P101-P1038.qxd 15/3/02 10:14 pm Page 10

I diy feature

CHOOSING A 300B

Clive Meakins listens to a brace of 300B triode output valves, from standard to esoteric - with prices to match.



ack in the days before transistors big amplifiers were needed for cinemas, public address and such like.

Western Electric produced the 300B power triode specifically for low distortion audio amplification in such situations. Possessing a smooth, civil sound, it is more linear than a transistor and is used in high quality valve amplifiers. Demand is such that Western Electric have restarted production.

There are a good number of 300Bs on the market today, with prices ranging from low up to scary. I recently tried out eight different types to see just how big the differences are, as well as discover their nature. As a testbed I used the Billie 300B single-ended triode monoblocks from www.diyhifisupply.com, reviewed in the February DIY Supplement of Hi-Fi World. The front-end was CD, 'speakers

floorstanders with a pair of subtly setup subwoofers. Listening was performed over several weeks.

By changing individual components within the Billies I could easily change their sound and some changes were just as significant as changing 300Bs. Other changes alter the tonal balance but result in little musical or lasting difference. Keep in perspective that the best 300B for you could become the worst with a simple internal circuit change that puts everything out of balance.

The prices given are approximate. Some valves were sourced abroad and are subject to exchange rate fluctuations. Service was prompt and packaging excellent in all cases. Let me say up front, there was not a poor 300B in the test; it's more a matter of picking one that suits your requirements.

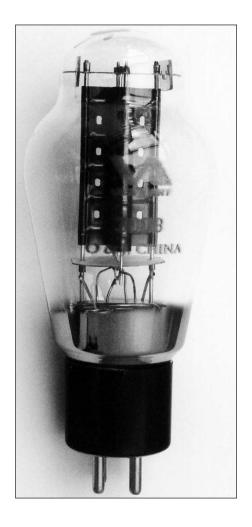
JJ 300B Watford Valves +44 (0)1923 893270 £136

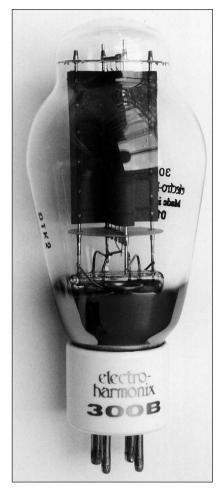
The JJs produced a relatively balanced sound that was just a tad biased towards treble, with a hint of emphasis on sibilance. Soundstaging is fine, around average for the group. The box was the most colourful but arrived too late for the photo shoot. Here is a good sounding and well priced valve that might be most at home in a neutral to marginally dark sounding system.

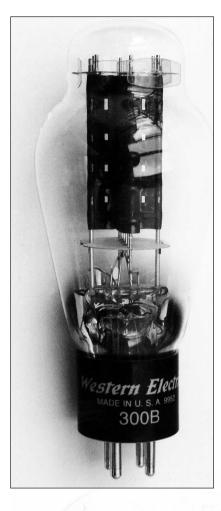
Valve Arts 300B www.diyhifisupply.com £84 + duty

This Chinese valve has a powerful mid to upper bass, rather like a small speaker faking

diy feature ı







Valve Arts 300B

Electro-Harmonix 300B

Western Electric 300B

deep bass with a response peak. Deep bass does seem to be lacking but the bass that exists is tight and punchy. Soundstaging is respectable, but inner detail a little lacking. Overall the Valve Arts gives music an enthusiastic and lively interpretation. Good at the low price.

Electro-Harmonix 300B www.newsensor.com Standard version £98 + shipping & duty

The EHX valves are made by Sovtek in Russia. Their bass is deep and solid, providing music with a good foundation. The top end is gentle and a little recessed. This is not a super detailed valve and a lack of treble only increases this perception. Soundstaging is fine.

Overall they provide a pleasant sound that is easy to get on with.

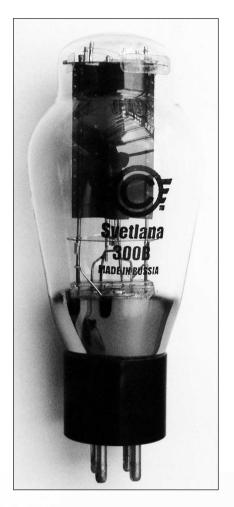
Electro-Harmonix 300B www.newsensor.com Gold Grids £142 + shipping & duty

This is the same valve as the EHX but with gold grids. It has the same excellent bass but also much greater treble extension, giving extra detail and air. Soundstaging is much the same, although vocals are far more refined. It's rather like going from a 4 to a 6 cylinder engine, overall a much more refined experience. Sibilance sounds very natural and this valve was amongst the best tested. I feel this is a very well balanced valve with no extremes that might push a system over an awkward sonic threshold.

Western Electric 300B PM Components +44 (0)1634 848500 £650

This is the new production version of the classic valve that is the mother of all 300Bs. The WEs produce a warm and cuddly sound, not in the extreme but they definitely make all music that bit more rounded. They paper over the cracks on CDs that are challenging. Their bass is a touch slow and soundstage is big. Sibilance is well controlled and very natural. Treble is just a fraction restrained, but mid range is great, vocals are just "there". Detail is good in the mid, just a little air lacking at the top end. These are expensive but a great experience. Their laser etched cherry wood box is really quite over the top!

L diy feature







Svetlana 300B

Svetlana 300B PM Components +44 (0)1634 848500 £237

For the first 2 hours the Svetlanas were terrible but don't panic, persevere. Definitely easy to listen to, not quite the last word in detail but almost. Bass is good, treble well extended. Soundstaging is on the generous side of average for the group. Overall they are one of the "safe" valves but ones that make the music flow in a very appealing way.

Golden Dragon 300BM PM Components +44 (0)1634 848500 £300

These mesh-anode 300Bs are also sometimes seen as Full Music and TJ. The two mesh-

Golden Dragon 300BM

anode valves tested set themselves significantly apart from the rest. The Golden Dragons have good weight in the bass with quite a meaty mid too. Their treble is very extended and soundstaging big. There is simply more of everything. They are expressive and detailed, allowing you to hear deep into the mix.

TJ Premium 300B www.diyhifisupply.com £245 + duty

The TJ Premiums are a more expensively made mesh-anode, with reinforced anodes, plus a ceramic base and gold pins. Their sound is similar to the Golden Dragons but more extreme. It delivers a

TJ Premium 300B

big soundstage and extended treble. Bass is just a little shy. This seems at times to extend to the mid with brass and vocals sometimes a little "white" sounding. They are the most open valve in the test, with lots of air and detail, but could become ruthless with unnatural, poorly recorded sibilance. These valves are not warm and cuddly like the WEs, being more of a cerebral experience. I have the feeling that some amplifier tweaking, possibly reverting to PIO coupling capacitors, would allow the TJ Premiums to really excel.