



# A New Dawn...

## The Kuzma 4POINT Tonearm

by Roy Gregory

NIH; the acronym that stands for “Not Invented Here” might better be expressed as “Never Invented Here” when it comes to hi-fi. For every company that rejects out of hand any idea that they didn’t come up with, sheltering behind entrenched dogma, there must be at least a dozen that have never come up with anything original. They sit back, wait and see which way the wind’s blowing, keeping a weather eye open for any passing band wagon and ready to execute a philosophical U-turn with the alacrity of a London cabbie (and just about as much consideration for others).

But real progress depends on the combination of all available information and thinking, with a few novel twists added for good measure. The resulting steps are often significant, either extending the notion of what is possible or bringing new levels of performance down to much lower prices. And because they so often build on existing thinking you can also often trace their “family trees”. So, one might think of the Zeta which spawned the Kuzma Stogi, Mission Mechanic, SME 5 and ultimately the Rega RB300 (et al). Then there’s the line that stretches back from the Phantom, through the other Graham arms to the Michell Focus One. But the lineage that concerns us here starts with the Tri-Planar, evolves through the VPI JMW designs and emerges in the form of the Kuzma 4POINT.

It was the Tri-Planar that established the tandem benefits of an out-rigger (or offset) mounting for the main-bearing, coupled to a vernier type VTA tower that allows for record-by-record adjustment.

It also established the practicality of mounting a longer, 10.5” tonearm within the compact dimensions of the decks then currently fashionable. The fact that a refined but otherwise virtually identical design is just as popular now, some 25-years later, speaks volumes. No surprise then, that when Harry Weisfeld at VPI wanted to create his own tonearm, he adopted those ground-breaking ideas himself, adding interchangeable arm-tops sitting on a damped uni-pivot bearing into the mix, allowing users to change cartridges on a record-by-record basis too. For the first time, a cartridge and tonearm could be removed from a deck in a matter of moments, with all critical settings preserved intact. And while he was about it, Harry raised the stakes in the cable game too, offering a purpose built Nordost Valhalla internal wiring option.

Which brings us to Franc Kuzma’s latest design, a tonearm that takes cues from his previous models and combines them all with the developmental path established by the Tri-Planar and VPI. And furthering the tradition, he has introduced a third bearing configuration, but one that’s unlike anything that’s gone before, in this or any other family tree! But before we get to that, let’s look at the major structural features of this new arm.

Starting at the front end of the arm, we find the compact and heavily triangulated headshell first seen on the AirLine. However, even this has undergone a series of refinements: the shell itself is mounted on a stub

extension with hexagonal profiles at each end and an allen grubscREW through its shaft. Slide the headshell into the end of the arm tube and the hex sections achieve a positive mate, while a small hole in the top of the tube allows the grubscREW to be nipped up to lock the assembly firmly in place. Note that the arm cabling exits the tube behind the headshell junction; this is not a removable headshell in the true sense of the word and if you want to swap cartridges you will need to disconnect and

reconnect their pins – but that beats the hell out of setting up from scratch. More importantly, the arrangement allows users to mount cartridges directly to the headshell, which eases the process considerably. There is also a threaded rod that can be screwed into the right hand shoulder of the shell, providing a finger lift or cueing aid.

The arm tube itself employs Kuzma’s familiar two-piece tapered





► construction, allowing incredibly precise adjustment of azimuth, although in this case the effective length is actually 11". This mates to a massive and incredibly deep bearing yoke, from the rear of which extend two threaded rods to carry the counterweights. The lower, thicker of these carries the composite balance weight, constructed from a single large "drum", a set of five discs of different weights and interleaving hard plastic locators to help damp the assembly. This mix and match approach ensures that the main mass can sit as close to the pivot as possible. The thinner, top rod carries the long, narrow, locking downforce weight, familiar from the AirLine. The internal cabling exits



from the inner side of the yoke, a short flexible section linking to a delrin cylinder that supports the arm-cable proper. Permanently attached to the arm tube, a small stub on the yoke allows the cable to be safely "parked", the aluminium termination cylinder being clamped in place by a small grub screw. Finally, a small but deep well on the side of the yoke allows fluid damping of the arm tube's vertical motion.

The integration of the arm tube and tonearm cable means that the cueing platform and VTA tower arrive as a separate assembly. This mounts using a simple post and collar arrangement which is compatible in terms of fixing and geometry, with the Linn three-bolt arrangement used by the Ittok, Ekos and others, albeit with a 40mm (not 30mm) central hole. That means that in theory the 4POINT can be mounted

on any deck capable of supporting a Linn tonearm – providing it can also support the Kuzma's not inconsiderable weight. And if no armboard exists, the manufacturer supplies both a mounting template and positioning jig, as well as a comprehensive toolkit and hardware for the arm. In fact, every aspect of this arm, from the superbly clear and comprehensive instructions through the fit and finish to the packaging elevates this product into the very highest echelon.

Once the collar and post have been used to set the arm's basic height, this can be preserved using a separate locking ring. Above the mounting post is positioned the VTA tower. First seen on the Airline and since adopted for the 313 and this design, this elegant arrangement employs a large, graduated knob to alter arm height and thus VTA in a continuous and repeatable manner, on a record by record basis

if so desired. Once set, the VTA is locked by a cam linked to a cueing-style lever behind the tower. It is a precise and beautifully damped set-up that's easy and intuitive to use. My one complaint is that I'd like finer graduations on the knob, making repeatable adjustments easier, but apart from that this remains the best-executed VTA adjustment I've used. The VTA tower carries the outrigger arrangement that supports the cueing device, falling-weight bias and horizontal bearing (and associated damping trough).

Which brings us to that bearing; the separate arm tube and bearing post might suggest a uni-pivot but this is a far more complex design than that. The bearing "post" is in fact an external sleeve that does sit on a vertical point (a la uni-pivot), but a second, horizontal point engages a polished trough on the front face of the post proper, preventing any fore and aft or sideways movement and thus stabilizing the sleeve. A horizontal plate is attached to the bottom of the bearing sleeve and it's this that carries the attachment for the bias thread and also the outrigger that dips into the horizontal damping trough. But on the rear of that plate is a pair of bearing cups, angled slightly back from vertical (take a look at the pictures – in this case they truly are worth a thousand words). Drop the yoke on the arm tube over the bearing sleeve and two forward angled points sit in those cups, allowing free vertical movement (and justifying the 4POINT moniker). The four pivots employed combined with the arm's massive construction should provide a combination of negligible friction and excellent stability, while an outrigger added to the top of the bearing sleeve engages the trough on the side of the yoke to complete the independent horizontal and vertical damping layout. A small stub on the rear face of the outrigger supports the arm cable, the short flexible section allowing the arm unimpeded movement.

Clearly, the separate arm tube construction means that entire tubes can be swapped, although not as easily or quickly as on the VPI arms. If you employ the vertical damping, that will need to be disengaged and then the arm cable will need to be unshipped from the outrigger and "parked" back on the bearing yoke. The arm tube can then be lifted clear, although it's still carrying the arm cable and connected via that to the phono-stage. In part, that reflects that interchangeability was never one of the design goals, although in practice, many of those looking to profit from ►

► the opportunity on offer will have two separate phono inputs (one mono or configurable, one straight RIAA), which would ease things considerably.

Finally (as if that wasn't enough) there's one more little wrinkle up the 4POINT's sleeve. You'll notice a termination box, a foot or so down the arm cable. Look a lot closer and you'll see that each cartridge tag is connected to a pair of wires coming from the arm tube. In fact, the arm is double wired, one set running from the tags in an uninterrupted run to the Silver Bullet plugs (an advantage over the breaks in the Lemo plug and phono sockets set-up used by the VPI; the price paid for that arm's peerless convenience). The other set connects to the phono sockets on the termination box. The cabling used is Crystal Cable throughout, but the provision of the termination box allows users to employ a different arm-cable from that point onwards should they so choose.

The physical description should have underlined just how easy it is to set up the 4POINT, especially as the Linn geometry and mounting has to be the most common pre-cut armboard. Kuzma even provides an under-board fixing collar to provide even clamping to unthreaded armboards. But before you reach for your LP12 or Pink Triangle, make sure the Kuzma's (off-set) mass isn't going to upset the suspension, while the arm-cable is sufficiently stiff to impede free movement too. But assuming your 'table is appropriate, then the stage by stage nature of the set-up, even down to the detachable headshell makes the process extremely straightforward, while the range of repeatable adjustments on offer means that there's no excuse for anything other

than optimum geometrical precision. Like its forebears, the Tri-Planar and the VPI (as well as earlier Kuzma designs) clever engineering ensures that you needn't compromise any aspect of proper set-up on the altar of mechanical integrity

This easily attainable geometrical precision is reflected in the quality and consistency of the sound, each cartridge used sounding more like itself than is usually the case. I ran both the Lyra Skala and Titan i, along with the vdH Condor, each with excellent results, although the differences between these three transducers, and especially the resolution gap between the two Lyras, has never more obvious. Ultimately, it was the Titan with which I did the majority of my listening, its transparency and dynamic resolution a perfect foil

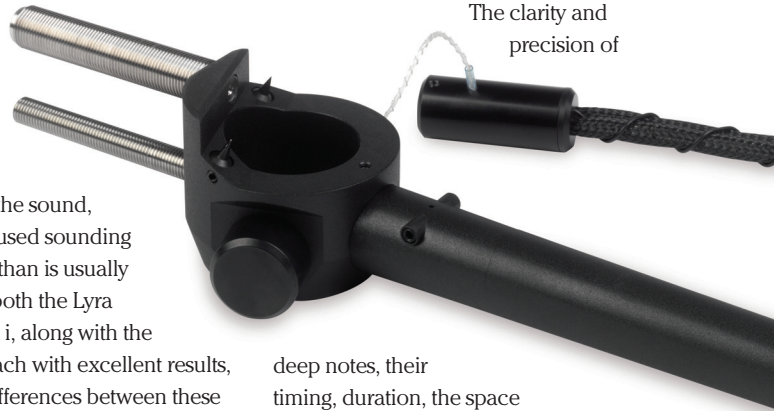
for the 4POINT's presence, life and energy. The arm was mounted on a fixed height Stabi XL4 tower, although I'm keen to try it with other decks too – especially the VPI TNT and Kuzma's own Stabi Reference, a combination which I suspect could be the audio equivalent of Floyd Mayweather Jr – just without the mouth.

The first thing that strikes you about this arm is its sheer vivacity – quickly followed by its astonishing transparency, especially at low frequencies. I've never heard a pivoted arm that can image like this – and I've never heard any arm that does bass the way the 4POINT does.

The clarity and precision of

deep notes, their timing, duration, the space between them and the air around them – but most of all the energy that propels them is in a class of its own. The normally grubby thuds of upright bass that underpin so many 60's jazz tracks are taken in hand, given shape and pace, pitch and placement. They're also given independence, never swamped by even the most frenetic big band tutti. So the wonderfully undulating bass line that underpins 'Way Out Basie' (from *Farmers Market Barbeque*) takes on a sinuous vitality, an up-beat swing that breathes new life into the track's underpinnings, leading naturally into the shockingly sudden brass stabs, tying the meandering solos into the fabric, keeping things constantly on the move – an ever present influence, shaping and guiding the music. Which is, of course, exactly how it should be – and so often isn't. So many arms soften the bass notes and lose track of them altogether once the going gets tough that its something of a surprise to hear them rendered with the same audible clarity and easy independence that you experience live.

That low frequency transparency contributes directly to the palpable acoustics conjured by the 4POINT. That and the arm's phenomenal stability; images simply don't



► wander or shimmer the way they do with other arms – effects that we are so used to that you only notice them once they're banished – a trick achieved by the Grand Prix Audio Monaco, another primo candidate to partner the Kuzma. This arm produces sound as solid as it looks, which given that it's probably the most substantial yet handsome arm I've ever used, means pretty darned solid.



That stability gives images and instruments a real presence that underpins the explosive dynamic potential of the 4POINT. Brass rips the air and drum rolls cascade in a tumble of energy. But this energy is harnessed and concentrated, tied to the instruments producing it and the music it serves; nothing escapes, not one shred is overlooked or wasted. The result, when required, is a drive and momentum that is almost physically propulsive, a vitality that is exciting and bursting with a natural sense of life.

But this isn't just about big and bold, brash and ballsy. The Kuzma is all those things when it needs to be, but it is poised, delicate and controlled too. The really impressive thing is the way it exerts those qualities at the *fff* end of the scale as easily as it does at the other extreme – and the ease with which it allows them to coexist or transits between the two. The Ricci *Carmen Fantasie* on Decca is the perfect test in this regard, Bizet's orchestral bombastics contrasting with the solo violin, the studied technique and precise measures

of the *Habanera* a world away from the pell-mell flurries of the faster passages. The dramatic sweep and stark shadings delivered by the 4POINT produce a vivid, torrid performance from the opening passages, one that leaves the listener almost breathless with the excitement

and virtuosity it reveals. Yet the transition to the slow central passage is effortlessly natural, the delicate beauty and muted shadings cherished with a poise and dignity that seems almost beyond the scope of the same arm that generated those musical pyrotechnics that opened the piece. But just follow Ricci as he builds into the finale (and you will, because you won't want to take the music off) and marvel at the way he bridges through the pizzicato sections to the lightening runs and

phrases with which the piece concludes. This is a record I know intimately, one that I've played on literally dozens of decks and probably hundreds of systems. But it left me open-mouthed and grinning inanely at Ricci's astonishing range, his ability to conjure and encompass such emotional contrasts and carry you from one to another so naturally that you don't even notice his part in doing it. Of course, what I should have been impressed by was the fact that for the first time the 4POINT had allowed the music to transcend mere technique, the unfettered dynamics, lucid phrasing, wide yet coherent bandwidth and absence of grain or edge finally allowing

the performance to escape the grooves.

In some ways this arm mirrors its lineage, combining the precise vitality and quickness of the Tri-Planar with the easy flow and rich harmonics of the VPI JMW, all built on the stability and presence of the Stogi Reference. But the 4POINT is more, so much more than the sum of those parts. The Airline challenges it in terms of delineating depth and positional precision, and the pivoted arm can't match the sheer fluidity, the grace through a phrase of the parallel tracker. But many a listener really won't care, simply blown away by the life, energy, explosive dynamics, transparency and easy control of the 4POINT; And that's before they experience its absolute delicacy, micro dynamics and preservation of the smallest musical nuance. And if you are still not convinced, just try a vocal. The big Kuzma passes that most acid of tests with the same grace and charm it tackles everything else. Just don't get spooked when you realize that Ella really IS in the room!



#### TECHNICAL SPECIFICATIONS

Type:	Pivoted tonearm
Bearing:	Kuzma 4POINT
Damping:	Independent horizontal and vertical
Mounting Geometry:	Linn compatible
Effective Length:	280mm
Effective Mass:	13g
Pivot To Spindle:	264mm
Internal Wiring:	Crystal Cable
Weight:	1650g
Price:	£3950

#### UK Distributor:

Audiofreaks  
Tel. (44)(0)208 948 4153  
Net. [www.audiofreaks.co.uk](http://www.audiofreaks.co.uk)

#### Manufacturer:

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