

Introducing Our **EL34D Triode** A Pure Triode Valve for Modern Amps!

Warm Vintage Sound for EL34 and KT66 Amplifiers

New for 2016

A simple "Drop in" replacement for the EL34 which has all the characteristics of "vintage Triodes" but requires no modification of the amplifier



Ideal Driver for 845 Big Triodes etc.

designed by David Shaw

The Mullard developed EL34 introduced in the early '50s was a remarkable achievement. Powerful, efficient, with high gain, just what was needed in the post war boom of hi fi. Today there are hundreds of thousands in use worldwide. Unfortunately like all Pentode valves the sound was not acceptable for hi fi until the "Ultralinear" or "UL" transformer was developed (half pentode half triode) to improve the harsh grainy sound quality, and that situation remains today.

Although "UL" is a good compromise for sound quality and power, feedback from customers tells us that pure triode operation is preferred where amplifiers have switchable UL/Triode mode. As this is closer to the low distortion near sonic perfection of the 300B/845 etc vintage pure triode valves, but to make the change you would normally have to change your amplifier at great cost, as these primitive valves are "directly heated" and have several design problems to overcome, not least being prone to "hum".

So Icon Audio have developed the EL34D (D for triode) an EL34 compatible valve but with all the characteristics of a vintage pure triode which can be used in virtually all existing EL34 amplifiers giving 100% PURE TRIODE sound instead of 50%.

The EL34D retains compatibility in nearly all amplifiers where an EL34/KT66/6L6 (even KT88/6550 in some circumstances) would be used. Normally a straight swap and bias check is all that is necessary. We have done

extensive tests in all kinds of situations where EL34s may be used. E.G. in SINGLE ENDED, PUSH PULL, SELF BIAS and FIXED BIAS types of amplifier, both vintage and modern, integrated and mono block. (Icon Audio ST40, ST20SE, Leak TL25 and Stereo 50/60, QUAD II etc.)

How is it Different?

Unfortunately it is not just a question of ignoring or removing the 2nd and 3rd grids, the EL34 will not function without them even in "triode mode". So a total re-design was called for using a 300B/845 style flat anode with the critical shape and spacing to get the EL34 characteristics. See the photo and diagram below.

What are the advantages?

Smoother more transparent, like a veil has been lifted away, revealing more macro detail and natural sounding. It's like changing from cotton to silk! The EL34D is handmade to the highest standards in Europe and like for like should outlast a standard EL34 as it is less complicated and does not have the G2 grid which is a common cause of failure in EL34s and all pentode valves. And if you take into account the cost saving of changing your amplifier this can represent very good value!

"What are the disadvantages?"

None other than a 3db loss of power which you may hardly notice. And you can always revert back to your standard EL34s for more power if you need to!

"But my EL34 amplifier already has a "Triode Switch"?"

Because the EL34D is simplified, any switch becomes redundant as the EL34D is operating in pure triode at all times. The EL34D is a "true" Triode. And therefore behaves the same as 300B/2A3 and other pure triode valves.

"How do I use the EL34D in my Leak amplifier?"

Just insert them, the UL connection is ignored, so they can only work as pure triode valves with no modification.

That is also true of virtually all "self bias" (auto bias) amps including the QUAD II etc. For fixed bias amps the bias should be adjusted in the same way as a new set of valves to the same setting as EL34.

Specifications and Features:

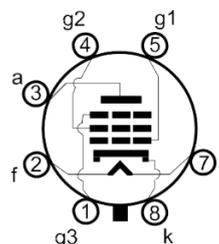
- Octal base same as EL34
- Pin connection same as EL34
- 6.3v heater same as EL34
- 1.6A heater same as EL34
- Indirectly heated same as EL34
- Transconductance 11mA/V
- Amplification factor 11 same as EL34
- Max plate voltage 600v DC (EL34 500v in UL)
- Max current 120 ma (EL34 150 ma)
- Max dissipation 30w (EL34 25w)
- No G2 screen grid
- No G3 suppressor grid
- Carbonated Anode for maximum dissipation

Typical Operation:

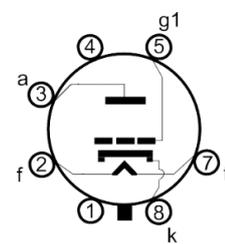
- DC plate voltage 300v
- DC plate current 100ma
- Grid voltage -12v
- Plate resistance 1k

Provisional Figures specifications subject to change

A higher power 50w version EL34D/50 is under development!



PENTODE EL34



EL34D Triode