

# FURUTECH

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Demag Review— Tom Campbell



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### deMag LP, Disc, and Cable Demagnetizer

as reviewed by Tom Campbell

If you're a regular reader of this site, you're presumably among the converted: a true-blue audiophile who has no question that there are profound qualitative differences to be heard between different amplifiers, preamplifiers, and CD players—not to mention cables, cords, power conditioners, equipment racks, and even footers. On the other side of the audio divide are the debunkers: those who think those differences are usually at best negligible, and who view audiophiles as pitiable obsessive-compulsives who delude themselves into hearing distinctions that aren't really there.

For this latter group, the Furutech deMag has recently become something of a poster child for out-of-control audiophile madness. The deMag is a massive, luxuriously finished machine with a singular purpose: to discharge the magnetism that resides or, as the case may be, builds up in your LPs, CDs and audio cables, thereby improving their sonic performance. There are other products available that purport to do more or less the same thing, but the deMag is the biggest, baddest, most powerful and—at \$2150—the most expensive of them all.

The naysayers become apoplectic over the whole premise at play here—first, that magnetism is a significant issue affecting audio playback, and second, that discharging that magnetism requires a powerful and specialized machine to accomplish. As one Web scribe, whose piece will show up on the first page of a Google search of "Furutech deMag", put it (I've cleaned up his prose, which appears to have been written in a burst of fury):

*"OK, there is static electricity which may render objects with magnetic properties (sic); (but) what has electrostatic magnetism to do with a laser in a CD player? And why should anyone be willing to pay the \$2900 (sic) (that) Furutech*

(charges) for Demag just to get rid of electrostatic energy, as all you need to do is touch some other plastic—or better, metal—object with disc and off it goes?"

The second half of that argument is specious: magnetism and static electricity are not interchangeable terms (though the latter is inclusive of the former—[check out this video for a good grade-school primer](#)), and the deMag does more than simply discharge static electricity: it almost completely removes all magnetic energy from a treated item. But the writer's more basic point, "*What role can magnetism play in an optical medium like CDs?*" seems a potentially valid question.



According to Furutech's literature, "The silk-screened label on an optical disc contains chemical compounds such as iron, nickel, and cobalt. These materials are all strongly magnetic and easily re-magnetized." Furutech asserts that optical discs actually magnetize as they play, and that magnetic energy in general can wreak havoc on the laser's ability to read the disc. In the case of LPs, while vinyl is not itself magnetic, LPs become magnetized as a result of the pigment—the "carbon black"—added during the manufacturing process. The idea that magnetized objects can hinder a playback system based on analog waves is not hard to fathom. As for cables, "electric current generates a magnetic field as it flows through a power cord or conductor. However, *magnetic impurities within the materials themselves become magnetized* and introduce further magnetic distortion." (The entire Furutech brochure is [available here](#).)

This explanation sounds solid enough to me, though there is obviously room for opinion in the "science" at issue. But as is often the case, most of the would-be debunkers simply dismiss the deMag out of hand—they seem to have little or no interest in actually hearing what it can do. So I entered this audition process anxious to find out for myself, but admittedly a bit wary of being "fooled," and acutely aware of the potential for a placebo effect at play. In all honesty, I would have preferred to report that the deMag makes little or no difference, and that this is one pricey audiophile accessory that you can safely forget about. But, as you will see, I can report no such thing.

The operation of the deMag is simplicity itself. The front of the machine has two buttons: on the left is the on/off switch, which lights red when the unit is turned on, while on the right is the operating switch, which lights green when the demagnification process commences and then fades out, after about 20 seconds, when the process is complete. You simply place an LP or up to 5 CDs on the platter and then press the right-hand button. As one would expect, LPs should be treated on both sides, and Furutech also recommends that both sides of CDs be treated for a thorough demagnification of the whole.

The deMag has no moving parts and makes no noise whatsoever as it operates. But according to the manufacturer (in response to an email inquiry of mine), there's a lot going on inside:

While not as powerful as an industrial demagnetizer, the deMag is the most powerful demagnetizer designed for audio use (LPs, CDs, cables etc.). The deMag contains 7kms of coiled copper wire to create a strong magnetic field in the first half of the process. The process is then reversed, drawing the magnetic field out from the treated object.

Whatever is going on, the deMag's design was deemed impressive enough by industry peers to win an award for innovation from the Consumer Electronics Association in 2007.

After unpacking the machine and completing the simple work of screwing in the silver-plated footers (a fancy pair of cloth white gloves, suitable for Jeeves the butler, are supplied), I turned to my vinyl racks to search for a first record to test my new (loaned) toy. After some consideration, I chose a recent purchase, a copy of Nick Drake's *Pink Moon* (UK import, second pressing, mid-'70s "sunset" label) that I had been very pleased to find for fairly short money in a Boston-area used record store. This is a record I have in several different forms, including the *Fruit Tree* vinyl box set and the CD, but I had always heard that early UK pressings were supposed to be killer. But I found this particular copy somewhat disappointing on the first two plays—a bit thin and brittle-sounding, and not the wide, deep, immersive experience I expected. So I reasoned that this LP would be a good place to start finding out if the deMag actually does what it says.

I treated both sides and dropped the needle. If you were with me in my living room at that moment, you might have heard a quiet gulp: at least on the basis of this first LP, there was *no way* I was going to be able to say that the deMag did not make a difference. From the first moment to the last of this short (28-minute) but devastating record, the deMag helped deliver what I had expected of this record all along, rendering what I had found tight and thin suddenly airy and sweet-sounding. This record is famous for its intimate sound—it's all Nick Drake playing and singing by himself, recorded live to tape except for one piano overdub on the title track, which Drake also played himself—and on this playing, unlike the first two, the "in the room" effect was striking.

OK, I thought to myself. That first impression sure was in the deMag's favor. But first impressions can sometimes be misleading. Let's not jump to any conclusions yet.

So I grabbed another recent acquisition, a new pressing of Leo Kottke's 1969 debut *6- and 12-String Guitar*. This is made from the same stampers as Classic Records' audiophile reissue, but is the lighter-weight version that retails in most stores for \$10 to \$15. I have an original copy on the Takoma label that sounds good but not great. And, similar to *Pink Moon*, my initial opinion of this reissue was that it was tonally bright, to a somewhat unpleasant degree—in this case, better than the original in some respects, deeper and more detailed, but harder than I'd like.

Well, darned if the deMag didn't do it again. What emerged after the demagnification treatment was not as transformative as it was for *Pink Moon*—this pressing is not as fine as that vintage '70s Island issue, and nothing can change that—but it was a pronounced improvement, with a more accurate acoustic guitar tone than the record conveyed pre-treatment, and in general a sound that was just much easier on the ears and more enjoyable than it had been before. This reissue now sounded good enough to retire my old Takoma copy.

OK, I thought to myself again. This is still just the first night. The true test will be to see if these initial impressions hold up over the coming days and weeks.

Most audio enthusiasts are familiar with the dilution effect that sometimes occurs over the first few weeks with a new component or accessory. At first, we think we hear striking, positive improvements. But then those feelings get ironed out with prolonged exposure and we become indifferent or even disapproving of what the item in question has to offer.

Obviously, the products that hold up—like my Harbeth Compact 7 speakers, which have now resided in my system for almost 10 years—are the keepers, the truly special products that we hold onto and build around.

Well, all I can say is that the dilution effect never happened with the Furutech deMag. There was never an evening where I thought I might be fooling myself with this thing. Again and again, with almost every LP and CD I treated, I heard a significant, no-doubt-about-it (at least to me) improvement that was consistent in quality: a sense of tightness relieved, of hardness made supple, and of slight electronic artificiality made natural-sounding.

The fact that this happened with CDs as well as LPs was the biggest surprise. In fact, if anything, I would say that this device makes an even *bigger* difference with CDs than LPs. The top beef that many listeners have about Red Book CD is its tendency toward glare—a seemingly inherent hardness that makes long-term listening fatiguing. The deMag does a remarkable job of reducing that glare. I won't go so far as to say that it cures all of the format's ills—compact disc is still a compromised medium that will never have the airiness or extension of vinyl, reel-to-reel, or hi-rez digital—but it did go a long way toward making CDs much more of a pleasure to listen to.

One CD that has gotten a lot of play in my house in 2009 is *Rattlin' Bones*, a joint effort from Australian roots singer Kasey Chambers and her husband Shane Nicholson. I'm a fan of all of Chambers' previous CDs, which mixed rock, folk and country in almost equal measures. But she has never sounded more comfortable and confident than on this, a full-fledged bluegrass effort with most tracks featuring a two-, three- or four-piece combination of acoustic guitar, dobro, banjo, fiddle, stand-up bass or steel guitar. It is very well-recorded, but as is typical in recent years, the CD mastering is highly compressed. The disc has always struck me as a would-be audiophile recording that's been straight-jacketed by an unsympathetic mastering.

Obviously, the deMag did not add dynamic range to a CD that has little of it. But by doing what it does, it really helped this disc *breathe* in a more convincing and life-like way. The demagnification process helped bring out greater depth, nuances and microdynamics, which collectively had the *effect* of making the disc sound less compressed, contributing a sense of ease that simply hadn't been there before.

That last descriptor, in fact, is the single best one to describe what the deMag brings to the table: ease. De-magnifying your LPs and CDs with this machine really took the edge off of my system's playback. And considering that "edge", with whatever word you choose to describe it (and I've used 'em all in this review—brightness, hardness, tightness, glare, etc.) is the # 1 complaint that many audiophiles have about their system, that's a pretty big deal. Taking the edge off helps make instruments sound more tonally accurate; it gives the soundstage greater depth and width; it contributes a greater sense of "air" and brings out small details and more convincing dynamics. Again, that's a pretty big deal.

As mentioned, the deMag is also intended for use on cables. I tested this application as something of an afterthought. I treated both my speaker cables and the connections between my CD player and amp, and then stopped treating LPs and CDs to try to judge the effect on the cables. I thought I heard some easing similar to that I heard from CDs and vinyl, but it was not as noticeable or pronounced. I don't think you'd ever spend the money on the deMag just to treat your cables every once in a while. Demagnifying your discs, both vinyl and aluminum, is the machine's everyday application, and definitely its most efficacious one.

Some readers may be curious as to how the deMag might compare to a popular accessory like the Milty Zerostat 3, a zap-gun device that discharges static electricity from LPs and costs less than a hundred dollars—i.e., less than one-twentieth what the deMag costs. I have used the Zerostat before, and it is a fine product that effectively neutralizes

the snap and crackle that can result when LPs have a strong static charge—and that charge can indeed be quite strong if you live in the dry heat of a New England home in the wintertime, as I do. But its overall effect is not close to the thoroughly natural and neutral sound that the deMag produces from both LPs *and* CDs. It is the difference between alleviating a problem and solving it, between treating a symptom and curing the disease.

To step back just a bit, I don't want to overstate the "transformative" nature of the deMag. Can you live without a de-magnetizing machine? Of course you can. But once you get past the painful process of actually paying for it, will you love what the deMag does for your musical enjoyment? I think absolutely yes. I'd describe the net effect as similar in magnitude, if different in kind, to a record cleaning machine. Vinyl lovers who spring for a really good cleaner generally can't imagine ever going back, so important to them are the improvements realized: the quieter surfaces, blacker backgrounds, deeper images, etc., that result from removing the grit between the grooves. The deMag, by releasing and absorbing the magnetic/electrical energy that lives in your LPs and CDs, achieves a separate but equal improvement, helping the music on your discs to fully bloom, and to sound as good as the artists and engineers intended it to sound.

I may catch flames from some readers for wholeheartedly recommending this expensive and controversial product, but the Furutech deMag greatly enhanced my enjoyment of just about disc with which I treated it. Throughout the review process, I was frankly looking for an out—almost hoping that the spell would break, and that my enchantment with this hulking metal machine would pass—but that moment never came. I would only ask that those who might attack this review (and this product) first think about actually hearing what the deMag can do. If you haven't heard it, you really should. **Tom Campbell**