

REVIEW PRODUCT OF THE MONTH

Trends Audio BA-10

An unusual approach to desktop audio – it's hi-fi in miniature, and with a valve twistscreen,



SPECIFICATION

TRENDS AUDIO BA-10

Type Bi-amplifier system
Price £480 (inc delivery)

PA-10.1D preamplifier/headphone amplifier
Inputs One pair line, switchable for PC/iPod or CD/DAC input level
Outputs Two sets of preamp-level, headphones
Dimensions (WxHxD) 7.6x 4.6x14.5cm

Trends Audio TA-10.2P SE
Type Stereo power amplifier
Inputs One pair line
Outputs One pair of speakers
Dimensions (WxHxD) 5.8x3.8x11.5cm

Accessories supplied Power supplies for all three units, two pairs of stereo interconnects
Optional Speaker cable pack (see text)
www.trendsaudio.com

The idea of miniaturised hi-fi is nothing new – after all, we've had micro-systems for a very long time. But developments in technology – notably the idea of an amplifier on a single microchip – have made possible ever-smaller products, and as a result a brief survey of the internet will reveal no shortage of tiny amplifiers for sale, all using the Class T technology developed by Tripath, now part of Cirrus Logic.

One of the leading exponents of the art is Hong Kong-based Trends Audio, which also makes a wide range of miniature audio components from a digital-to-analogue converters to a headphone amplifier powered by a single valve sitting atop its tiny case.

Of course, hi-fi so small lends itself to consideration for use in desktop audio systems, or perhaps even for use in small rooms, not least because these little amplifiers tend to deliver very modest power, making them best suited for (relatively) close-up listening with fairly sensitive speakers.

Given all that, Trends Audio's BA-10 package is doubly intriguing, comprising as it does the company's PA-10.1D headphone amplifier/preamplifier and a pair of TA-10.2P SE stereo power amplifiers. Yes, what we have here, for around £480 delivered direct from the company in Hong Kong (US \$699,

plus \$62 for delivery), is a full bi-amplification system – able to drive each section of bi-wirable speakers separately –, just smaller.

And by smaller, I mean tiny: the single-input preamp/headphone amp measures just 7.6cm wide, 4.6cm tall and 14.5cm deep, while the power amplifiers are a very dinky 5.8x3.8x11.5cm.

All three units are powered by offboard power supply units, which are provided, the power amps coming with the chunkier SE power supplies (actually larger than the amplifiers to which they deliver energy).

The preamp has a single pair of line inputs, switchable for use with an analogue output from PCs and portable devices or conventional CD players, etc., two sets of outputs, and a 3.5mm headphone socket on the front beside the volume control, and uses a hybrid valve/solid state pure class A design, with the valve as the voltage driver and MOSFET output driver devices.

It's also designed for 'tweakability': you can change the valve between 6DJ8/6922 and 12AU7 types, choosing Chinese, Russian or whatever else happens to be your tube of choice, and there are potentiometers to adjust the valve bias voltage to suit different valves – designed, Trends Audio says, to suit 'professional audiophiles'.

Meanwhile the power amplifiers have two sets each of inputs and speaker outputs, as on the preamp using high-quality gold-plated terminals, and deliver a very modest 15W into a 4ohm load, or 10W into 8ohms. As I said, not much beside the kind of output claimed for modern AV receivers, for example, but it should be more than sufficient for close-up listening in small spaces.

'The Trends Audio package is doubly intriguing, combining a preamp/headphone amplifier with a pair of stereo power amplifiers'

Provided in the BA-10 package deal are two pairs of the company's QB-773 interconnect cables – all you need to connect preamp to power amplifiers – and I also opted for the Trends Audio CQ-500 speaker cable pack (£129/£80), which contains two 2.5m bi-wire speaker runs, more than sufficient for use on even the largest desks!

You could of course use your own speaker cables, but the Trends ones are of high quality, like the interconnects supplied, come pre-terminated, and to these eyes (and ears) represent excellent value for money.

SUGGESTED PARTNERS

Tiny amplification encourages you to keep things compact: here's a couple of suggestions for a desktop system

BOX DESIGN CD BOX S

It's just about the smallest CD player around, but with an appealing sound and high-quality build, the ultra-compact Project Box Design CD Box S, is a fine buy at about £300



Q ACOUSTICS 2020I

One step up from the entry-level 2010i, the Q Acoustics 2020i speakers sell for £150, support bi-amplification, and sound very good indeed



It's worth noting, too, that the delivery was extremely fast: a few days after enquiring about the product, it was shipped from Trends Audio in Hong Kong at 17.40 local time on a Monday, and was in my hands at our Teddington office at 14.00 the next day. The world is definitely shrinking!

PERFORMANCE

The amplifiers are simple to set up and use: you have to install the single valve into the socket on the top of the preamp, but that's about it: the company provides diagrams of how to connect the combination for 'horizontal' or 'vertical' bi-wiring (more on that in a moment), or you can configure the system to provide a preamp and two monobloc amplifiers should you have speakers not able to be bi-amplified.

A note on bi-wiring and bi-amplifying: many modern speaker designs have split crossovers within, and two sets of speaker terminals – that's in a two-way speaker; more complex designs can have three, or even four, sets of terminals. In normal – that is single-wired – use, these terminals are linked, usually with metal jumper bars or cable links, but these connections can be removed to enable the sections of the crossover to operate entirely independently.

The idea is that by separating the bass and treble sections of the speaker completely, and driving each with its own amplifier channel (or bi-amplifying), there's less interference between the bass and treble, and the demands of powerful bass notes won't impinge on the ability of the amplifier to deliver delicate treble signals at the same time.

It's all about greater purity of sound, and I have to admit that while I often feel the gains available when bi-wiring – ie just running two sets of connections from the same amplifier output – are relatively small, bi-amplification usually yields better focus, more openness and a tighter, cleaner bass.

Vertical bi-amplification, by the way, means one stereo amplifier runs the bass and treble in a single speaker – one channel for each section –, while horizontal uses one stereo amp to drive the bass in the two speakers, and the other the treble. I must admit a personal preference for the latter, but it's a close-run thing, and of course a set-up such as this provides ample opportunity for experimentation.

I tried the BA-10 in a monobloc configuration with a variety of speakers including the excellent Neat Iotas, and bi-wiring speakers from the very affordable Q Acoustics 2020is up to the PMC DB1s, and while in every case the speakers' manufacturer suggests much greater minimum power than these little amps deliver, the BA-10 package proved itself to be more than up to the task when it comes to close-up listening.

What's most remarkable about the Trends Audio combination is that the sound it delivers manages to be both smooth and fluid, and at the same time open and dynamic. That means it has more than enough 'slam' and weight for large-scale orchestral music, while maintaining the delicacy and control required for, say, solo piano.

Of course, there are limits to the levels you can deliver with amps of such modest power – or at least deliver without obvious signs of stress setting in – but again we're talking about filling relatively small spaces with flowing, involving music.

I'd respectfully suggest if you want your symphonies at realistic 'front row' levels in a large room, you might think about looking elsewhere for your amplification.

I have to say listening while sitting at a desk isn't my favourite position, not least because it involves having a screen in front of you eyes for most applications, which I find distracting. However, having set up the Trends Audio speakers with my wife's iMac in our study, and connected the BA-10 through the Audioquest DragonFly DAC reviewed in these pages a few months back – Trends makes its own 'computer DAC', the UD-10.1, at prices starting from \$119/£75 depending on configuration –, I can see the appeal of a high-quality computer-based audio system for those who spend most of their lives surfing, Facebooking or whatever else it is they choose to do to fill their online time.

That's just what the BA-10 package is: a high-end audio system in miniature (with a very good headphone amplifier thrown in, by the way), and at a very sensible price, for those wanting fine sound on the desktop, or maybe on a shelf in a compact study.

It's a talking-point – that single valve and the diminutive dimensions guarantee that – and above all it performs extremely well. In my eyes, that makes this system as attractive as it is intriguing. **G**

DESIGN NOTES

Ricky Leung

Technical Director,
Trends Audio

On early experiences of live music, and why Mozart works best for system tuning



Ricky Leung is responsible for the design of Trends Audio's range of miniature products, including the BA-10 bi-amplifying combination tested here.

He says his earliest experience of music was 'Chinese pop music on cassettes, but the revelation came when a Chinese orchestra visited my primary school, on a music education tour, and played traditional music and pop songs in the school hall

'You know, it shocked me to hear music I knew so well performed on stage: it was a totally different experience to hearing it on cassette, as I had heard it until then.'

He says his favourite music includes 'Bizet's *Carmen*, Mozart, the Yellow River piano concerto and other

Chinese music', and that Mozart gets used a lot during the tuning of the products due to his variety of musical styles, but 'I also like to use jazz, vocal and pop music for tuning.

'We've moved beyond using discs when tuning: it simply wastes too much time. We have all our test music on a large hard disc, and just play the piece, or even a small music segment as we want from the computer. It's much more efficient.'

He says the booming headphone market is indicative of the desire of the 'iPod generation' – those listening on portable players or computers – for better-quality sound.

'As well as the convenience, computers open up the world of high-resolution music, up to 192kHz and at 24-bit or even 32-bit: the sound quality is so much higher than CD.'

'Of course, higher resolution audio files mean better equipment is needed, but higher resolution not only provides more detail, it also provides a better soundstage and timbre.

Leung says that 'Without higher resolution, it's difficult to enjoy the whole content of the music – it's a bit like listening to a classical symphony on cassette!'