

hardware review

## Linear A does exactly what it says on the tin

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### Tom Evans Audio Design Linear A Mk3

The Linear A been a long time coming. Tom Evans has been making the Linear A and B power amplifiers for 16 years now and as a long-time fan of his work, his CD player clock upgrades of the '90s made that format musical for the first time, I had hoped to try one of these distinctive amplifiers fairly soon after they went into production. But Tom moves in mysterious ways and you can never be entirely sure of how things will pan out.

The first electronics components that he made under the Audio Design name was the Groove phono stage, this was an evolution of the Michell Iso that Tom built and inhabits a similar black acrylic case. Umpteen years later there are many Grooves in the range and I use the second to best in the Anniversary SRX MkII, which is now due an update. There is also the Vibe, a preamplifier in much the same black acrylic mould as the Groove but with selector and volume knobs on the front. Tom sent one of these with the Linear A to aid my appreciation thereof. The Linear A and B power amplifiers are very different in appearance to the rest of the range and at a glance appear to be different inside as well.

The Linear A is a valve or tube amplifier that runs two banks of four EL84 pentodes in a triode arrangement that drive loudspeakers via impedance matching output transformers. Unusually Tom Evans does not supply valves with the Linear A but will fit any set of valves that the customer supplies, this adds £160 plus to the overall price but each device is tested before being fitted and biased in the amplifier.

The output is specified as 25 Watts per channel but Evans states that the "Linear A is suitable with speakers that are 89dB / Watt and above and 5 Ohm minimum impedance". The latter encompasses a fair amount of loudspeakers but certainly not all of them, many have a nominal 8 Ohm impedance but there will be a point where the impedance drops below 5 Ohms in many speakers. When considering which speakers to partner the Linear A with this is an important factor. All other things being equal high sensitivity and a benign impedance is a

desirable thing in a loudspeaker but the power available from modern amplifiers and the quest for smaller, more domestically acceptable loudspeakers means that such designs only account for less than 20% of the market today.

Apart from the distinctive shape there is one other distinguishing feature on the Linear A, that is a control knob on the back which adjusts feedback. This is not something you will find on any other amplifier to my knowledge and its purpose is slightly odd, essentially Tom has included it so that listeners can hear the shortcomings of the technology. Feedback is used in



the vast majority of amplifiers in order to maintain stability and produce more power, it has always been viewed with suspicion in the valve world however and the cult of the single ended triode would rather eat its full range drivers than use feedback. Yet it's quite popular in push-pull amps, where the extra power is a boon, but the Linear A is not a push-pull amp despite its use of pentode valves. The option to adjust feedback might be useful in some circumstances but ultimately it's the maker's way of saying that almost everyone has got it wrong.

### Linear A sound quality

The Linear A along with the partnering Vibe preamplifier, not a valve powered device, do make a very good case for avoiding feedback. This is easily the most tonally even valve amplifier I have had the pleasure of using. Virtually all the others have had some degree of midrange emphasis or obvious warmth to them, and this can often be very enjoyable so long as the amp has sufficient power to drive real world loudspeakers. But it's very revealing when you get valves employed in such a linear fashion, this is an amplifier that literally does what it says on the tin.

As mentioned above the Linear A prefers loudspeakers without low impedance dips in the bass, unfortunately I don't have any that fit the bill that well at my disposal. However, I discovered that as long as the volume level is sensible and there's not too much bass the sound is absolutely thrilling. It just loves electric guitars or, to put it another way, if you love the sound of electric guitars it will reel you in with the first bar.

I was checking out an alt Americana classic via another amplifier and found it interesting but not as essential as many feel it to be, playing it again on the Linear A made it clear that the album (Giant Sand – *Swerve*) should be in my collection. It was that obvious. This is because this amplifier has phenomenal immediacy, it is extremely fast and this allows notes to stop and



start exactly as they should. Transistor amps struggle to deliver speed without grain or edginess, here you get transients that are apparently distortion free, that deliver the goods without anything getting in the way.

The Linear A is also a very quiet amplifier, the noise in its signal to noise ratio is very low and that brings out the sound of the acoustic around any instrument or voice. This means reverb, decay, echo you name it, any acoustic element or effect is clear and well defined and this combined with mercurial dynamic speed makes for extremely engaging listening. Nothing seems to phase the Linear A when it comes to musical complexity, its ability to clearly define leading and trailing note edges means that there is no blurring and this opens up even the most hectic of multi instrument mixes. I loved the rhythms of Joe Chambers fascinating *Dance Kobina* album with this amp, this is jazz with a groove provided by the band leader's drum and vibes playing. The Linear A makes it clear that Chambers and co are excellent musicians but also that the Blue Note production is a little on the cosy side. Which suits the warm Latin vibe even if it doesn't reveal all of what's going on behind the mics.

The Linear A also brings out the depth in everything it plays, even the gritty yet muscular sound of Arab Strap on *Packs of Three*, here the solidity of the kick drum and the reverb on the juicy bass playing come through in full effect. The above was achieved with PMC [twenty5.26i](#) speakers as they usually seem the most tube amp friendly in my armoury, but I was fascinated to hear what the Vivid Kaya S12s could do as well. Again this speaker has a sub four Ohm impedance dip so is not ideal but that didn't stop the combination producing magical results. Tom Waits' Brechtian poetry on 9th and Hennepin was quite an event, while Herbie Hancock and Joni Mitchell's rendition of *The Man I Love* was positively vivid, the speakers living up to their name in no small way. The expression and variety that the Linear A brought out in the voice was quite a revelation. Ryan Adams and the Cardinals' live version of *Hallelujah* was as intimate and engaging as ever albeit a bit more power would have been useful here.

Yet the Linear A was able to produce surprising levels of bass from the Vivids with the right record, that being *Do the Bop* by Fila Brazillia. Switching from Tom Evans' Vibe preamplifier used thus far to the somewhat more spendy Townshend Allegri Reference the sound took on spatial qualities that were uncanny. The preamp upgrade allowing the Linear A to up its game in no small manner. At this point I gave the feedback control a couple of clicks, that is I added a small amount of feedback and sat back to discover a veil had been pulled over the sound, its energy had subsided and there was a slight sense of compression. It proves Tom's point as you might expect but beyond that it's not something that most would ever be inclined to use. Turning the feedback off produces better imaging, a lower noise floor and greater realism of tone; worth a try but unlikely to remain in use.

If you mention the power limitations to Tom he says that you either need speakers that are easier to drive or a pair of Linear B monoblocks, these have a push-pull configuration and he claims that they are also "far more revealing and will drive anything". So now I really need to hear them, it is hard to imagine that they could be more revealing than the Linear A which combines huge transparency, a vanishingly low noise floor and uncommonly even tonal balance. It's hard to imagine how a push-pull could be more revealing than a triode amp but I am open to being convinced.

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### Linear A verdict

There's no disguising the fact that this is a bit of a niche amplifier that can only drive a small proportion of the loudspeakers made today. It's good enough to warrant a search for such speakers however and there are some fine examples available. The fact that far lower powered triode amplifiers are relatively common suggests that this is hardly insurmountable. Those amps do not generally offer the inky black backgrounds, immediacy and transparency that the Linear A can deliver even with less than well matched speakers. It's no beauty to look at but if you want to be carried away by the music to the extent that your worries and cares become irrelevant, you'll realise that beauty is a lot more than skin deep.



### Specifications

Type: EL84 triode stereo power amplifier

Analogue input: RCA

Analogue outputs: copper binding posts

Power output: 25W/8 Ohms

Frequency response: 10 Hz-130 kHz (1W), 10Hz- 23 kHz (full power )

Sensitivity: 560mV (zero feedback)

Gain: not specified

Distortion: input / driver stages intermodulation distortion: -150 dB

Signal to Noise Ratio: > -90dB

Dimensions (HxWxD): 260 x 475 x 325mm

Shipping weight: 38kg

Warranty: 5 years



The ear is all about great music and great sound. It is written by hard bitten audio enthusiasts who strive to find the most engaging, entertaining and great value components and music of the highest calibre. This really is what living is all about.