Subject: Cartridges
Posted by Manualblock on Wed, 27 Jul 2005 00:48:17 GMT
View Forum Message <> Reply to Message

A lot of people use Shure carts and I like them myself since they track very well and sound nice and articulate and smooth at the same time; for the money they can't be beat. I am asking for opinions on an aspect of cartridge design that becomes apparent with low compliance MC's. Since the stylus is integrated with the body of the cart and the response is dictated by the low inductance of an MC they can produce significant frequency output as high as 150k. If the pre-amp or input stage of the poweramp suffers from distortion caused by slew rate limitations. These ultra-sonic signals can cause distortion; even with inaudible signals.With a MM cart there is serious bandwidth limitations starting at 20k due to electrical resonance of cart inductance and pre-amp input capacitance.When the series impedance of the 47k input resistor shunting in series with the pre-amp input is made larger by the MM cart at resonance; around 15k there will be a noise increase of audible intensity.That has an audible result and may explain the smooth and musical presentation of MC's.While the presentation of good MM carts is very detailed, the MC's commonly used sound more real to me. Any thoughts?

Subject: Re: Cartridges
Posted by Wayne Parham on Wed, 27 Jul 2005 03:49:29 GMT
View Forum Message <> Reply to Message

You've thought that through pretty well, John. That's an intersting series of observations indeed.

Subject: Re: Cartridges
Posted by Dominic on Thu, 28 Jul 2005 00:01:42 GMT
View Forum Message <> Reply to Message

You have certainly done your homework well and I really can’t take issue with anything you say. I have been a longstanding Shure fan, using a M55e for so many years I can’t even recount. I now use the M97x and have no complaints.
http://dvautier.home.comcast.net/

Subject: Re: Cartridges
Posted by Manualblock on Thu, 28 Jul 2005 01:11:37 GMT
View Forum Message <> Reply to Message

As I say; you really have to spend to get better sound than the Shure Brothers make. You have an interesting website. The birth of the popular song occurred as a result of Piano Rolls being 3.5 minutes long. The songs had to be written to fit one roll. Since Player Piano technology parralled the Gramaphone the Piano Rolls usually ran about 7 ft per minute wich would reproduce one side of a Gramophone recording in 3 minutes. That is where we get the 3 minute time for the average pop song.Then one side of a 78 is 3 minutes and that was reproduced by the 45 single. Early popular songs written before the Player Piano would sometimes exceed 10 minutes or more for a ballad.

Subject: Re: Cartridges
Posted by Dominic on Thu, 28 Jul 2005 02:06:06 GMT
View Forum Message <> Reply to Message

I respectfully disagree with your premise as well as your conclusion. Although songs did get to be 3 ½ minutes long, it came from a number of factors, but mostly sheet music. This is all covered at length in my book (chap 3 & 4):http://dvautier.home.comcast.net/pubs/pubs.htmIt is also available on amazon.com at:http://www.amazon.com/exec/obidos/tg/detail/-/0967704634/qid=1122519453/sr=1-1/ref=sr_1_1/002-2074593-0620046?v=glance&s=booksThe player piano and its 3/1/2 minute length was a result of many things. Unfortunately I would not attribute it to the physical charastics of the player piano. Sorry about that:
http://dvautier.home.comcast.net/

Subject: Re: Cartridges
Posted by Manualblock on Thu, 28 Jul 2005 12:43:27 GMT
View Forum Message <> Reply to Message

I bow to your research. What I know is the length of the rolls to play one 3.5 minute song was 21 ft. On average and that would be a size easily packed for shipping and handling for the merchandisers and allowed the roll to be read at a speed comfortable for all piano players of the time.Believe me I am no authority on this and if it is incorrect I would enjoy knowing the real deal. Post your Site and a link to your book again that is allowed here and it sounds like a rich and rewarding read.

Subject: Re: Cartridges
Posted by Dominic on Thu, 28 Jul 2005 21:10:27 GMT
View Forum Message <> Reply to Message

This 3 ½ pop song time is an interesting discussion and to tell the truth I never thought about it very much. 3 ½ minutes was the time that Stephen Foster began using but I'm not sure why. Some of it I suppose had to do with the standard number of pages that sheet music used around that time. This was for manufacturing and and paper considerations. There is also something about the human ability to focus, or maybe a desire to make his music distinct from classical which was always longer. He wanted people to dance to his music and 3 ½ minutes was a good time to use.Minstrelsy and vaudeville established a similar venue, the first because of the great Foster influence, the second perhaps because it suited the fast-paced playbills of vaudeville.A notable exception to the 3 ½ rule came during the 1890s when waltzes became the rage. Even though today they are between 3 and 4 minutes, remember waltzes were played at that time at 30 beats per minute so people could actually dance to them. Today Daisy Bell is played at an astonishing 40 to 50 per minute.The record and player piano manufacturers followed suit as you suggested.It was not until the Beatles that the 3 ½ rule was seriously challenged. Many other artists followed.

http://dvautier.home.comcast.net/pubs/pubs.htm