## EQUIPMENT REVIEW

## The Zanden Model 3100 Line-Stage by Roy

by Roy Gregory

eviewers are supposed to be neutral, disinterested observers. But the truth is, that to do this job well – in fact, to do this job at all – you have to be passionate about recorded music and the equipment we use to reproduce it. Now, being both passionate and disinterested is definitely an uneasy duality and, hard as we try and as objectively as we report, there are few reviewers who would deny that they have their favourites – companies that always seem to deliver and whose deliveries are awaited with a little extra anticipation. For me, one of those brands is Zanden, whose products have single-handedly been responsible for more truly ear-opening experiences than almost any other. Send me a product from Zanden designer Yamada-san and I'm unlikely to be disappointed. That being so, when it comes to the Model 3100 line-stage, the question ceases to be whether I like it, but more a case of why I like it so much?

One of the things I love about the Zanden products is their innate sense of style and identity. "Me too" doesn't feature in the Zanden dictionary and the 3100 doesn't disappoint. It's chromed and slatted topplate mimics the casework of the Model 1300 phono-stage, but here it's combined with milky white, frosted acrylic front and side >



panels that echo the substantial acrylic slab that supports the biscuit-tin lid of the Model 2500 CD player's transport. Two large, flat, aluminium knobs control source selection and level, flanked by a pair of smaller push buttons that switch from standby to operate and normal to reverse absolute phase. Status is clearly indicated by a combination of logically laid out red, orange and green LEDs, which give the 3100 a faint air of an impossibly stylish traffic control system, but make remote operation from the matching frosted acrylic handset simplicity itself.

Whether it is the unusual, contrasting chassis materials or the elegant proportions, the simplicity of its symmetrical layout or narrow frontal aspect, nothing else looks quite like it – or quite as good. But the best thing about the quiet confidence of its appearance is that it carries over to its performance. As much as I like the way the 3100 looks, I love the way it sounds.

Tucked inside the compact chassis with its deep, almost square footprint is a typically Zanden solution to what should be – but never is – the simplest problem in the system. Classically minimalist thinking (gain from a single 5687WB twin triode in a feedbackfree topology) is combined with several unusual features (output transformers, valve rectification and triple shielding of key circuit elements) to create a circuit that's as distinctly individual as its chassis. In fact, the basic topology is borrowed from the two-box flagship Model 3000, but you'll go a long way before you find anything similar outside the Zanden line.

Round the back, you'll find the input and output socketry – and another surprise. The 3100 has as many outputs as inputs: one pair of balanced XLR and three pairs of single-ended RCA inputs; two pairs of singleended RCA and two pairs of balanced XLR outputs. There's a ground terminal, an IEC input and a couple of 12V trigger sockets, but that's your lot. These days, as system reach extends and sub-woofers proliferate, even in dedicated two-channel set-ups, "Aluminium knobs control source selection and level, flanked by a pair of smaller push buttons that switch from standby to operate and normal to reverse absolute phase. Status is clearly indicated by a combination of logically laid out red, orange and green LEDs, which give the 3100 a faint air of an impossibly stylish traffic control system, but make remote operation from the matching acrylic handset simplicity itself."

those extra outputs are extremely welcome, while the off-loading of multiple input switching duties to DACs and CD players means that four inputs is sufficient for almost all but the most complex of system situations. This shifting emphasis from multitudinous input options to comprehensive output capability mirrors the changing role of the line-stage in modern systems – and marks the 3100 out as a thoroughly modern product, despite its apparently traditionalist roots. In fact, it's precisely those roots – and the continuing relevance of the line-stage in current system topology, despite the expansionist tendency of DACs and digital control units – that make the Zanden so musically beguiling.

Install the 3100 into your system and as soon as you start to listen you'll immediately notice a lucid sense of flow and shape, a natural, inviting and engaging quality to the music you play. It's almost as if someone took the brakes off – or more precisely, took their foot off its throat. It's not just that the performance moves more effortlessly and purposefully, that there's more shape to melodies and more life and colour; there's simply more going on and it's easier to hear. Now, the world is full of ultra detailed, high-resolution line-stages, long on information but about as lively as King Tut without the special effects. Part of what the Zanden does is indeed about resolution, but that's almost a by-product. The really important things are all going on behind the music – and they amount to a whole lot of nothing!

Compare the 3100 to other line-stages, and you quickly discover that it's seriously, ghostly quiet. Not just quiet for a tube unit; quiet in a fundamental, absolute way. Music comes from a background that is so dark and free of grain that where an instrument is and when each note starts (and stops) has a new, almost explicit quality – so apparent, so obvious that you don't even notice it. Instead, it has that "just the way it should be" acceptability that lets you immediately move on to other, more engaging things – like how that note relates to the others around it. At least part of that is down to the sheer stability and focus that the Zanden brings to proceedings. It's not just that you can hear

where an instrument is (which isn't that unusual) – it stays there, regardless of what happens in the music (and *that* is unusual). How loud, how busy, resting and then reemerging, there is a sense of physical presence and spatial confidence that underpins each voice and instrument, the music as a whole.

Now, "quiet" and "stable" might not seem like the stuff of dreams, but combine it with the dynamic range and discrimination that goes hand in hand with those qualities when you reinforce them with a decent power supply and some careful mechanical design (a Zanden forte) and that's when you get something really rather special. The 3100 allows you the luxury of ignoring the constituent parts in the performance, so that you can concentrate on how they fit together. The spatial and tonal separation is such that instrumental identity is never in doubt. Instead, you can clearly hear not just who is doing what but why – and it's this last quality that makes this (and other Zanden products) so consistently captivating.

Play the rolling vocal melodies of Lisa Hannigan's 'Sea Sew' and the 3100 balances them perfectly against the repetitive rhythmic patterns. Play the Benedetti Michelangeli performance of the Beethoven 1st Piano Concerto and marvel not just at his combination of power and delicacy, but Guilini's ability to balance the orchestra against the solo instrument, maximizing the expressive range and drama in the live performance. What the Zanden does is allow you to see further into the music, to understand both how AND why it works. Traditionally, products major on one or the other with few that encompass both – and very few that do so with the grace and dexterity of the 3100.

Much of that stability, low noise floor, solidity and sense of drive come from the transformer coupling of the outputs. But unlike many transformercoupled designs, the Zanden avoids any hint of clumsiness. It's deft and agile, so that rather than bludgeoning momentum you get a sense of direction and purpose in the performance. This ability to fasten on what matters in the music is what sets the Zanden products apart. It allows the musicians to engage the listener, the listener to engage with the system – and that's exactly what audio electronics should be all about. It's a while since I had the Model 1200 phono-stage at home, or Zanden's four-box CD player, but both have lingered long in my memory. More recently, the Model 1300 phono-stage has seriously impressed and now the Model 3100 joins that list. Zanden is succeeding in delivering the almost magical performance it built its reputation on, but at much more affordable prices. It's still not exactly pocket change, but the Model 3100 is their most attractive and might just be their most engaging and enjoyable line-stage to date. In material terms it might seem expensive until you remember that it's not about the metalwork, it's about the music; that's when you realize just what stunning value the Zanden really represents.

## **TECHNICAL SPECIFICATIONS**

Type: Vacuum tube line-stage Tube Compliment: 2x 5687WB Line Level Inputs: 1x balanced XLR 3x single-ended RCA Input Impedance: XLR - 10kΩ RCA - 100kΩ Line Level Outputs: 2x balanced XLR 2x single-ended RCA Output Impedance: 300Ω Dimensions (WxHxD): 398 x 103 x 254mm Weight: 9.0kg Price: £11,495

Manufactured by: Zanden Audio System Co, Ltd. URL: www.zandenaudio.com Distributed by: Audiofreaks (UK) Tel: +44(0)208 948 4153 URL: www.audiofreaks.co.uk

