Subject: Straight vs. S-shaped Tonearms
Posted by matt on Wed, 03 Aug 2005 18:03:50 GMT
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Hi- Fairly new to this, but I've been reading contradictory things about pros/cons of straight and s-shaped tonearms. I have a straight tonearm but do not dj. My vinyl collection is well cared for and am more into sound quality. I have an Audio Technica AT440ML cartridge. Does my straight tonearm really have poorer sound quality and wear out my records faster? Is my cartridge/stereo at full potential with a straight tonearm?Thanks for your time and advice,Matt

Subject: Re: Straight vs. S-shaped Tonearms
Posted by Dominic on Thu, 04 Aug 2005 21:04:27 GMT
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I think the difference is cosmetic. The cart is rotating from the same fixed point in both cases. Also the straight arms turn the cartridge to a tangent at the headpiece anyway so there's no such thing as a straight arm. Years ago there was a great deal of discussion among audiophiles about the damping factor of different materials used in the tone arm, its mass, sympathetic vibrations, tracking ability, etc. I think that by 1980 most manufacturers had solved these problems.

Subject: Re: Straight vs. S-shaped Tonearms
Posted by Manualblock on Thu, 04 Aug 2005 21:15:12 GMT
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The arc of tangency is different from the s-shaped to the straight arm. There are some good sites that describe this relationship. Just type tonearm geometry into the header and you will get lots of info. Both types will produce good results as Dominic says.

Subject: Re: Straight vs. S-shaped Tonearms
Posted by hurdy_gurdyman on Sun, 07 Aug 2005 20:42:55 GMT
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I haven't been able to find any info on a S shaped arm having better tangital tracking than a straight. Seeing as the location of the pivot vs stylus can be identical with both types, it shouldn't have any difference for tanganital tracking. I have read where a straight arm has a shorter tube (a straight line is the shortest distance between two points), thus will have less mass (if made of the same materials.) It will also be stiffer. A S shaped arm, in theory, will have better lateral balance.

In other words, the cartidges natural tendancy to tip over with a pivoted arm is reduced with a S shaped arm. It's unclear if this can make an audible difference or not. Both types of arms can have supurb performance. I happen to like the looks of an S or J shaped arm best, but this has nothing to do with how well it will perform.Anyone have any links to where S vs Straight is discussed in an informative way?Dave

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Subject: Re: Straight vs. S-shaped Tonearms
Posted by Manualblock on Sun, 07 Aug 2005 21:20:54 GMT
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I can find the links but I have a hard time posting them. If you like I could just print one out and there you go.But understand I never said one method is better than another. Only that there are issues with either arm and designers choose them for individual reasons. Your points of lower mass vs. better lateral balance are correct. Allow me a small rant. If there were a clear winner here it is tangential tracking provided it is done correctly and that is expensive.As in all things mechanical the quality lies in the materials and proper execution more so than the particular design.

Subject: Re: Straight vs. S-shaped Tonearms
Posted by hurdy_gurdyman on Mon, 08 Aug 2005 02:01:27 GMT
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I agree that, at least in theory, tangential arms are superior. Now, if they could just make one at the same price as a simple pivoted arm...I don't know what kind of computer system you have, but with any windows compatible internet software I've seen, posting links is easy. Just right click on the address in the address bar near the top of the page when at the page you want to link to and then click on "copy" in the tool window that shows up. Next, when you are posting on the forum, right click and then click on "paste". I've no idea how non-windows compatible software works.Please don't waste forum space re-printing an entire article just for me. Dave

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