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Subject: Idler Drive and my Rek-O-Kut project

Posted by [hurdy\\_gurdyman](#) on Tue, 06 Mar 2007 14:04:59 GMT

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I've been working on a turntable project for a couple of months now. It's a late 50's Rek-O-Kut that I acquired that was still new in-the-box. I'm building a massive plinth for it and eventually will be installing an Infinity Black Widow tone arm. I had a new idler wheel made from a local machinist and am using an O- ring for rubber. The ROK turntable has an incredible platter bearing with the well made of cast iron instead of the usual bronze. The spindle shaft has a groove in it that continuously pulls oil up from the bottom to let it fall back from the top of the well, so there is always a coating of oil on everything in the bearing assembly. The massive plinth is to damp/absorb any noise the idler drive may exhibit. Here's a link to some photos I have of the project:[http://new.photos.yahoo.com/the\\_hurdy\\_gurdyman/album/576460762387548586](http://new.photos.yahoo.com/the_hurdy_gurdyman/album/576460762387548586) I have an old AR-XA arm I'm using for awhile until my Black Widow arrives, which may be a few weeks yet. There is an old Shure M91E cartridge installed. Why idler drive? Well, for one thing, I've always had more long-term pleasure out of my old Dual idler drives than out of the various belt and direct drive units I've owned, this in spite of the somewhat more rumble my Duals have (actually more of a bad platter bearing design than and idler wheel problem with the old Duals). Now I'm seeing just how far I can go with idler drive. So far, even with the primitive arm and cart, I'm getting better analog sound than I've ever had. Here's some links to what got me started on this latest crazy binge: (click on the link at the bottom of this page to get a PDF file with what may be the longest audio thread of all time) <http://www.lenco-lovers.com/forum/viewtopic.php?t=86> And continued here: <http://forum.audiogon.com/cgi-bin/fr.pl?eanlg&1157059532&openflup&115&4#115> That should keep you turntable addicts busy awhile and give you something to think about. I know I'm hooked on idler drive permanently! Dave

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Subject: Re: Idler Drive and my Rek-O-Kut project

Posted by [Wayne Parham](#) on Tue, 06 Mar 2007 14:54:34 GMT

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Oh wow, Dave, that's cool! Off the beaten path and interesting!

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Subject: Re: Idler Drive and my Rek-O-Kut project

Posted by [SteveBrown](#) on Tue, 06 Mar 2007 15:20:55 GMT

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Dave, I have two ROK's at home. One in a heavy plinth, one in a light plinth (have not listened too much to that one yet). One thing I found, that you may not have to deal with given the "new" nature of your table, is that the lead out wiring insulation on both motors has broken down badly over the years. By the way, the heavy plinth seems to work well, though you can hear the table

from a couple feet away. I've used both an RB250 and a Audio Technica 1005 II on the table with good results. I'd suggest a big hole for the tonearm and then making mounting plates to fit over that to accomodate different arms. Oh, and I found that a "Herbie" mat sure beats the standard ROK heavy rubber mat. Best of luck!

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Subject: Re: Idler Drive and my Rek-O-Kut project

Posted by [hurdy\\_gurdyman](#) on Tue, 06 Mar 2007 19:13:24 GMT

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Hey Steve, The wiring on my motor is just like new, as are the rubber grommets. I have to get my ear about three inches from the table to hear the motor running. I thoroughly oiled the motor with Mobil 1 5W-20 fully synthetic oil. It was dry when I got it. Probably never oiled at all before this. I suspect the rubber O-ring idler wheel I had made is quieter than the harder rubber of the stock wheel. This may contribute to the quietness, as I can't hear any change in sound from engaging the motor and having it run without being engaged. The table actually is a bit quieter than my old AR-XA belt drive. Quite amazing, actually! If you look close at the pictures on my yahoo photos site, you'll see the round cut-out on the backside of the plinth. This has a removable round mounting plate for just as you suggested. I'm using a thick Denon hard rubber platter mat which does a great job damping the platter. Dave

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Subject: Re: Idler Drive and my Rek-O-Kut project

Posted by [hurdy\\_gurdyman](#) on Tue, 06 Mar 2007 19:24:30 GMT

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I have found the whole thread very interesting (at least that that I've managed to find time to read. Haven't quite finished it all yet.) I'm one of those few who have preferred idler drive over belt and direct drive for over 30 years. I always thought I was the lone stranger on this, and maybe a bit crazy. It's good to feel vindicated. The heavy plinth idea is just icing on the cake, adding that last bit to make these old tables quiet enough to compete with everything a belt or direct drive can do, and be superior in many things. I seriously doubt if I'll ever bother with another turntable again, as this one is about perfect. I'll just play with different arms and cartridges. Dave

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Subject: Re: Idler Drive and my Rek-O-Kut project

Posted by [SteveBrown](#) on Wed, 07 Mar 2007 00:01:17 GMT

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Dave, great luck on your part! Anxious to see the finished product. What cartridge are you planning to use?

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Subject: Re: Idler Drive and my Rek-O-Kut project  
Posted by [hurdy\\_gurdyman](#) on Wed, 07 Mar 2007 03:04:10 GMT  
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Steve, Once I get the Black Widow arm installed, I have an old ADC LXM and a Shure V15-RS. The Shure is the same inside as a type-5. Only the stylus is different, using a less expensive aluminum cantilever instead of boron and a hyper-elliptical stylus instead of a line-contact type. The ADC was the top-of-the-line at that time for ADC. They both need a new stylus, so I have to decide which I'm going to use. They are both high-compliance, so should be a great match for a Black Widow. Dave

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Subject: Re: Idler Drive and my Rek-O-Kut project  
Posted by [hurdy\\_gurdyman](#) on Wed, 07 Mar 2007 03:09:03 GMT  
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Steve, Have you tried a Grado on your Rek-O-Kut? I was wondering if hum was a problem. Dave

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Subject: Re: Idler Drive and my Rek-O-Kut project  
Posted by [SteveBrown](#) on Wed, 07 Mar 2007 10:41:59 GMT  
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Dave, I have a couple of ADX XLM's that I really like and have used on the ROK, great MM cartridge. I'm not familiar w/the LXM, how does it compare to the XLM?

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Subject: Re: Idler Drive and my Rek-O-Kut project  
Posted by [hurdy\\_gurdyman](#) on Wed, 07 Mar 2007 14:16:06 GMT  
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>Dave, I have a couple of ADX XLM's that I really like and have used on the ROK, great MM cartridge. I'm not familiar w/the LXM, how does it compare to the XLM?

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Subject: Re: Idler Drive and my Rek-O-Kut project  
Posted by [hurdy\\_gurdyman](#) on Wed, 07 Mar 2007 17:22:57 GMT  
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I found another problem I had overlooked before. I was playing a record at a good room filling volume today. When I lifted the arm from the lead-out groove, I noticed a reduction in a slight hum, different than the electrical hum I had had. I played with this a while, both on the lead-out and the lead-in groove. Next, I started just the motor without engaging the platter drive. Exact same thing happened. Definitely not the drive system. What I'm hearing is mechanical motor noise. I can't hear this acoustically while listening to the motor with my ear by the chassis, as all I can hear is a whisper of sound. Hmmm... I dug out the Dual and listened to it, doing the same experiment. It had the exact same sound with just the motor running. I've listened to Duals for many years and had not noticed this before. Probably if I had heard it I had just thought it was recorded noise from the record cutter. I don't know if this is audible on belt drive, as my AR doesn't have a tonearm at the moment. The noise level is low enough not to be noticed at all while playing a record. I'm thinking that those old rubber grommets on the motor mount may be dried out and not isolating good anymore. I'll see if I can locate some locally from a hardware store. Not sure what I'm going to do if I can't find new grommets. Live with it, I guess. I am going to try and mass load the motor when I have the chassis removed to install veneer. This may get rid of a lot of it. It's not bothering me at all while playing music. I still like the music better than on any of my other tables. I guess it's just one more challenge!Dave

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Subject: Re: Idler Drive and my Rek-O-Kut project  
Posted by [hurdy\\_gurdyman](#) on Wed, 07 Mar 2007 22:32:49 GMT  
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I've had more surprises since my last post. While checking things out, I noticed I had all the tonearm wires backward on the RCA sockets on the back of the plinth. I had to move the plinth/chassis assembly around to get to it for soldering (not an easy task with the rubber balls I'm using for feet). Once done, I put the whole thing back in place. First thing I noticed was that the motor hum was barely noticeable now! I am perplexed! The only thing I can think that could have been effected is the power cord could have been caught on the motor and was dis-lodged when I moved everything. Nothing else has changed. Now, when I leave the motor on but don't engage the platter, I hear little difference between the stylus sitting on the record or lifted off. I may never know for sure what happened, but all is well now. No more nasty mechanical hum. Electrical hum changes a lot according to how the IC wires are positioned behind the equipment console. The wires are 10 feet long Monster Cable Interlink 400 MkII. I really need shorter ones for this. While playing around with everything, I installed my old Grado Black and was pleasantly surprised to find no more electrical hum than the Shure M91E had. Very cool! I like the Grado's sound better. I never cease to be amazed at how musical the primitive AR-XA arm can sound. At this point, I have no complaints. Until the Black Widow arrives, this will do me just fine. Dave

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Subject: Re: Idler Drive and my Rek-O-Kut project  
Posted by [hurdy\\_gurdyman](#) on Fri, 09 Mar 2007 14:13:21 GMT  
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I mentioned earlier that electrical hum seemed to be very wire position sensitive. I found the problem. It seems the Monster Cable Interlink 400 MkII I'm using doesn't like being a phono stage wire. I'm not sure if it's the way the wire is built or the 10 foot length. I traded places with the preamp out wire, a blue colored IC that came with my Jolida CD player that's three feet long. Now, the hum is lower than ever and makes only minor differences when moving it around. At this point in time, I can safely say that this set-up is by far the best sounding of any turntable I've ever owned in about forty years of audio passion. Hum is as low as I could ever get with my Denon DP-75, and mechanical noise is on a par with my AR-XA. I can hardly wait to get the Black Widow arm, now. Also impatient for Spring to get here so I can put a finish on it. Dang North-land weather, anyway. Dave

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Subject: Re: Idler Drive and my Rek-O-Kut project  
Posted by [Wayne Parham](#) on Fri, 09 Mar 2007 15:35:06 GMT  
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I would think that ten feet is a bit long for magnetic phono signals. Maybe it would be OK if limited to two feet.

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