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Subject: Turntable Cartridge Measurements

Posted by [Wayne Parham](#) on Fri, 21 Dec 2018 21:52:54 GMT

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In the "Stylus Inspection" thread, we got sidetracked onto the related topic of cartridge evaluation. So that prompted me to start a new thread, specifically about the ways to measure cartridges.

I found an article in the attached "Bruel & Kjaer Technical Review" journal from 1976. Pages 25-34 discuss using an accelerometer to provide a signal for testing turntable cartridges.

Bruel & Kjaer Technical Review, 1976, No. 2

I understand that some people use a test record instead of an accelerometer to vibrate the stylus. That would be good too and probably more accessible for most people.

I've tended to trust cartridge manufacturers to provide products that perform well, having flat frequency response and low distortion. They are sort of a "trusted reference" for me. But it occurred to me that this is quite an assumption.

Even if the cartridge provides flat response with the stylus provided when it is connected to the right load impedance on the input of a phono stage with the perfect RIAA curve - How much am I deviating from that years later when I switch to an aftermarket replacement stylus? And how much of an impact does the load resistance and capacitance matter? The RIAA curve in the phono stage isn't a cartridge issue, but it definitely matters too, and its filter function may depend upon and interact with the cartridge source impedance. So these are the things I'd love to see actually measured.