

Kuzma Stabi Reference Turntable

by Roy Gregory

Designing turntables has always been a juggling act, maximising one aspect of performance while trying to minimise the damage it does to the others. Speed stability requires close coupling of the motor to the platter, but that compromises isolation.

Okay, so let's use a really heavy platter, but that aggravates the noise performance...

You begin to get the picture. Which is one of the reasons why there are so many different approaches to turntable design, and absolutely no consensus as to which is best.

However, the one thing that you can normally rely on is that once they've adopted an approach most designers pretty much stick to it, modifying the hardware and execution to hit various price points. So if you get a box with Clearaudio written on the outside you can predict with some certainty the kind of turntable it contains. It will be a rigid design with a separate motor assembly and the main plinth will be made from acrylic. A Basis, an SME, a VPI, a Rega, an Avid - all have strong genetic markers defining their design paths.

Not so the Kuzmas. The original Stabi was a four point suspended deck constructed mainly from wood. The Stabi S employs a skeletal brass chassis

and a separate motor housing. The Stogi tonearm is a traditional gimbal type design, the Stogi S a damped uni-pivot. Rather than simply modifying an existing product to fit a new price

point, designer Frank Kuzma seems to approach

each new project as a blank sheet of paper, selecting the concept, engineering and materials most appropriate to the available

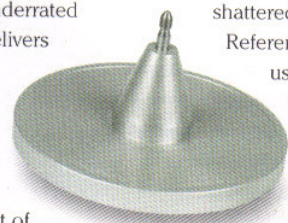
budget. And it seems to work too. The Stabi was always a seriously underrated performer, whilst the Stabi S delivers superb results at its modest price. The tone-arms too, have been consistently excellent. It's safe to conclude that Mr Kuzma has a pretty good grasp of what it takes to get music out of record grooves.

Which brings us to the Stabi Reference turntable and the top of the Kuzma tree. The heart of any turntable is its bearing and drive system, which I've detailed in the descriptive sidebar, but it's worth noting that despite the complexity of its overall construction and engineering, the Reference is also elegant and that elegance manifests itself in the shape of sheer practicality. Record players have never been the

easiest devices in the world to set up and use, and the assumption has tended to be that the more you're prepared to pay for the privilege of playing records, the more inconvenience, fuss and hassle you're prepared to tolerate too. The Stabi Reference breaks that mould. Not only is it a genuine top-level performer (at a fraction of the price of some of the competition) but it's an effectively suspended design that's a piece of cake to set-up and use, and it stays that way.

Anybody who thinks that a suspended deck means a severe case of the wobbles and endless tinkering with springs and cable dressing is about to have their pre-conceptions shattered. In fact, the Stabi Reference is so stable in use that you barely even notice the suspension,

unless you deliberately excite it. As a result cueing, clamping and record handling are just as straight forward as they are on a rigid 'table, which comes as a blessed relief. Indeed, the big Kuzma exhibits many of the benefits of a rigid deck, combined with the low noise floor and information retrieval of a good suspended design. It's also largely impervious to the nature of it ▶



● EQUIPMENT REVIEW

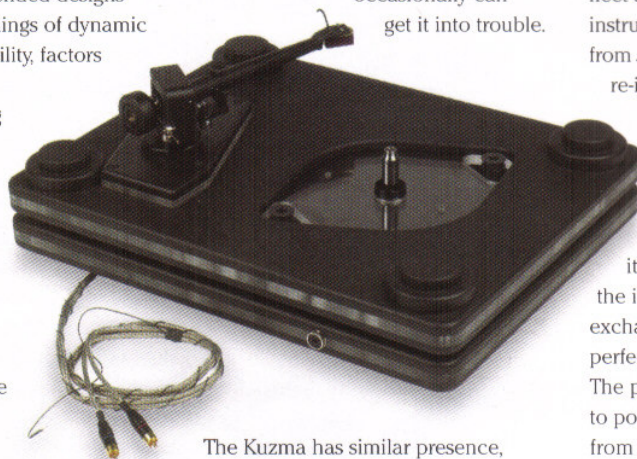
► support, as long as it's stable and sufficiently strong to support the record player's 40kg total mass.

So, does the Kuzma Stabi Reference represent the best of both worlds? In many respects it does, but that requires some explanation. The long time Achilles heal of suspended designs has been the twin failings of dynamic range and speed stability, factors that are not entirely unrelated. By offering both significant suspended and rotating weights, and a superbly damped suspension the Kuzma aims to stabilise the platter-motor interface. Add a second motor to the equation and drive them both from a well executed power supply, specifically designed to reduce motor vibration and provide constant torque to the platter, and you are beginning to approach the ideal of something that simply needs to be quiet while it revolves at a constant speed. The final piece of the jigsaw comes from the fine pitch adjustment, allowing the user to vary the speed by $\pm 0.4\%$ in discrete 0.05% steps. At heart, the job of a turntable is very simple. The Kuzma keeps it that way.

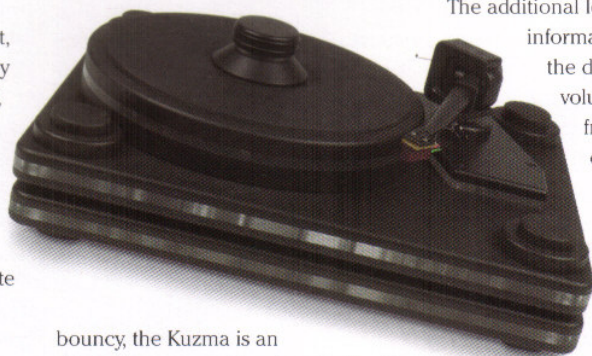
Playing piano music (whether it's Solomon, Janis, Rubenstein or the Duke) the Kuzma can't quite match the speed stability and absolute authority of pitch achieved by the rigid, three motor Clearaudio Master Reference driven from its regenerative power supply. But then it doesn't match its price either (or the care required when it comes to support). Indeed, at around 40% of the Clearaudio's cost, its weak suit gets surprisingly close to the German player's strength, whilst also offering considerable alternative benefits of its own. Indeed, the logical competition

for the Kuzma comes from the similarly heavy, similarly suspended and similarly priced VPI TNT HotRod. It's a fascinating comparison.

If I had to characterise the VPI I'd major on its scale, power and musical enthusiasm. Enthusiasm that just occasionally can get it into trouble.



The Kuzma has similar presence, weight and substance. Its scale is slightly less obvious, as is the sheer sense of musical energy, but both those things are down to its greater sense of control, and it's this that primarily separates the sound of the two 'tables. Where the VPI is meaty, beaty, big and



bouncy, the Kuzma is an altogether more cultured and refined performer. That sense of control and stability is further extended when the deck is used with the matching Stogi Reference tonearm, whereas the VPI JMW 12.5 introduces a shade more air into the proceedings, allowing the instruments to breathe that much more freely. However, the important thing to note is that with neither arm did the

sound ever cross the line into overdamped sterility. The deck's behaviour might be physically and mechanically well damped, but that characteristic never imposes itself on the sound.

Indeed, rhythmically speaking, the Stabi Reference is both agile and fleet and foot. The rapid rhythms and instrumental interplay of 'E Luxo So' from *Jazz Samba* (the excellent DCC re-issue LPZ-2011) intertwine

effortlessly as Stan Getz and Charlie Byrd joust and revolve around each other. The relationship between the two instruments never loses its track or simply meanders: the increasingly rapid and complex exchanges locked together by the perfectly paced rhythm section.

The pedants amongst you will jump to point out that the rhythm comes from the playing and I agree. The point is that the Kuzma delivers it intact and then downshifts gracefully to the mellow smooch of 'Baia'. So gracefully in fact that it isn't even an issue. The mechanics of reproduction don't intrude and once again the deck doesn't impose itself on proceedings. The additional low frequency

information doesn't phase the deck and that speaks volumes about its freedom from bass artifice or overhang. If that doesn't sound like much of a compliment then think again. The ability of any turntable to portray changes in musical pace is intimately

linked to the way it handles low frequency energy. Some chop or truncate it, adding a sense of pace, but adding it to everything. Others release that energy unevenly, slurring and disturbing time signatures and musical momentum as a result.

Both the Kuzma and the VPI avoid those sins of commission

Build and Set-up

Kuzma's flagship is a massive, four-point suspended design. The plinth and sub-chassis/top-plate are constructed from laminated Aluminium/Acrylic sandwiches. It uses a sophisticated, electronically controlled, two-motor belt-drive system to turn an aluminium sub-platter on a massive, tapered inverted bearing. The platter weighs 8kgs and the whole assembly spins on a Ruby ball mounted in the tip of the bearing shaft. There's a one piece record clamp and a separate arm board that's big enough to accommodate most tone-arms, including awkward linear trackers like the Eminent Technology and Clearaudio designs. Set-up consists of basic assembly followed by levelling and setting the height of the suspension. This is accomplished by turning the top mounted knobs, while lines machined

into the suspension shafts and easily visible from the side of the deck, offer a simple yet accurate guide. Those and a spirit level are pretty much all you'll need, and the whole process should take about half an hour from opening the box, assuming that you've got a pre-cut armboard. The suspension itself is heavily damped using silicon wells that automatically seal when the sub-chassis is unloaded. It's an elegant arrangement that I first saw on the Basis Ovation X and which delivers stable, effective isolation devoid of the nervousness of light-weight designs. It's nice to see that Kuzma's open mind isn't blighted by "not invented here" syndrome! Resonant frequency of the suspension is a low 2Hz. I used the Kuzma with both its own Stogi Reference arm and my own JMW 12.5. It's incredible stability makes it a natural partner for both uni-pivot and linear tracking tonearms, as well as accommodating even relatively stiff tonearm cables without complaint.

▶ and omission, but that doesn't mean they sound the same. Whilst both deliver music with life and pace, the VPI conveys the greater sense of energy and volume, the Kuzma greater transparency and texture. Getting back to the vexed question of piano reproduction, play the new Coup d'Archet release of Yvonne Lefebure playing Beethoven's *1st Piano Sonata* and the Kuzma's reproduction of this 1961 mono recording will amaze and delight you. Its ability to sort the finest percussive textures imbues the musical picture with uncanny shape and presence. The dynamism and virtuosity of the playing leaps to life, bringing the performance, solid into the room. All without the benefit of audiophile bandwidth or stereo! It's an impressive demonstration of the Kuzma's capability to control and dictate without stifling or limiting. Key to that capability is the subtle distinction and definition of individual



key pressure. The ability to let the listener hear through to the weight and attack of each note without effort and without destroying the structure of the music as a whole. Extend that beyond the single instrument on up through the ensemble jazz of EST, the Basie big band and studio rock of Led Zeppelin, and you quickly discover that this clarity and insight into the structure and energy spectrum of music expands with the scale and power of the performance. It culminates to stunning effect on well-recorded orchestral material like the Heifetz/Sargent Bruch *Scottish Fantasy* (RCA LSC-2603). The space between instruments and behind the soloist is clear and stable, the energy that comes in waves from those instruments, not least of course the poised lyrical sweep of Heifetz' violin, combines and builds exactly as it

does in a live concert, at once separate and together. Without becoming confused or congested. Just as you can in a live concert you can follow the individual strands within the whole.

Where does the Kuzma compromise? Well, it lacks the extraordinary detail and sheer resolution of the Clearaudio Master Reference. It also lacks the musical gusto and verve of the big VPI, but by treading the middle path it succeeds in being better balanced overall than either. Of course, that doesn't necessarily make it the best deck for your system: that will depend on the context of the equipment as a whole, but the Kuzma Stabi Reference is as capable as the alternatives in its own style, and cheaper than most of them. Its great competitor, the VPI TNT Hot Rod was one of my products of last year. On this showing, the Kuzma's going to be on the list for next year. If you're in the market for a top-flight turntable that is reliable, versatile in terms of matching arms, and beautifully engineered to last, then it should be on your list too. ➤

TECHNICAL SPECIFICATIONS

| | |
|-----------------------|---------------------------------|
| Type: | Suspended, belt-drive turntable |
| Motors: | 2x 24 pole synchronous |
| Speeds: | 33 and 45, + or - 0.4% |
| Suspension type: | Fluid damped |
| Suspension resonance: | 2Hz |
| Platter mass: | 8kg |
| Lid: | Optional extra, free standing |
| Dimensions (WxHxD): | 500 x 200 x 400mm |
| Weight: | 40kg |
| Finish: | Black |
| Price: | £3995 |

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 Tel. (44) (0)208 948 4153
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 E-mail. info@audiofreaks.co.uk
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