



## High Fidelity September 2006 Issue *Furutech DeMag* Review

Translated from the text appearing in Greece High Fidelity Magazine

**Furutech** is a company renowned for the outstanding quality plugs, connectors, as well as cables it has been offering for quite a few years, and all that at quite reasonable prices. This time, the Japanese firm is featuring something far more “ambitious” and exotic as well. Something, nevertheless, addressed at a very specific group. **DeMag** is a demagnetizing device for records, discs, cables and any component that could be influenced by certain static magnetic phenomena. Fact is the sound is negatively influenced by magnetic fields, as all appliances are sensitive and prone to such phenomena. Especially discs, and primarily vinyl records fall victims to magnetism and all those problems it causes-problems that have shown a proven liking to them. But how can this possibly happen, and to what extent can it influence our sound quality? Let's have a look.

### Fact or Fiction?

Almost all optical discs bear some kind of printing on the back, that is a coating containing certain chemical elements based on metals like iron, nickel and cobalt, which enjoy significantly strong magnetic characteristics, but are also prone to get demagnetized, though not by themselves. The reflective surface bearing the data of a disc consists of 99% aluminum, but also of 1% (according to **Furutech's** claims) other materials, which are intensely magnetic. Even aluminum-as they characteristically mention- can possess certain magnetic properties, due to added elements. Fact is that optical discs do tend to get magnetized as they play. The magnetic field is created as they spin. According to measurements, invariable magnetic fields have a direct effect on data acquisition.

As to our LPs, the culprit is the pigment added to the vinyl during the manufacturing process. The minimal, but existent ferrous material present in the pigment, causes the magnetization of LPs. According to measurements conducted by the Tokyo Nanotechnology Centre on behalf of **Furutech** on an HI Gauss basis, the magnetic field of an LP was reduced from 620-630 nT to 572-562 nT, following the application of **DeMag**. Evidently, according to these measurements, the results are impressive. Especially in the case of vinyl records, where the slightest parasitic magnetic field causes disturbances in the very sensitive fields of the cartridge magnets, things are far more serious and dangerous for the final acoustic result. The

same thing applies, though to a lower extent, to power cables, which develop the problem as a result of the magnetic field created as the current flows through a conductor. Thus, the magnetic substances within the materials themselves get magnetized, introducing in turn further magnetic distortion. That's what DeMag promises to solve.

### **But let us have a closer look... The anti-magnetic silver disc.**

Visually, **DeMag** is a quite impressive and handsome device. A large, hefty "disc", built to excellence, mounted on three needlepoint pegs. **DeMag** comes with a top quality **Furutech** power cable in the package. Up to 5 CDs or DVDs can be accommodated simultaneously with absolute ease and demagnetized on the quite large diameter stable platter. One can also quite easily put their power cables, or an LP, of course, on the ample platter.

As soon as the object to be demagnetized is accommodated on the platter, the device is turned on at the push of the left hand button, while pushing the other one, the "erasure" is initiated, which normally takes no longer than 20 seconds. In the case of power cables, however, this might take slightly longer. Next, we remove the object and everything is OK. That simple.

### **Is actually anything heard?**

That any kind of magnetism has a negative effect on sound quality is common knowledge. However, to what extent this is audible, is a rather debatable issue, at least until today. In the last few years I have experimented with such devices, supposed to demagnetize optical discs, but with completely disappointing results, not to say completely negative. Especially in the case of one such device employing helicoidal demagnetizers, from the moment the disc stopped the part of it that remained exposed to the fixed magnet underneath it, was further magnetized instead of getting demagnetized. Of course, **Furutech** are well aware of this. Therefore, they have developed a technology of their own, called **Furutech's DeMag Ring Magnet Technology**, according to which the power fluctuates initially upwards and consecutively downwards, so that all magnetism is totally removed. So, on getting my hands on **DeMag**, my curiosity was at its peak. I started with vinyl records. Well, there is a difference, and it is indeed, intensely audible. And, the older and more used the record is, the bigger the difference is, located basically towards both ends of the acoustical spectrum, especially the lower end, with the bass gaining extent, plasticity and momentum, whereas treble gains in both extent and analysis.

Nuances are enlivened, and dynamic contrast is significantly enhanced, donning the musical work a much more impressive nature. Differences, though much more difficult to discern, existed even in the case of records played for less than 10 times. The same things apply to CDs, but to a much lesser extent. I would say that in vinyl records the improvement in the aforementioned fields exceeds 5-10%, whereas in CDs at no time does it exceed 5%. At least that applies to my system. As for cables, in defiance of my efforts, I was not able to discern a difference, however hard I tried. Their acoustic characteristics remained unaltered, with no trace of change. Another interesting point: Once demagnetized, a record should be played several times (more than 6), before it starts showing certain magnetization phenomena, thus saving one the trouble of the continuous repetition of the process.

**DeMag** is excellent in its kind, easy, ultimately functional and simple to use. All procedures are swiftly performed and are more of a game than some boring chore one is obliged to perform. As for audible improvement, it certainly exists, especially in vinyl records.

The question is to what extent one seeks absolute perfection. **DeMag** is not cheap. But in the hands of the perfectionist audiophile, one who wants to get the most of his system and records, it can become an indispensable "weapon", in which case I strongly recommend it.