### EQUIPMENT REVIEW

## Kuzma RD Ultra Sonic Record Cleaning Kit

by Roy Gregory

leaning records is one of life's necessary evils.

Even before vinyl became a specialist or niche source, unceremoniously pushed aside by CD, buying secondhand records necessitated a way of cleaning the dubious contaminants that infested their surfaces, while slowly but surely, we all became aware that the pressing process itself left muck in the grooves that meant that even new discs benefitted from a good clean. Record cleaning options ran from the non-existent ("Let the stylus clean the groove, then just clean the stylus") to the ineffective (the "fabulous" Recovac) via various combinations of fluids and scrubbing brushes, all the way to smear on

and peel off latex 'face packs'. But even then, if you were serious about record cleaning you used a machine, generally the Keith Monks (expensive, slow, but quiet-ish) or the VPI (affordable, fast, but noisy). The problem is that almost all of these methods are self-defeating, either because they don't work or they are so tedious to use that only the terminally sad would persevere. On that basis alone, I've relied for years on VPI's incredibly simple machines, but as fast as they are, I still find my own personal tolerance level sits around the six-disc mark, especially if you are using a two-stage wash and rinse cleaning fluid. After that I need to lie down in a darkened room, preferably playing something very loud...



### EQUIPMENT REVIEW / KUZMA RD ULTRA SONIC RECORD CLEANING KIT

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But just recently, the record cleaning landscape has been shifting: our increasing reliance on secondhand records, coupled to the ever-increasing capabilities of our record replay systems means that the ability to clean records has never been so important, meaning that an increasing number of record cleaning machines is hitting the market. Many of these are variations on the established "wet and dry" theme, seeking to offer lower prices or more facilities. But the most significant new entry was the AudioDesk System cleaner, the first in my experience that offered a significant advance in the effectiveness of the cleaning process itself, by using ultrasonic technology. This involves rotating the record through a bath of water that is excited at ultrasonic frequencies, which in turn dislodges contaminants lodged in the record's grooves. It's a technique developed for cleaning everything from jewellery to metal parts in precision engineering: a vinyl record should be child's play - or so you'd think. In practice, the very fragility of the vinyl record poses the problem, with AudioDesk taking a few years to iron out issues surrounding the longevity and functionality of the rollers that rotated the vertical record's playing surfaces through the water bath while holding the label high and dry. Even so, the experience was salutary, and as expensive and finicky as the AudioDesk machine was (at least initially) there was no denying the effectiveness of its cleaning or the appeal of a machine that cleaned both sides of the disc in an automatic cycle. It soon became apparent that when it comes to records, there's clean - and then there's really clean. The die was cast and record cleaning would never be the same again, with a number of ultrasonic cleaners hitting the market in the years since. But for most of us, the price of entry has been prohibitive - until now.

Enter that master of cost-effective engineering, Franc Kuzma. Given the near ubiquity of ultrasonic cleaning across a whole host of precision occupations, there's no shortage of off-the-shelf cleaning baths available. Why not (he wondered) simply take advantage of an existing solution, adapting it to the task of cleaning records and cutting the price of the process into the bargain? So that's exactly what he did: Kuzma's RD kit is best considered as a cradle that allows a motorized axle to be positioned over a commercially available ultrasonic cleaning tank. Its four legs are adjustable for height,



making it compatible with a wide variety of cleaning tanks, but I've kept the best for last: the axle that holds the record being cleaned, spans the entire tank – and most tanks are a lot wider than a single, vertical record. By providing a series of spacers to separate the discs, the Kuzma RD is able to clean as many as ten records at once! Now that got my attention!

As well as the frame, with its small electric motor and drive sprocket, the kit includes all the axle elements (locking collars, spacers, and sliding retainer) to create your very own record kebab, as well as a very necessary stand in which to construct said kebab or allow the records to dry after their bath. The operation is simplicity itself. Once you have selected your cleaning bath (Kuzma supply specs and, having conducted exhaustive testing, a list of recommended models on its website) fill it with the appropriate amount of distilled water along with any additives you deem necessary (the kit comes with a small bottle of isopropyl alcohol and an even smaller bottle of wetting agent, but you could experiment with a diluted solution of any one-pot record cleaning fluid - the thing to remember is that it's the cavitation rather than the fluid that is doing the cleaning): turn it on to warm up to the recommended 33 degrees celsius and assemble the records to be cleaned while you wait for it to reach the temperature. This involves standing the axle in the vertical boss on the heavy, cast iron base and removing the spacers. Then you just stack up the records to be cleaned, alternating with the

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▶ Delrin spacers and finish off with the sliding lock collar. Lift the whole, slightly ungainly assembly and place it in the jaws atop the cradle, ensuring that the drive cogs mesh properly. Set the timer and intensity on the cleaning tank (I ran it for 20 minutes on the delicates setting) and start the motor. The records will slowly revolve through the tank until the cycle is complete, at which point you lift the axle clear and place it in the angled boss on the stand so that the records can air dry (additional axle assemblies and stands are available separately if you want to start in on the next stack of records before this batch have dried). Once dry, you give each – now incredibly pristine disc – a quick brush over to remove any surface debris, pop it into a clean inner sleeve and you are done. Each tank of fluid should clean around 400 records – but it costs peanuts to replace anyway.

Downsides? Aesthetically speaking there's no escaping the slightly "surgical" look of the tank and cradle: nobody is going to think that this is a thing of beauty. Also, don't go thinking that ultrasonic means inaudible: the bath will generate a nasty high-frequency whine that means using it in the listening room (or any other room where people spend time) is a no-no. The degree might vary with different devices, but taking both factors into account, my tank is located in the equipment storage room next to my listening room where it's handy but not intrusive. It also cuts down on visitor requests for hot dogs. It should be noted that the long-term impact of ultrasonic record cleaning is yet to be determined, but there are no scare stories yet, nearly a decade in and you need to remember that every other approach has its longevity issues too.

Now to the benefits – the very, very considerable benefits. First up is the price: at £895 for the RD kit, plus around £375 for a suitable cleaning tank, this is by far the most affordable ultrasonic cleaner out there (additional "kebab skewers" and stands cost £499 a set). It's automatic in operation (meaning you don't have to stand over it) and it cleans around ten records a time. Let me just say that again – it cleans TEN records at a time. All of which should have you reaching for your credit card already: except that I've saved the best for last – the sonic performance is remarkable. As I said before, the advent of ultrasonic cleaning revealed the difference (and distance)

#### **TECHNICAL SPECIFICATIONS**

Type: Kit to adapt regular ultrasonic bath for

record cleaning

Capacity: 10 discs per cycle

Duration: 20 minutes, plus drying time

Fluid Volume: 8-9 litres, depending on bath used -

distilled water plus chosen additives

Price: RD Kit - £895

Spare spindle and stand - £499

Manufactured by: Kuzma d.o.o.

**URL**: www.kuzma.si

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between clean and really clean. The Kuzma RD delivers up records as clean as gold pants – and musically, the benefits are smack-you-in-the-face obvious...

I could list them in audiophile terms, breaking them down into improvements in fluidity and rhythmic articulation, tonal palette, dynamic expression, separation, and timing. I could talk about the sense of easy, unforced musical flow, and the panache that becomes evident in the playing. I could point out that your records are going to sound more engaging, more natural and more enjoyable than you ever thought they could. But there's a simpler way to describe the impact of ultrasonic cleaning: suddenly, you'll find yourself waving your arms, conducting an imaginary orchestra or thrashing an air guitar. That's what ultrasonic cleaning does! It removes another layer in the process – another layer between you and the performance – and it's a layer at a critical junction. Clean your records ultrasonically and you move that much closer to the musicians and engage much more closely with their playing.

I'm convinced: ultrasonic cleaning is a genuinely fundamental step forward in record replay – one that the Kuzma RD renders affordable, functional, and convenient. It makes secondhand records even more accessible and improves the sound of brand new pressings too. I still find myself shaking my head in wonder every time I use it. This product goes way, way beyond simple recommendation: every record playing audiophile really should have one.