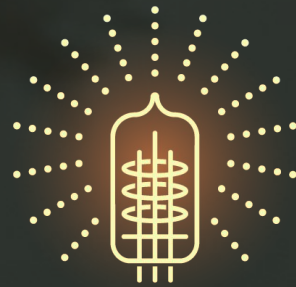
# Ray Tubes Retail Partners

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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