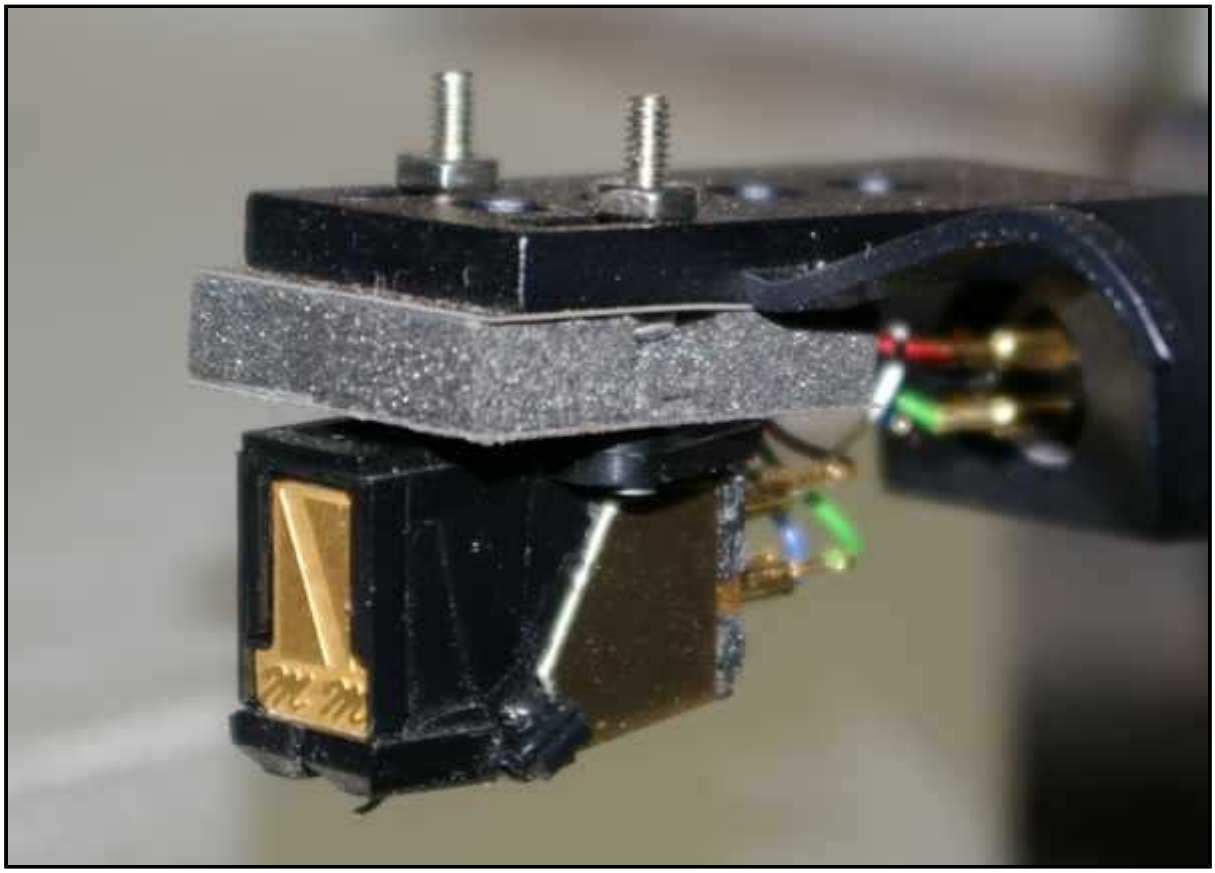
The Cartridge Man's Isolator (and Music Maker mkIII)

The Wonder Stuff - losing those vibes

Product: Phono Cartridge Isolator
Manufacturer: The Cartridge Man - UK
Price: 120 Euro approx
Author: Geoff Husband - TNT France
Reviewed: September, 2005



[Italian version]

Introduction

Len Gregory (AKA The Cartridge Man) needs little introduction to regular TNT readers. His aim in life seems to be to plough a furrow through vinyl in a way unique to him. Where almost every high-end cartridge is a moving coil (MC) he

produces a rebuilt Grado moving-iron with fancy tip and gives us one of the most detailed and uncoloured sources I've heard. So when Len rang me up and said he'd updated the Music Maker cartridge I was happy to give it a listen.

The result - well OK the Music Maker III was undeniably the same cartridge. For those who've not heard it (and here I'd direct you to Lucio's review) it doesn't sound like a moving coil. A good moving magnet gives a solid, clean reproduction which lacks the air and "ambiance" of a true high-end moving coil. The MM III takes the unflappable nature of a good moving magnet and expands its abilities so much that the "magic" of those high-end moving coils is approached but the precise and incredibly accurate reproduction of the MM III marks it as something special. I can only echo Lucio's comments on sibilants which cause problems with many cartridges and yet which the MM seems to take in its stride.

So what did the new MK III bring to the party. Well hand on heart I wouldn't have spotted the change unless it was a back-to-back swap. The difference was small but significant - a feeling that the noise floor of the cartridge had moved back a step allowing the cartridge to pull out even more low level detail (already a strong point) and give more acoustic clues to a venue.

Chatting with Len revealed that the difference between the Mk II and III was simply the addition of some special damping material into the cartridge body. Len was cagey about what it actually was, but its origin was the motor industry of all places. As Len says "there isn't enough money in hi-fi to justify big research budgets for new materials, but it's chicken feed for the motor industry".

And now for something completely different

Move on a couple of months and Len sends me an email titled "Have I got news for you".

Len had been playing with his new 'wonder stuff' and produced a isolator for a cartridge and two were in the post to me - comments please...

What arrived you can see in the pictures. A layer of 'the wonder stuff' was sandwiched between two 0.2mm thick stainless steel sheets, one of which had cartridge bolts attached and the other two locating pins. A cartridge is stuck (by removing a strip of protective paper from the glued bottom of the isolator) directly to one steel sheet, then the combination is bolted onto the headshell using the standard bolts. The important thing here is that the only material

linking the headshell to the cartridge is the layer of 'wonder stuff' - no bolts run from one to the other.

So before going on we'd better have a look at the material itself. According to Len it's not a foam, but a "closed cell, crosslinked ethylene copolymer' it is unconditionally stable , impact absorbent, chemical resistant, fire resistant, and not affected by ultra violet rays".

So in a house fire when all your worldly goods are fried that ol' Isolator will still be OK :-) Mind you the UV resistance is important. Unlike say Neoprene foam, if it's compressed it doesn't spring back and is in effect ruined. Its job is to isolate the cartridge from vibrations - more on that later.

The Snags

Before I go further it's important to realise that bolting this onto your arm/cartridge will inevitably have several effects beyond the designed isolation. For most people these are irrelevant but I know I'll get mails unless I point them out so here goes.

First, and most importantly it increases the cartridge height by about 5 mm. If you have an arm without VTA adjustment (e.g. Rega) then you will have to fiddle with spacers. It will also have an effect on arm geometry, in particular the relationship between the bearing and stylus height. In theory this increases the forward/back movement of the stylus over warps (though with some arms with a pivot below the stylus it may improve the situation) to add to the warp wow but adding a fraction to bugger all is still bugger all. On the 507 there was a hint of warp wow due to the high pivot and short armtube, but I couldn't spot the difference the Isolator made.

Second the isolator adds mass to the arm - about 2 grams if you allow for the fact that the isolator includes the mounting bolts. You need to adjust for this, but the effective mass will also rise fractionally. This will have an effect, but whether it is audible is highly debatable, but in a world where people claim to hear the most amazing things I thought I'd cover my back.

Lastly it isn't going to make your arm look better. If Clearaudio made this it'd be a beautiful piece of sculpture designed to enhance the visual experience of owning one of their turntables (and charge accordingly). Len just wanted something that worked...

What is it supposed to do?

A turntable produces a mass of vibrations when it is playing. Bearing and motor noise are but two, but also the very act of playing the record drives vibrations from the record to the cartridge - arm - armboard - chassis - bearing - platter - record and then back to the cartridge. In effect what you have is a feedback loop, and that proportion of vibrations that arrive back to the cartridge having done the loop will be greatly attenuated (depending on the quality of the turntable) but also out of phase and with certain frequencies exaggerated. Any outside vibrations (from motor, airborne vibrations, from the turntable stand etc) will enter that loop and begin to go round and round screwing phase and tone. The idea is to break the loop and Len believes the best point to break it is at the primary source - the cartridge.

Those who've read my 'Blu-tac' tweak for the Orbe will see that the addition of a thin layer of blu-tac under the Orbe armboard made a big difference to the clarity and bass control of my own turntable. In the past I've played with blu-tac between the cartridge and headshell with some good results but with considerable risk to the cartridge (blu-tac can be pretty permanent) and considerable inconsistency. So you see that when Len described what he was trying to do he was pushing on at least a partially open door. It was a problem I'd identified but here was potentially a ready-made solution.

All that said, let's not forget that all this flies in the face of accepted wisdom that the bearing/platter/arm/cartridge link should be as rigid as possible - at least at audible frequencies, so what the Isolator does is controversial to say the least... However the inportant phrase here is "at audible frequencies". No-one is going to pretend that a unipivot arm is remotely rigid at anything but audio frequencies and yet they work fine, so we're not into heresy here - just getting close :-)

In use

The Isolator has a self-adhesive side which you stick to the cartridge and then the other side just bolts up as normal. The unit is designed to work on all cartridges but it seemed fair to use it with its natural partner the MMIII and the Hadcock tonearm.

Fitting and adjusting the arm took 10 minutes after which the MMIII's line-contact stylus dropped into the first groove - 'Sheherizade'(a wonderful old Decca conducted by Ernest Ansermat). Digging swiftly into my oddments box of hi-fi jargon pulled out 'open window' and 'dark background' - OK they'll do. The MMIII and Hadcock, fitted to my Orbe are already a truly hi-end

combination, adding the Isolator did more than guild-the-lily.

So what happened? The record is quite noisy, one reason I chose it, and here there was an audible improvement, not only did the pops and crackles reduce, becoming somehow 'softer' but vinyl roar and just that general background mess retreated into the darker background already mentioned. My experience with some damping products (the Deflex platter mat for example) is that they slug the sound, everything sounds rounded off and mushy, the loss of surface noise matched by a loss of definition. The Isolator did the opposite. Pulling back the noise floor allowed the Hadcock's normally sparkling performance to take on extra shine, again those little acoustic clues pull forward and tiny details become more obvious. Sheherizade has a wonderful solo violin section, which suffers badly from noise on my well-used copy. Now the noise was reduced but the edge of bow on string remained as positive as ever and the reflections of the hall more obvious.

A significant improvement - without question. Trying other records right up to the rawest recordings (Polly Styrene's 'Bondage - up Yours') showed no smoothing off or sanitising of the sound, dynamics remaining excellent. I had feared that when things got busy then everything would clump together as that layer of polymer allowed the cartridge to move relative to the groove, but it appears that as far as the music signal was concerned nothing was lost.

So now on to my SME 4. Again an improvement but rather different to the effect on the Hadcock. I've said during my turntable tests that the SME4 sounds rather 'dirty' with the MM cartridge. This problem simply vanished with the Isolator. Was there a missmatch between the MM and the SME with regards to some resonant frequency which the Isolator killed off? Who knows, but it made a combination I'd previously avoided sound beautiful. I still prefer the Hadcock/MMIII for it's speed and openness but the SME worked just fine.

Now onto my Dynavector 507. Here things were less clear cut. With an absolutely massive U-section arm there were no pipe resonances and with the low effective mass always making live easy for the cartridge, this is my favourite arm for the MMIII. I think part of the 507's armoury is it's simply huge mass compared to most arms (don't try it on a suspended table!) - and I think this alone tends to make that feedback loop previously mentioned less of a problem. Swapping back and forth I did prefer the Isolator but here we're talking a far more subtle change than with the Hadcock or SME. The significant thing was that once again there was no downside to its (this time slight) lowering of the noise floor.

Conclusion

The Isolator costs £85. My first instinct on seeing something like this is to look to see how I could achieve the same effect for less. I looks like it should be easy, after all it seems so simple, but when you look carefully, even if you did have access to the 'wonder stuff' it would be very difficult to make a copy - I wouldn't know where to start. By that measure alone it must therefore be at least reasonable value for money. But the problem is that is makes a difference wholly disproportionate to its appearance or cost. The effect on the Hadcock was as if you'd just spent a lot of money on an arm or cartridge, but then even stock, the Hadcock frightens most megabuck arms so where does that leave it? Ditto with the SME and even with the 507 you'd have to say it was a value-for-money upgrade. I did try the isolator with a couple of Dynavector MC cartridges and here there was also an improvement, but we're starting to throw in a lot of variables here (and make a loooong review) but I go as far to say that the Isolator is worth at least trying with any combination - I've yet to find one that sounded worse, though some could be classed as 'different'. If I had a lot more time and a stack of turntables it'd be interesting to see if the isolator can reduce the rumble on a Garrard 401, or the bloom of an LP12 - is it the panacea for all turntable ills? I very much doubt it but it might be worth a try :-)

So scoring 10/10 on the weirdness meter, and slaughtering a whole herd of 'sacred cows', the Isolator joins the select band of tweaks that work.

systems used

- Vinyl: Michell Orbe SME IV/Dynavector XV-1, XX-2, Music Maker
- Phono stages: GramAmp Era Gold Lehmann Black Cube Twin.
- CD: Audionote Zero CD/DAC
- Preamp/poweramp: Audionote M3/Quest Silver
- Cables: FFRC and Sonic Link speaker cables. DIY silver interconnects. Audionote silver interconnects.
- Speakers:Loth-x Polaris and REL Stentor.

Test records used... - Killers