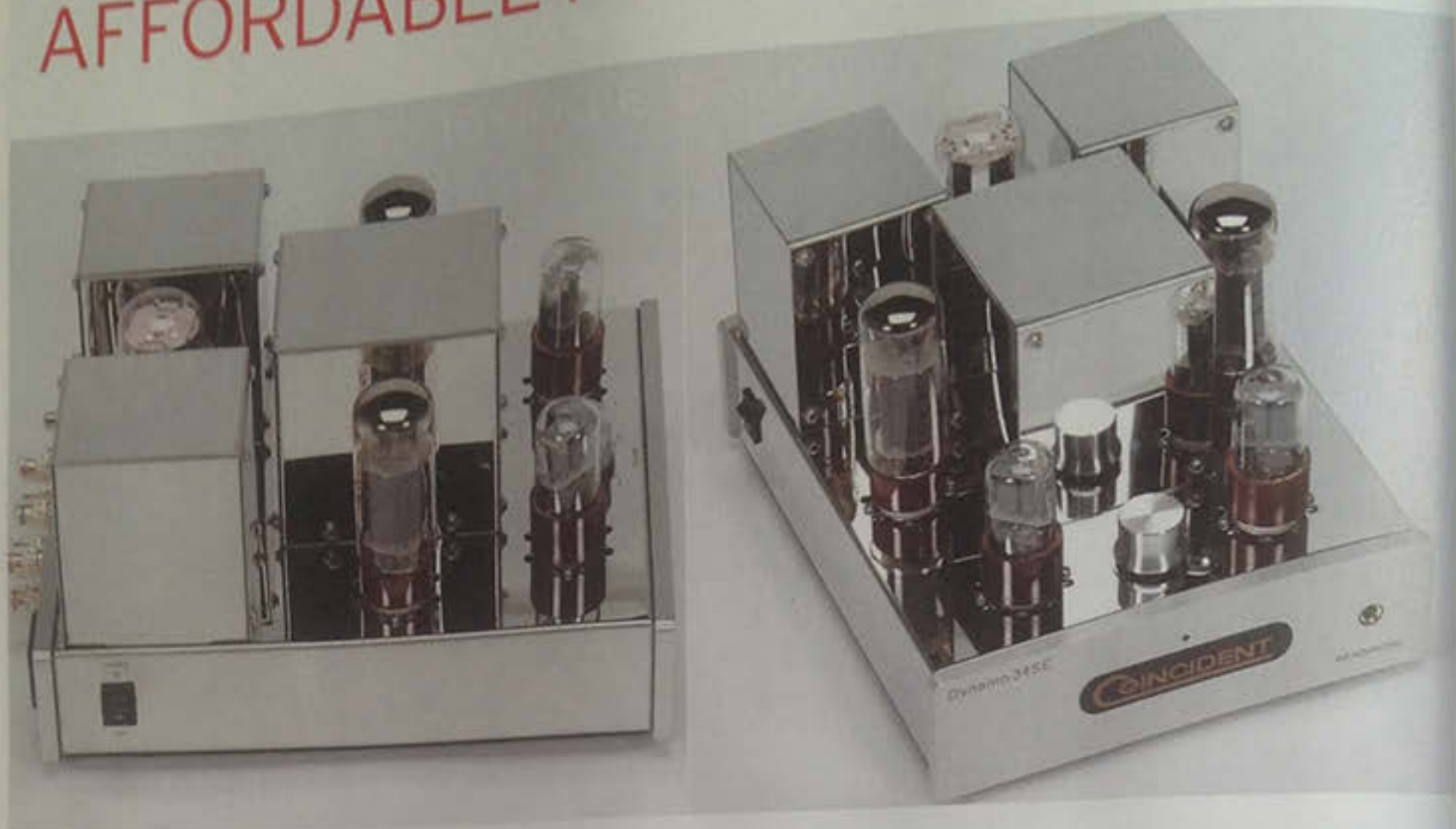


AFFORDABLE FOCUS



Coincident Speaker Technology Dynamo 34SE Power Amplifier

Low Power, High Pleasure

Dick Olsher

The EL34 power pentode is a rare bird in the single-ended amplifier domain, which has been traditionally dominated by directly heated triodes. Of course, the Western Electric 300B is the 800-pound gorilla in the room when it comes to single-ended-triode (SET) designs, but there are legitimate reasons to look elsewhere. Foremost would be cost and availability. Most Russian and Chinese new-production 300Bs aren't very good sonically. There are exceptions, typically from boutique manufacturers, which, like designer fashion accessories, carry a hefty price tag. On the other hand, new-production EL34s are not only affordable, but in the case of the Russian Gold Lion reissue consistently excellent. From a technical standpoint, an indirectly heated cathode results in reduced hum levels (a good thing), and the extra grids are not necessarily a bad thing. The screen grid provides the option of an ultralinear output stage connection as exemplified by the Audion Sterling EL34 integrated stereo amplifier. The option adopted by Coincident's Israel Blume was to connect the screen grid to the plate resulting in triode-like operation and a power output of about 8Wpc.

Coincident Speaker Technology's take on the EL34-based SET is the 8Wpc \$1299 Dynamo 34SE. Unquestionably, the Dynamo

looks swank in its stainless-steel mirror-finish chassis. Remove the bottom plate and you'll note that all connections are neatly hard-wired. The input signal is routed through a 100k-ohm pot, which allows a direct connection to an external line-level source such as a DAC. The audio circuit is about as simple as it gets: a voltage gain stage comprising a 6SL7 dual-triode connected in parallel, which drives an EL34 output stage with no global feedback. The power supply is tube-rectified, a good choice for a single-ended Class A design. I found it a bit distressing that the 5U4G rectifier arcs for about a second when the amplifier is powered up due to the in-rush current transient. Coincident considers this a normal event, but to my mind arcing is a cause for concern over the rectifier's lifetime. However, I was comforted to find out that, so far, the factory test amps have logged over 2000 hours without a rectifier failure. The real trouble started one evening when the amplifier refused to turn on due to a blown fuse. After blowing another couple of fuses, my first review sample went back to the factory. The culprit, according to Coincident, turned out to be a failed filter cap. Coincident pointed out that there are a few hundred units in the field, and that this was the first such failure. The fact that it happened to a reviewer is a testament to the perversity of audio reviewing; the probability of failure

AFFORDABLE FOCUS - Coincident Speaker Technology Dynamo 34SE

is apparently highest when a sample is under review. I should note that the second sample behaved well for the duration of the review process.

For many SET aficionados directly heated triodes are a religion. They believe and accept no substitutes. The rest of you must be wondering by now if the end justifies the means. In other words, is a triode-connected EL34 able to compete sonically with the likes of a 300B? As you will see, the Dynamo's sonic performance pushed many of my buttons and affirmed such a "heretical" conclusion. My first impression was of a sweet midrange, an exceptionally dimensional soundstage, and a dynamic presentation belying the miniscule power rating. Driving a 96dB-sensitive loudspeaker, the Dynamo was capable of an explosive first watt. Harmonic textures weren't overly liquid, implying decent-bandwidth output transformers.

Was it perfect out of the gate? Not really—it quickly became obvious that there were problems at the frequency extremes. A comparison with the PrimaLuna DiaLogue Premium, operated in triode mode with a complement of KT120 power tubes, highlighted the issues. While the Dynamo generated a far more spacious soundstage and better image focus, it fell short in treble-range harmonic purity and bass-range heft. I felt fairly certain that I could address the treble granularity via judicious tube-rolling. The first step in this process was to replace the Chinese EL34s with a matched pair of Russian-reissue Gold Lions. There was a noticeable gain in textural silkiness, but that wasn't enough of an improvement. The next target was the 6SL7, which is similar electrically to a 12AX7 but with somewhat lower gain. Without global feedback, SET designs are dependent on the quality of the front-end tube, which can make or break the amplifier's sonic performance. It turned out that there was a wide gap in performance between the stock Chinese 6SL7 and, in particular, vintage Tung-Sol types. Even the best of current Chinese production, the 6N9P equivalent, was no match for the Tung-Sol. And the king of the Tung-Sol types was the 6SU7GT. This is a select 6SL7 with closely matched sections, of course, long out of production but definitely worth looking for. At last the Dynamo began to sing with enhanced transient clarity, lush textures, and more linear dynamics. Superlative soundstage transparency combined with 3-D image outlines produced a strong sensation of being there, of being transported to the recording venue. This little beauty was now responsible for many hours of pleasurable listening.

J. Gordon Holt opined many years ago that the problem with a power amplifier is that you can't listen to it without using a loudspeaker and vice versa. Thus, it becomes difficult to ascertain what either sounds like because of the amplifier-speaker interface. Ideally, you would evaluate an amplifier in the context of several speakers to infer its intrinsic sonic character. Being blessed presently with only a single high-sensitivity speaker this was not an option with the Dynamo. One of the factors that can make an amplifier shine with one speaker and stink with another is its source impedance. A typical push-pull tube amplifier's source impedance is likely to lie in the range of one-to-two ohms, which only slightly perturbs the speaker's frequency response. I measured a source impedance of 10.2 ohms off the Dynamo's 8-ohm taps. The net effect was to reduce speaker response in the upper bass and lower midrange, the power range of an orchestra, where

the speaker's impedance magnitude is lowest. It didn't sound exactly like the bottom dropped off the map, but the balance was distinctly lightweight. This was especially an issue with symphonic music, which was reproduced without a convincing orchestral foundation. Curiously, despite the low damping factor, bass lines were well defined with plenty of boogie factor. The important point to keep in mind is that I'm merely describing the resultant tonal balance obtained with the Basszilla DIY speaker. Your results may well vary; there's no substitute for a personal audition in the context of your specific loudspeaker.

Considering the Dynamo's price point, it was natural for me to dial down my expectations. Yet in the end, it turned out to be a major sonic surprise. The price tag effect is apparently very much in play when it comes to fine wines and high-end audio. It has been shown that wine experts are clearly influenced by price. In an arranged blind tasting, two identical bottles of wine were disguised as inexpensive and expensive brands. Sure enough, the expensive bottle received a higher rating. In fact, researchers have suggested that the price tag influences our perceived enjoyment of purchased goods. It's likely that a similar effect is in play in the high-end arena. As audiophiles we tend to collectively perceive expensive gear as sonically superior to entry-level gear. The Dynamo 34SE emphatically proves such a perception to be inherently false. Here is an amplifier that clearly shouldn't be defined on the basis of its price. It captures much of the magic of SET at an entry-level price point. Because of its high source impedance the Dynamo may not always yield the most accurate tonal balance, but the crux of the matter is foot-tapping musical bliss. In entertainment value, I can't think of a more musically pleasurable low-power amplifier at this price point. *tas*

SPECS & PRICING

Power output: 8Wpc
Output impedance: 10.2 ohms
Voltage selectable: 115V/230V
Frequency response: 20Hz-20kHz +/-1dB
Sensitivity: 300mV for full output
Input impedance: 100k ohms
S/N Ratio: 88dB
Weight: 22 lbs.
Price: \$1299

COINCIDENT SPEAKER TECHNOLOGY

391 Woodland Acres Crescent
Maple, ON., Canada L6A 1G2
(905) 237-1696
coincidentspeaker.com

ASSOCIATED EQUIPMENT
Basszilla Platinum Edition
Mk2 DIY loudspeaker; Audio
by Van Alstine Fet Valve
Preamp; Apple Mac BookPro
running Sonic Studio's Amarra
Version 2.6 software, AYON
Stealth DAC; Sony XA-5400
SACD player with ModWright
Truth modification; Kuzma
Reference turntable; Kuzma
Stogi Reference 313 VTA
tonearm; Clearaudio da
Vinci V2 phono cartridge;
Pass Labs XP-25 phono
stage; FMS Nexus-2, Wire
World, and Kimber KCAG
interconnects; Acoustic Zen
Hologram II speaker cable;
Sound Application power line
conditioners