Subject: Re: Tone arm shapes
Posted by Manualblock on Wed, 28 Jul 2004 12:56:37 GMT
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The simplest explanation or the blue plate ala carte? S-shaped arms are more accurate at the two null points of the arc the arm transcribes across the record surface, but it is less accurate at all other points. The straight arm is a little less spot on at the nulls but more closely algned throughout the rest of the arc.Linear Trackers are the most accurate however they must be actively driven across the platter which causes another set of problems designing for the least applied bias as well as constant correction applied.Bill mentions the Dynavector DV 5o5 I beleive? That arm uses some tricks to overcome inertia in both the verticle and horizontal planes. The object is to try and provide a large effective mass in the horizontal plane with good damping while effecting the lowest mass in the verticle plane. They have a great tutorial on their website.The longer the distance from pivot point to stylus overhang the better in most gimbal or uni-pivot arms since that allows for the most accurate overhang adjustment and describes a flatter arc.These are simple explanations for very complicated issues. Really asking which is the best geometry is like asking is a 2a3 better than a 300b? It depends on execution. More important than geometry is bearing integrity and resonance control. Unfortunately good bearing manufacture is expensive. In Gimbal arm bearings the inertia in both planes is the same but the fine line exists between accuracy and friction depending on the bearing tolerances.Uni-pivots solve that problem but in the verticle plane they tend to misalign on large excursions as the stylus is thrust upward.The most important aspect of TT is mating the right arm/table/cart. I have seen very high compliance carts. mounted on high mass arms all the time, not to mention misaligned carts. improperly loaded.Before you go with that bargain cart. check with the manufacturer of the TT. Rule of thumb is gimball bearings on suspended TT and uni-pivots on solid plinths.There is a guy in one of the clubs who built a tonearm out of a no.2 pencil. He built a scaffold out of aluminun and hung the arm from it with fishing wire. The cart. was glued to the erasure and he rigged up a rubber band as a anti-skate device. As the arm traced the grooves the rubber band wound up providing bias counterclockwise to the arc. I never heard it but it got good reviews. Mr. Martinelli, if you are serious about DIY tonearm try this site; Bernhard Kistners Audio Pages. He is building a Linear Tracker that looks real nice. J.R.If you would like my opinion, I use my Linn with the Linn Ittock type LV111 simply because they were made to work together and while slightly bloated in the base and they run a little slow, they still play music better than most other tables within reason. If I were to look for something more modern I would check out the Audionote tables. Maybe we can get some input on those. I really liked the MM cart. they make and I think I am ready to change from MC.