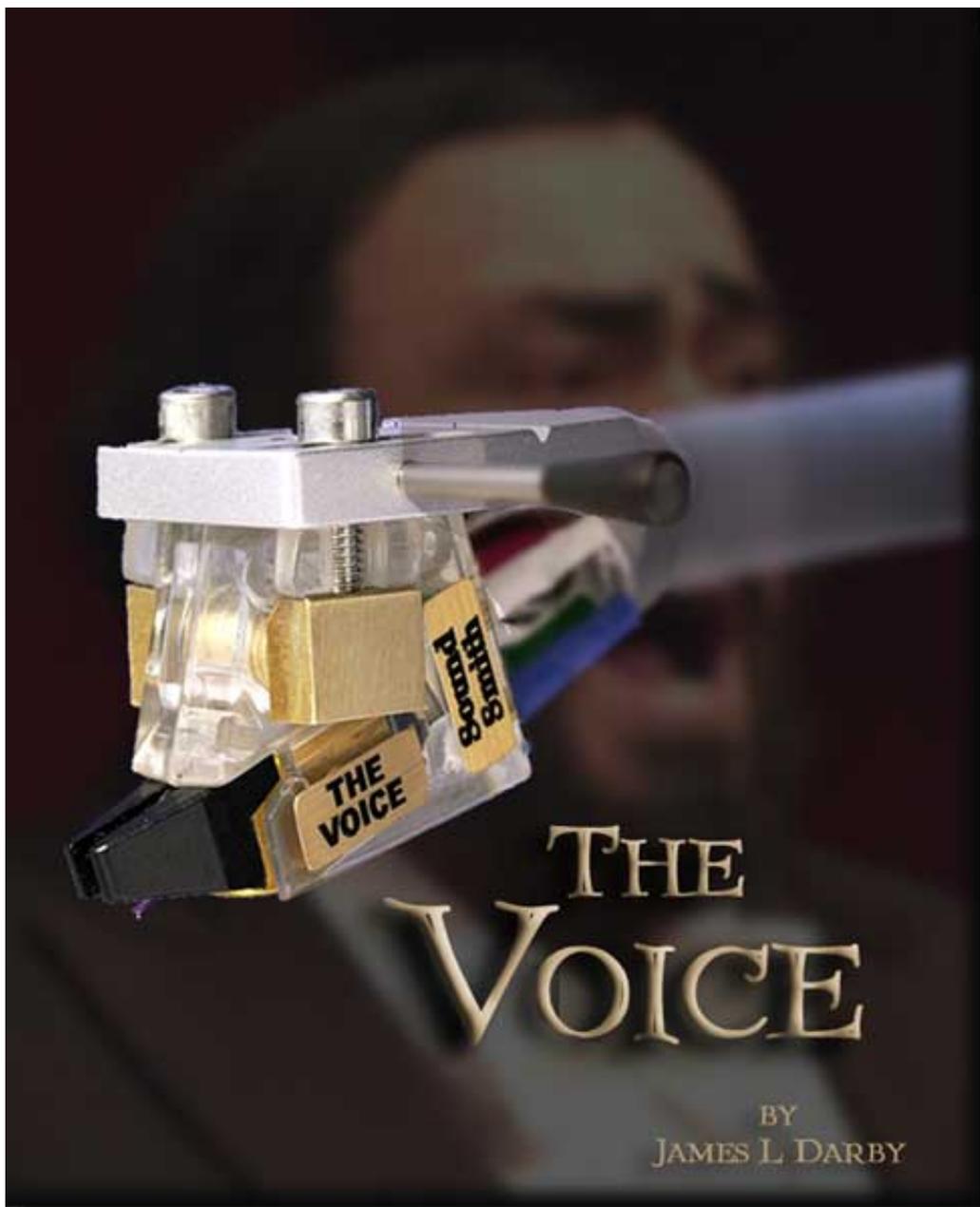




**A STEREOOMOJO EXCLUSIVE  
WORLD'S FIRST REVIEW**



**SoundSmith**

**STEREO PHONO CARTRIDGE**

**RETAIL PRICE \$2,799**

## THE WORLD'S GREATEST DEBATES

Lincoln vs. Douglas, Nixon vs. Kennedy, Book Depository vs. Grassy Knoll, Apple vs. Windows, Ford vs. Chevy, "Tastes Great" vs "Less Filling", Leno vs. Letterman, Tubes vs. Solid State and, of course, Moving Magnet vs. Moving Coil cartridges. It may well be that the last of those, MM vs. MC, is over. And the winner?

Neither.

## LEDERMANN - NOT LETTERMAN

Peter Ledermann has been doing late-night sessions longer than Letterman or Leno. Not on TV, but in his inventor's studio in Peekskill, New York. Peter told me that 35 years ago he left a high-level position at then tech King of the World IBM to pursue a greater passion. He had also been Director of Engineering at the Bozak Corporation, makers of very high-end speakers and a design engineer at RAM Audio.

Until lately, his Soundsmith company had been mostly noted for retipping cartridges and refurbishing vintage hi-fi components. In addition to a full line of cartridges, they also design and manufacture speakers and stands.

Today, Peter has generated some tsunami sized waves in the audio world with two revolutionary products, the first of which is his Strain Gage system where the cartridge "talks" to the preamp to display tracking forces, forces on each groove wall, record eccentricity and "AC" component of the tracking force (record warp). Much more than that, it is the only cartridge



STRAIN GAGE PREAMPS

that generates no current. It is not an MM, MC or even MI - moving iron. It has no wire coils to mess up the high frequency performance or pick noise or hum. It employs two pieces of silicon crystal that when compressed or expanded by tiny

amounts, change resistance. The cantilever suspension is coupled to these elements. The energy that is lost into the suspension of other cartridges is used to create the signal. Their special preamp supplies it a flow of electricity, which it varies and that is the signal that gets amplified. Because it doesn't have to carry around all the weight of other cartridges, it has almost no effective mass - almost like tracking records with a human hair. Genius.

The other sizzling development is the object of this review - "THE VOICE" cartridge. While it is not a Strain Gauge, it has a lot in common with it, one being that both track at a near impossible one gram. What does that mean in practical terms? Less record wear. In the vertical plane, every time you play your precious vinyl, that diamond-hard stylus takes a little bit of the soft plastic groove with it. Less weight means less pressure, thus less wear. Horizontally, the plane in which the stylus vibrates back and forth, there is less inertia which means the rock bounces back and forth much kinder and gentler to the jagged grooves.

That also translates to sound quality. A very heavy dump truck takes a lot longer to stop and change direction than a Mazda Miata. Try going around a sharp curve at speed in a dump truck. Its weight and inertia will push it off the road and crash while the Miata will track like it's on rails. Well, the grooves of any record are full of millions of very sharp, jagged micro curves that cause the stylus to oscillate and eventually reproduce music. Better and more accurate tracking = better and more accurate music. *Capiche?*

I have had the privilege of talking to Peter Ledermann several times; at audio shows, via emails

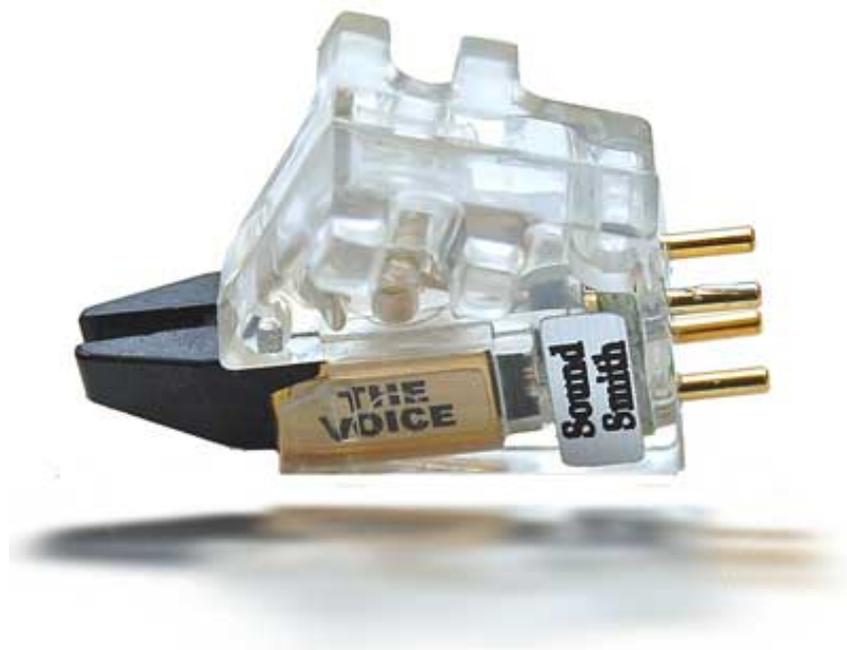
and telephone conversations. Our conversations have encompassed a lot of diverse subjects - some audio, but others very personal which I would never divulge. I find him to be a man of great integrity with a heart as big as his intellect. He is a born educator to the extent that he calls SoundSmith "a mentoring company". He is the kind of guy you'd enjoy spending a day with. Like most designers, for better or worse, his character is reflected in his products. In his case, I believe that is a very good trait.

I queried Peter about his design goals for The Voice;

*"The design goal was to take an already excellent design, based on B&O's 40 years of research, and improve it in many respects. One of those was to reduce the already extremely low effective moving mass, reducing it another 40%. I also introduced a Ruby cantilever and our "Optimized Contour" nude styli.*

*The moving iron design B&O culminated in after so many years of effort was excellent, to say the least. It was not nearly as well known as it should have been. In some circles, the MMC2 and MMC1 were recognized as some of the most advanced cartridges ever built. At that time, most MM cartridges had reached their performance limits in their low to medium price ranges, and MC types were coming on strong as very good performers due to lower effective moving mass - the mass that the cantilever must move around to produce a voltage.*

*It had been shown that a moving iron design could be built that had lower moving mass than an MC type - always a good thing to do for cartridge design. I stick to "first principles" in my design work - lower moving mass results in many benefits, and I take advantage of those in "The Voice".*



**"I AM THE IRON MAN"**

*- Ozzy Osbourne*

Other than the Strain Gauge, phono cartridges are designed around two main elements - coils

and magnets. In a moving magnet, the coils are fixed in place and the magnets quiver in response to the grooves. A moving coil is just the opposite. Both have advantages and disadvantages and thus the controversy. There is however, no debate that one advantage of moving coils is that they are lighter and less massive. An advantage of the moving magnet is that while heavier, it allows higher output and thus eliminates the need for additional amplification via a step-up or special MC pre-amp which can be very expensive to the tune of several thousand dollars. The Voice is neither of these. Rather, it is a moving iron design which means that both the magnets and the coils are stationary and a tiny piece of metal (imagine a star with only four points) moves in not only two directions, but four - between four sets of magnets and coils. While all that sounds as if it would be heavier and with greater mass, the opposite is true - it actually is much less. It also has high output more like a moving magnet. As you can see, moving iron combines the best of MC and MM and eliminates the worst of both.



The cantilever is made from a single high quality ruby (the translucent redness plainly seen in the photo) while the stylus is a Contact Line Nude, 0.100mm SQ selected for low noise. "Selected"? All Voices are hand made by Peter himself. The other specs are rather phenomenal as well, including a claimed frequency response of 20-20,000 +/- an amazing 1 db. That is the definition of ruler flat. A lot of amplifiers can't do that and no speakers that I know of - even precision studio monitors.

Compliance is very high at 28  $\mu\text{m}/\text{mN}$ , though he also makes a medium at

22 for better arm matching. Channel separation is outstanding and he lists channel difference as well - the balance between left & right is specified at only one-half of a decibel - virtually non-existent. If you often find yourself playing with your balance control, this could be a solution.

Unless you have a B&O arm, The Voice cannot be mounted straight to your headshell, it is designed to use his adapter (pictured) much like the old P-mount, so you can slip it out and use another cartridge - as long as it another SoundSmith brand. But Peter makes many different

models in various price points and also in either high or medium compliance and mono with prices starting as low as \$199. Peter told me he did that so that owners could not only easily go from a stereo to a mono cart (yes - mono LP's sound much better with a mono cart) but also switch out an expensive model with a lesser one for parties or guests where accidents can happen. Of course, you can remove it altogether when you need to dust your table - or if you have cleaning people. He also told me he was working on a design for a "childproof" model that allowed owners to teach their kids to use a table without fear of damage to the cart or the LP.

As I write reviews and talk to designers, I try to think of questions that our readers might ask as they move through the review. One that came to mind was this:

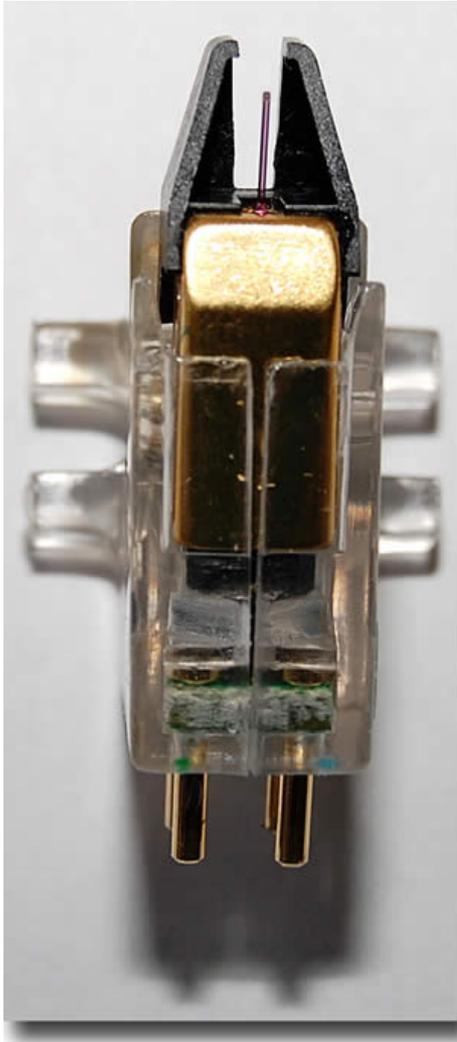
**Moving iron designs would seem to combine the best advantages of MM (higher output) and MC (less mass), while eliminating the worst of both - low output and high mass. The obvious but simplistic question is, since Moving Iron is apparently superior, why aren't all carts MI or why doesn't everyone at least make them?**

Peter replied, *"A very good question indeed. I wondered the same until I started to produce them. Unlike the MC or MM, the MI types we build are balanced magnetic systems. They have to be perfect, or they don't perform. So, in a nutshell, they are far, far harder to manufacture. As a manufacturer, to be practical, one should go for a product that has high yield and high profit margin. If one is going for profit, this design is NOT the way to go. Fortunately for our customers, no one has ever accused me of being practical. (Or one could also say, greedy - publisher) If I see a direction that is the path least traveled for one or more reasons, but promises to result in great sound, I will go there."*

Also, you have seen the term "**effective moving mass**" used in this review. Since it is clearly a design feature, I thought it would be wise to have Peter give his definition; *"Simply, effective moving mass is the generating element in any magnetic cartridge. In the moving coil system (more properly labeled an "armature" as most of them are wound wire on an iron cross or square), the magnet in a MM cartridge, or the iron in a moving iron cartridge. This mass, coupled with the cantilever and stylus, plus the resistance of the damping system constitutes and effective moving mass. It is the whole moving system. Lower it, and good things generally happen. It becomes easier to control, or damp unwanted movements or jitter. Damp it better, and the stylus stays in better statistical contact with the groove wall".*

## THE SOUNDSMITH SOUND

I used The Voice mainly in my Graham Phantom arm mounted on my much loved TW Acoustic Raven One table. Phono cables were Cardas Neutral Reference running into my much underestimated (and not well known in the US) Roksan Caspian DXP phono pre as well as the new WhestTWO by Britain's Whest Audio. I also used it to review phono sections of some integrated amps.



Comparative cartridges were the Dynavector DV-XX2MKII (\$1,850) and the ZXY Airy R1000 3X (\$3,450). I own the Dna, but the Airy was on short-term loan that went back to the owner. Both are low output MC designs. I think I can say that I much prefer typing "THE VOICE" than either of the other two model numbers...

I had to apologize to Peter for the length of time it has taken me to publish this review - much too long and very out of character for Stereomojo. The reason? Honestly? I have enjoyed listening and re-listening to my LP's so much and so enthusiastically that time just flew and before I knew it, the review was way overdue. Time does, indeed, fly when you're having fun. The upside is that I have had the opportunity to listen to well over 100 LP's via The Voice.

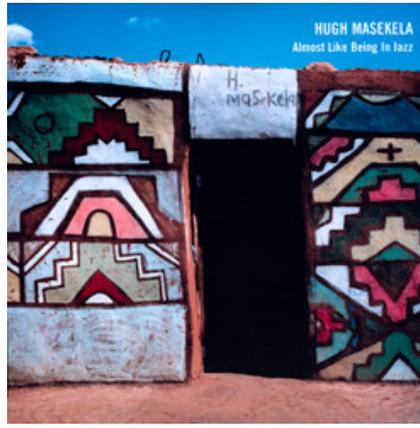
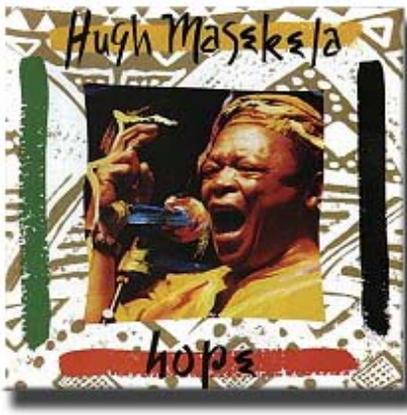
The first thing I noticed about The Voice is that, even though it was brand new, it sounded amazingly good from first spin. Most new carts sound both restrained and congested right outta the box. Of course, after about 50 hours, it sounded even better.

The Graham Phantom has an adjustable-on-the-fly VTA, meaning you can dial in the VTA while the LP is playing. Usually with a new cartridge, this takes days or even more to locate the spot where the magic happens most consistently from disk to disk. With this cart, I was able to dial it in much

faster. In addition, I only had to make small adjustments for only the thickest 200 gram disks. The Voice has a very large sweet spot for VTA. For the most part, it is "set it and forget it". I can't tell you what a blessing that is when reviewing other equipment, it is vital to have the best possible sound from a source, so I am much more picky than when I'm just listening for my own enjoyment. The ZYX was diametrically opposite. I found myself wearing a path in the carpet making tiny adjustments to VTA; the ZYX is very fussy. The Dyna is somewhere in between, but closer to the Voice. I wouldn't call it fussy.

Since it would take forever to describe how The Voice performed on all the LP's to which I listened, I'll pick out a few new ones that came my way during the review. Two of them were by the same artist, both 2 LP sets with audiophile credentials and intentions. Both are recorded live - one in front of a crowd and the other in studio. One however, is exciting, engrossing and a masterpiece. The other is slow, somnolent and performed at a level that leaves a bit to be desired.

The artist is **Hugh Masekela** and the two recordings are "*Hope*" (Analog Productions APJ 82020) and "*Almost Like Being In Jazz*" (Straight Ahead Records 101). The masterpiece here is "*Hope*", so we will focus on it. The other is a collection of slow ballads (in this instance that is not an oxymoron - they are slooow ballads) that literally put me to sleep - even with the outstanding Bernie Grundman sonics.



With "Hope", Masekela brings his heavily South African style to a live crowd in NYC and the results are stunning. Forget the 1812 Overture, this is the LP to spin when one of your "CD has much better dynamic range" friends comes over. If you amps and speakers can handle it (as well as your turntable and cartridge), the percussion, bass as well as Masekela's voice and horn will

amaze you. It sounds as if there was no compression at all used in the recording or mastering of this astonishing recording. More than once I was more than a little startled by some instrument or voice leaping out of the speakers. Needless to say, this 45 rpm version of the performance is a stringent test for any cartridge. Speed, agility and perfect trackability are a must to reproduce what this LP has to offer. The standout cut for me is "The Coal Train" where Masekela poetically speaks (yes, *speaks* in the beginning) about the trains that brought, not coal, but slaves from all over Africa to work the horrific gold and diamond mines. There are two events in the song that can make a follicle challenged man's hair stand up; one is a long crescendo that starts out with a muted cowbell softly playing straight 16th notes, joined by a floor tom as it grows louder and louder as you think all hell is about to break loose, to a stunning thunderous climax. The other is when he impersonates the shrieking sound of the train whistle. If there existed a pictorial dictionary of descriptive, audiophile terms, this album cover would be the illustration of the word "visceral". "Dynamic" is much too tame. But more than that, there is a fervently emotional, human quality that transcends the merely musical and "The Voice" liberates it gloriously. And that, over and over from recording to recording, is how this cartridge distinguished itself from the others...and I might add, from digital players as well. Perhaps this is why Peter gave it a name that can only be attributed to humans.

I could go on and on about the treble extension, the midrange that is neither too warm nor too cold and the bass that is never too lean or even a little bloated. Soundstage? Exemplary. This cartridge is dreamy at times. Explosive at others, depending entirely what you have placed on the platter. It is also extraordinary quiet.

I tried a few LP's that I knew to be plagued with excessive surface noise. The Voice sang right through it. It even seemed to negotiate light scratches and vinyl imperfections heroically. In short, The Voice is an extraordinary musical device - and it turns out I'm not the only one that thinks so.

## THE SCHROEDER FACTOR

Now, you must understand that all designers and sellers of stereo gear love to tell reviewers anecdotes about how magnificent their products are, and many of them include glowing statements they claim to have been made by audio luminaries. I've found that most such attributions are, to be kind, exaggerated. In fact, I have had some statements attributed to me that were just that. In one conversation, Peter dropped a couple of names; though it was clear that it was not in the spirit of hyping his product. Usually I get hit with names at the very top of the conversation in an attempt to grab my attention and impress, not later as Peter did. The name he mentioned was pretty impressive though, and it wasn't just what this person said, it

was also what he did.

If you are acquainted with the universe of turntables and arms, you should well know the name of Frank Schroeder. His tonearms are considered by many to be the best in the world, as illustrated by their nearly two-year backorder status. Peter told me that when Frank first heard The Voice, he was so impressed that he immediately went about building himself a tonearm for it that would better take advantage of its low mass and high compliance. It so happens that I had met Frank at a couple of shows and had a pretty good relationship with him. I'm not expecting an invitation to his house anytime soon, but at least a working relationship. So, when I ran into Frank at a recent show, I related Peter's anecdote and he confirmed it. That's the only reason I am publishing it here - he said I could. Did Frank say it was the best cartridge he had ever heard? No. But that's not what Peter had quoted him as saying. And I did not ask him if it was. Such questions put audio designers in awkward positions because they have many friends who are also designers and distributors and they don't want to slight them by inferring their products are somehow inferior.

The other person Peter mentioned is a leading designer of turntables who Peter said phoned him excitedly with glowing comments upon hearing The Voice. That one I cannot confirm, but I have no reason to doubt that it occurred, particular since Herr Schroeder was so enthusiastic.

So. Am I saying The Voice is the best cartridge in the world? Of course not! I have not *heard* every cartridge in the world, and even though I have heard many of them at shows, other people's homes and audio stores, I would not offer a definitive opinion of a product I have not evaluated at home. This is a good time to say that we at Stereomojo get emails every day from all over the world, asking "what do you think of" such and such a product. I answer every email addressed to me personally and usually within 24 hours, but I don't offer definitive advice or opinions on things we have not thoroughly evaluated. Does that makes sense?

Since the original Voice was released, Peter has designed another version which replaces the acrylic body with one fashioned out of ebony. In addition, Peter explained, "*When you are building things that are this tiny, they can and do vary. Each one is not exactly identical with the next. That is true for all cartridge manufacturers, especially as you go up their product lines*". He culls the top performing 5% of all "Voices" and gives them the ebony treatment, making that version the cream of the crop, so to speak. The price for that cream goes up to \$2,199.

If the \$1,599 or \$2,199 is too rich for you, never fear; as mentioned previously, Soundsmith makes eight other lower priced moving iron cartridges starting at \$199. Incredibly, each of the ten models are available in 4 variations: high or medium compliance, stereo or true dual coil mono. The great thing about Soundsmith is that if you need advice about which cartridge would work best with your setup, you don't need to write me or post a question on some audio site where people who *think* they know a lot about cartridges can give you their lame opinions, you can call up the real expert - the guy who makes them. I believe Peter will give you a very honest assessment of the best match for you and your budget.



How about one more LP and an exciting new announcement? If you've read our other recent reviews, you know that we came up with the idea of providing sample downloads of the reference recordings we use so that you, dear reader, can hear for yourself exactly what we're talking about - *as you read about it!* Of course, in order to do that we have secure permission from the issuing company. So, it's with a bit of pride and a lot of excitement that we announce that we have forged such a relationship with **Linn Records** - the same company that makes the great turntables and other audio components. We are particularly excited about Linn

because they not only make great recordings, they make great *sounding* recordings that are available in almost every format - including downloads in everything from high quality mp3's to Studio Master quality lossless in 48KHz, 88.2KHz and 96KHz, depending on the recording. Their SACD's are all hybrid with stereo and surround versions and the CD layer is encoded with HDCD. I don't know of anyone that offers more and better choices.

But! They also make LP's! Recently they sent me a sample of one of their 180 gram vinyls in the form of "*Too Darn Hot*" by British jazz iconess Claire Martin, pressed in Germany no less. I could tell you that she has a very warm, smooth alto voice and lots of outstanding jazz chops, featured in outstanding arrangements with top quality jazz instrumentalists for whom she allows much space to solo. But, you can hear a little of that for yourself right now. [Just right click here and download a 30 second mp3 sample.](#) Of course, you would think Linn would know how to make outstanding quality LP's and you'd be correct. *The Voice* let *her* voice and style come through clearly and cleanly, and once again with all the varied sentiments and emotive interpretations she explores. If Diana Krall is a bit too cool and aloof for you and Nora Jones leaves you wanting more vibrancy and substance, Ms. Martin might right for you. She is Clairely different.

So far, this has been a very enthusiastic review, but no product is perfect and there are two issues that you need to know about; neither of which is a deal breaker for me. First, because "The Voice" is so light and tracks at a mere 1 gram, you need to handle your tonearm and cueing a bit more gingerly. If you have ever balanced a tonearm and cartridge, you know you first need to set the weight so that the arm is perfectly balanced and level in free space. Even if you barely touch it in that state, it will bob and weave a lot so you have to be careful as you dial in the tracking force. Since the tracking force is so light, there is very little resistance even after it is set to one gram. After a couple of cues, it becomes second nature, but just be careful at first.

The other issue also deals with the low tracking force. Do you have a lot of warped records? Again, because of the miniscule tracking force, your arm may see a warp as a ski jump and gently launch like Steve McQueen in his gravity defying Mustang flying over a hill in San Francisco; the arm could actually lose momentary contact with the record surface. So, if you are extremely ham handed and most of your LP's are warped, The Voice may have a bit too much laryngitis for you.

# STEREOMOJO

## SPECIFIC RECOMMENDATION

As a music reproducer (with the emphasis on *music*), there is really nothing negative to report about The Voice. It out performed my other two cartridges, both more expensive and both excellent in their own rights. Both are also moving coil designs and require that extra dollars be spent on a step up or MC phono pre. The Voice, of course, will also require a phono pre if your preamp, integrated amp or receiver does not have one, but MM phono's are generally less expensive than MC's if you have to buy one. If your present cartridge requires frequent adjustments to play records of different thicknesses and you sometimes wish you could just "set it and forget it" and listen to music, with its wide VTA sweet spot The Voice becomes very attractive. If you are concerned about preserving your precious vinyl, its 1 gram tracking is unbeatable. If you have mono recordings, the ability to switch carts easily via the adapter is a godsend.

At \$2,800, The Voice is not cheap, but if you have a good quality analog front end (and every audiophile should), The Voice will wring every last drop of performance from it at a price that, in a world where most competitors go for two, three and four grand (up to ten large), is extremely reasonable and probably a great bargain. It is easily a reference quality cartridge with the added edge of being supremely musical, which is why Peter is going to have to pry this thing from my cold, bloody hand to get it back!

Because of its extremely high performance at a mid-performance price level with the added benefits of being MM compatible with a very light tracking force, Peter Ledermann, Soundsmith and "The Voice" are easily worthy of our highest Maximum Mojo Award. Even more, The Voice is a top contender for our forthcoming "Products of the Year Awards".



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