



Introducing the latest ultrasonic vinyl record cleaner on the block, Paul Rigby reviews the Kirmuss Audio KARC-1.

Cavitation - In The Nation

Arguably the fastest developing technology in hi-fi, ultrasonic vibration – long used in other industries for cleaning purposes – has risen to dominate midrange and high-end vinyl record cleaning too.

The idea here is to dip your vinyl into a specialist bath of distilled water (not low enough to wet the label, of course). That disc will normally be slowly mechanically rotated. Built-in transducers then introduce vibration in the water, producing

millions of rising bubbles that stretch and compress. The frequency of the transducers determine how large the bubbles become. Their structural integrity fails and they collapse... violently. If this happens near vinyl grooves, they agitate and remove surrounding particles. This is known as cavitation. Any surfactant (a substance to lower water's surface tension) added to the area attracts further bubbles.

Kirmuss has taken three years to develop the KARC-1, focusing on the right ultrasonic frequency for

vinyl cleaning, the correct height to hold the record in the bath, using a degasser (unique in hi-fi vinyl cleaning) to improve cavitation efficiency, developing an effective surfactant and more.

DESIGN

The rear of the chassis features a power cable and rocker power switch. The right side features a drain pipe for the bath. The front sees a sturdy valve switch to open/close that pipe.

Top-right features the touch interface. A readout keeps a track of



The Kirmuss handles 7in, 10in and 12in discs.

the cavitation cleaning countdown (78s only need two minutes of ultrasonic cleaning whereas vinyl requires the default five minutes per cycle). Lights indicate the active process and current temperature. Other buttons activate the cavitation time, its duration and that degass operation.

The upper, removable, one-piece motor assembly features a series of cogs and belts that gently turn the record during cleaning. It fits snugly on top of the bath. In it are slots for two 12" discs, one 10" disc and a 7" disc. This format diversity is a real plus point for the Kirmuss.

IN USE

Cleaning a record is long-winded but effective. You initially flip-flop between exposing the record to cavitation for five minutes then you apply the company's own surfactant directly to the grooves as a spray, worked in by the company's supplied brush. The system is extremely thorough and will even remove old, hardened substances that have been resident in the grooves, sometimes for decades. Repeated applications might be necessary before the grooves are totally clean - a visual indication will guide you here (the company provides help to recognise the signs).

Adding a 70:30 alcohol/distilled water mix to the distilled water acts as a de-greaser. Audiophiles will recoil with alarm at the



use of alcohol but the company is adamant, after consultation with its own chemists, that no damage will occur because only 40ml is used, less than 1% of the bath total. Also, that 40ml is a 70/30 mix with distilled water and fully soluble so it never hits the vinyl in a concentrated form.

There are other steps/tools in the cleaning process that provide a post-wash and a de-fungal cycle for the vinyl record along with an anti-static application. The Kirmuss method is nothing if not thorough.

SOUND QUALITY

I initially cleaned a dirty record using the machine and surfactant only - no alcohol was introduced at this time. An old Ritchie Havens LP provided a consistent low-level Rice Krispie noise throughout.

After two ultrasonic cycles featuring the surfactant, the noise had almost gone. Only occasional (very) minor clicks remained.

I persisted until the noise reduction had reached a plateau of quality that would not change with further cleaning applications.

In addition to the low noise, sonics had also improved. Clarity was enhanced while extra air and space was heard across the soundstage.

I then added the alcohol mix to the bath water.

I listened again, further noise was removed, making this record pretty darned silent in terms of nasty clicks, pops and white noise-type effects.

What really amazed me, though, was the improvement in sonics. Focus, precision, clarity - all rose through the roof, as it were. Haven's voice was enhanced in terms of the texture and gravel-like nature of his crescendos while his acoustic guitar was powerful and expressive during

his powerful strumming routines.

Transparency and tonal realism were the headline effects of adding the de-greaser. The improvements were impressive, to say the least.

Finally I cleaned a mucky

The hidden gearing rotates the records during the cavitation process.

The supplied ancillaries contribute to the long yet thorough vinyl clean cycle.



REFERENCE

Origin Live Sovereign turntable
Origin Live Enterprise 12in arm
Van Den Hul Crimson XGW Stradivarius cartridge
Icon PS3 phono amplifier
Aesthetix Calypso pre-amp
Icon Audio MB845 Mk.II monoblock amplifiers
Quad ESL-57 speakers with One Thing upgrade
Vertex AQ & Tellurium Q cable
Blue Horizon Professional Rack System
Harmonic Resolution Systems Noise Reduction Components
Audio Desk's Ultrasonic Pro Vinyl Cleaner

Jan Akkerman LP with my reference record cleaning machine, which reduced surface noise. Moving this record to the Kirmuss then improved the sonics by a clear distance while reducing noise a tad more and increasing gain by one to two decibels because the stylus tip had a purer contact with the groove. 'Cleaning' the same record, once more, with other record cleaning machines I have added a sonic veil to the presentation. It was as if they had coated the grooves with a new layer of grease or somesuch. Re-cleaning with the Kirmuss removed that sonic veil to enhance tonality once more.

CONCLUSION

To say that I was pleased with the performance of the Kirmuss was to issue a laughable understatement. The KARC-I not only removes troublesome noise efficiently, to give new life to your vinyl, it also provides a level of sonic transparency that is truly astounding. Once you hear the effects yourself, you'll realise that you've never actually heard your record collection. Not properly. As such, I have to declare that the KARC-I is the best record cleaner on the market. Bar none.

**KIRMUSS
AUDIO KARC-1
ULTRASONIC
RECORD CLEANER**
£1,197.60



OUTSTANDING - amongst the best.

VALUE - keenly priced.

VERDICT

Changes the face of record cleaning in terms of technology, method and price.

FOR

- degauss option
- cleaning performance
- sonic improvements
- design

AGAINST

- footprint
- long cleaning process

www.kirmussaudio.com