

# HIFICRITIC

AUDIO REVIEW MAGAZINE £17 Vol9/No2 JUL - SEPT 2015

## CABINET RESPONSIBILITY

Keith Howard looks at the thorny question of loudspeaker cabinets, and investigates some interesting new Dutch software

## ARCAM A49

Chris Bryant is very impressed by the sound quality of Arcam's new 'Class G' integrated amplifier

## NAIM STATEMENT ENCORE

Ten weeks on and Naim's remarkable Statement amplification continues to improve, as Martin Colloms explains

## THREE BLOGS

Everard, Kennedy and Rigby summarise their recent web-blogs on a very diverse collection of components

## MEETING THE SONDUCTOR

Ole Lund Christiansen discusses the techniques he uses when designing a purpose-built listening room

## PART METAL JACKET

Newcomer MBA's loudspeakers use metal enclosures to very good effect, as Paul Messenger discovers

## MUSIC & MORE

### REVIEWED THIS ISSUE

Arcam A49  
Linn Klimax Solo  
Linn Klimax DSM  
MBA Progression  
MBA Pulse  
Naim Statement  
Spendor A5R  
HIFIMAN HE400S  
HIFIMAN HE1000  
McIntosh MHA100  
Goodmans Triaxiom 212c  
Existence Euphoric



# A Mono Obsession

PAUL RIGBY OF [www.theaudiophileman.com](http://www.theaudiophileman.com) DESCRIBES NOT ONLY THE LACK OF TRUE MONO/STEREO VINYL COMPATIBILITY, BUT THAT THERE ARE INDEED TWO SPECIES OF MONO



In my last piece, I mentioned a mono cartridge made by a Japanese outfit called Miyajima. At the time of writing I had reviewed the 1mil tip version of the company's top-end mono cartridge, the *Zero*, a design that weighs a substantial 11.8g and features a chassis made from African blackwood. Then the UK distributor Timestep ([www.time-step.com](http://www.time-step.com)) gave me the opportunity to review a variation on this theme – the same *Zero* cartridge, but this time with a 0.7mil profile radius stylus tip. [FYI, 1mil is 1/1,000in, or one-thousandth of an inch.]

Why would I want to do that? Well, the general theory is that when vinyl as we know it hit the consumer market around 1948, stereo wasn't even a twinkle in the eyes of the mastering engineers. The vinyl world was ruled by mono, and largely by mono discs with grooves optimised for 1mil. Hence, to hear a mono disc properly and in all of its glory, you needed to play that genre of disc with a 1mil conical stylus tip, a mono cartridge (and preferably a solitary speaker).

Stereophony was introduced subsequently; it became more popular, and the commercial balance started to tip in stereo's favour. Stereo became the 'in thing' and mono was suddenly old fashioned. What happened then has led to more confusion amongst audiophiles than any other single event in the history of recording and, more to the point, in accurate sonic reproduction.

Although some studios (eg Blue Note) were recording in stereo from around 1958, in broad terms,

from around 1962 to somewhere around 1967, the industry began to retool (these years are not fixed, by the way). That is, the recording industry slowly began to dump its mono cutting gear and replace it with stereo cutting gear. The story goes that, in order to retain a mono option, those same companies also used stereo cutting gear with a mono plug-in module.

The typical stereo groove measures 0.7mil so any mono plug-in would also be cut at 0.7mil, which is why there are two different dominant mono groove sizes. The trouble is that the industry didn't draw a line in the sand and exclaim: "From this day, henceforth, everyone will change from 1mil mono to 0.7mil stereo/mono!" Instead, the changeover happened in a very bitty and haphazard way. Some outfits changed sooner than others, cutting 0.7mil mono and stereo grooves; some cut to 0.7mil stereo but 1mil mono; others only dealt in 1mil mono. A huge installed base of mono record players existed of course, and their cartridges, lacking vertical compliance, would damage a stereo record on first playing, so a parallel catalogue developed. Later cartridges were marketed as mono/ stereo compatible even in a mono player.

In very general terms, a host of early mono recordings should therefore be played with a 1mil stylus, then there's the messy and confused mid-period crossover area, and finally the later and present day period where mono discs should be played with a 0.7mil stylus tip. How does one know which tip to use? No obvious indicator or label is available to identify this distinction. Some enthusiasts have wondered if there is a special code on the run-out grooves, or maybe something in the catalogue number that indicates which, but nothing concrete has arisen. Others have suggested rather more desperate measures such as tracking down the original notes from the mastering engineers involved. Some enthusiasts have metaphorically struck the desk in frustration and queried why mastering engineers have not put all of this information on the internet specifically for their benefit!

Of course, the best way to find out is play each mono LP on two cartridges, one with a 1mil and the other with a 0.7mil stylus, to see which sounds best. You'd need two decks or an arm with transferable headshells. But do you really want to be testing every single mono disc?

I did hear one intriguing suggestion that might help reduce the testing time. If you see a mono LP with the word 'Mono' on the sleeve then, logically that mono disc will have been cut and pressed during the crossover period. After all, if it was pressed earlier why put 'Mono' on the cover at all? Everything was mono then. As for later? Mono became a novelty and a big thing was made of the fact in terms of bonus tracks, etc, so the 'Mono' appellation would not be on the sleeve in such a way (I tentatively assert). I would therefore suggest that only labelled discs ought to be 'tested'. (The situation then becomes still more complicated, as I hear from one or two audiophile sources of mono records with the odd stereo track on them!)

### Is it Worth the Bother?

This is where my blog/website comes in, because I wondered whether pursuing these mono differences was really worth all the effort involved, and have written a piece on this very subject. I did a sort of head-to-head...to head, as it were, grabbing an old mono vinyl pressing (featuring 1mil grooves), a more recent mono vinyl pressing (featuring 0.7mil grooves) and tested each with a Miyajima *Zero* 1mil, a second example with a 0.7mil tip, and a stereo Benz *Glider* of a similar value. I used an Icon Audio *PS3* phono amp with a mono switch in an attempt to create a level playing field.

I'll leave the full gory details to the blog review, but the essence of the comparison was this. Playing a stereo cartridge on a mono LP and flicking the mono switch to 'on' just doesn't cut it, curiously. Before I had approached a mono cartridge in any sort of serious manner, I used to listen to mono LPs with my stereo Benz *Glider*, and thought that the resultant music sounded perfectly reasonable and acceptable. Not any more. Not since I've heard what a mono cartridge can do. When compared to a mono cartridge, a stereo cartridge sounds confused, restricted, veiled and just plain nasty. Even playing a 0.7mil mono cartridge in a (wrong) 1mil groove sounded like a breath of fresh air compared to that horrible – truly horrible – stereo cartridge noise.

Taking a rather stricter reviewer's stance, and despite the fact that it was rattling around in the big groove and not hitting all of the walls at once, the 0.7mil tip in the 1mil groove made an admirable if slightly weedy noise. It lacked some fine detail but was sprightly and lively. (However, running a 1mil tip down a 1mil groove was just incredible in comparison, with big bold bass, plus exquisite detail and clarity.) Playing a 0.7mil groove with a 1mil tip also sounded weedy, as it sat too high in the 0.7mil

groove, so with such LPs, the ultimate bass, detail and clarity only really happened when using a 0.7mil tip. But even though a 1mil tip might operate in the 'wrong' groove, it still sounded far better than the results when using a stereo cartridge.

Actually, some people use 'wrong' tips in 'wrong grooves' for the very good reason of trying to avoid worn records. Think about it, the 0.7mil tip in the 1mil groove will track lower in the groove, while the 1mil tip will sit high in a 0.7 groove, situations that might be ideal for playing a well worn LP or single. In addition, for completists' sake, consider the rarer 0.5mil tip. The last time I heard of a mono cartridge with a 0.5mil tip was a Stanton example (the *5105AA* stylus assembly, used in a *500/V15* body). As you might expect, this stylus runs very low in the groove indeed and can easily come across issues of dust plus micro burrs from the original cut, but it's a credible option if the record itself is in a bad state.

I'll finish by adding several points and an appeal. First, after careful testing, I find that mono cartridges make a mono LP come alive. Stereo cartridges sound very poor in mono grooves and should never be used as such. More than that, older mono LPs should use 1mil tips and more modern pressings 0.7mil tips.

I'll go further than that, though. After living with mono LPs for some time and using the right tools for the job, once I reverted back to stereo I found the change a bit of a culture shock. In fact, at the exact moment of change, stereo sounded, what, gimmicky? Toy-like? False? I'm not surprised that The Beatles considered that mono was king right up until 1967. Don't be fooled by the propaganda. Mono, heard in the properly prescribed manner, offers a vast soundstage of carefully laid out and properly positioned instruments, with a clarity that stereo can only dream about.

As far as more tenuous ideas and theories are concerned, I must appeal to readers. Can anybody provide more concrete information on the various mono disc dates? Does anyone out there have a secure system of dating 1mil and 0.7mil grooves on mono LPs?

Paul Rigby can be found fretting over groove sizes on his website/blog, The Audiophile Man ([www.theaudiophileman.com](http://www.theaudiophileman.com))

