

## A table and a cartridge both well-tempered

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In 1977 the Danish firm Brüel & Kjær, specializing in the fabrication of vibro-acoustic measuring instruments, made a study which was published by the Audio Engineering Society. It focused on the audible effects of mechanical resonances in analog turntables, particularly on tone arms, and drew the following conclusion: a tone arm should have low mass and be very well damped. While this study led many manufacturers to make new, lighter arms, the damping question was often neglected or simply forgotten. It was William Firebaugh of Well Tempered Labs who turned his attention to the subject and created this tone arm, a masterpiece which uses no ball bearings or any other friction reducer!

To Mr. Firebaugh, who has often handled a golf ball, choosing one as the principal part of a tone arm seemed like a good idea to start with. Since lightness, rigidity and low mass are associated with such a ball, he thought that a metal rod, passing through one, would work as an arm. Then he dipped the ball and rod assembly into a silicone bath and so managed to eliminate the friction which would have been caused by one or more bearings. You have to admire this stroke of genius! With a main post holding a nylon thread which runs through the golf ball, we learn how to dispense with any mechanical axis of rotation, either horizontal or vertical. The golf ball rests in a metal well which acts as a reservoir for the silicone, so that the ball floats there, immersed up to a third of its volume. To complete the damping of the tone arm tube, the designer filled it with silica, combining light weight and optimal damping.

### Installation, setup and use

A turntable for playing vinyl discs should be packed with the greatest care and this is what I found with the Well Tempered Lab Simplex, every one of whose parts is nestled in thick layers of polypropylene foam. Following the supplied manual for unpacking and assembly turned out to be easy. The base of the turntable is equipped with flexible rubber feet which squash slightly as they are compressed, so as to help with the overall damping of the base; these are not just ordinary rubberized feet. The platter, which is made of acrylic of the same thickness as the base, is turned by a nylon belt like a fishing line... for very small fish! If I was initially doubtful when I first saw this belt, I was reassured once I got it installed between the motor spindle and the platter. It was surely the easiest belt I've ever had to put on, and any fears I may have had were dispelled when I saw the platter start up with disconcerting ease. Rotation (33 or 45 rpm, selected by moving the nylon thread on the motor pulley) is initiated with a switch placed at the rear of the turntable base. The arm wiring leads to two gold-coloured RCA jacks, which make it possible for the owner to use his own choice of connection cables. For first-time arm setup, the new owner will certainly have had the turntable installed in his home by the dealer, or else at least seen a demonstration of the steps to follow so as to understand the mechanics involved. I did not run into any special difficulty, either during installation or in balancing the arm. Everything is designed to be simple, from setup to

use. Esthetically, despite a first impression of rather austere sobriety, I found the Simplex well-proportioned and handsome, pleasant in its overall look. The elegance and finesse of the tone arm are especially seductive.

### The cartridge

The cartridge was supplied by the Well Tempered Lab distributor and is a moving coil (MC) type. It has the model number MC2 and is designed and distributed by Charisma Audio. It is attractively presented in a solid wooden box with two compartments. One of these is for the cartridge, which is screwed down into the box — keeping it safe from accidents in transport. The other compartment contains a small velvet bag of mounting screws. The MC2 cartridge body is machined from a block of solid metal (in a splendid turquoise blue colour), and inside this is the assembly which acquires and transforms what is read from the record groove, i.e. the coil, the sapphire cantilever and the genuine diamond tip. Since this is an MC cartridge, the magnets are fixed and the coils oscillate, thus transmitting what the diamond captures along the cantilever towards the coils. In a moving magnet (MM) type, the coils are fixed and the magnets are attached to the end of the cantilever, which moves with the stylus' motion. The moving coil type is more expensive and has generally found more favour with audiophiles, some of whom say that you have to spend more on a moving magnet type for it to show the finesse, definition and dynamics of a moving coil... a subject for passionate debate! In the case of our Charisma Audio MC2, the finished product is magnificent and the care brought to it is worthy of praise. Although the maker has in fact used gemstones in its construction, the entire cartridge can be called a gem!

### Musical selections

I started off with some albums I have in both vinyl and CD versions, including Verdi's *La Traviata*, Sonny Rollins' *East Broadway Run Down* and The Stooges' *Fun House*. We may believe the CD is technically superior, in terms of frequency range, dynamics, channel separation and the rest, but given the chance to make a direct comparison, I wanted to hear what I was missing, or indeed what the vinyl LP lacked in musical terms. I added to these, and to the comments which follow, Mussorgsky's *Pictures at an Exhibition*, a London Digital Recording which knocks me over whenever I hear it. Other 33 RPM discs used in the test included the magnificent I Musici recording of Vivaldi's *Four Seasons*, and some jazz in the form of original versions of works by Dexter Gordon and Thelonious Monk, on Impulse. I just wanted to hear what some top-quality mono recordings would sound like!

### Listening

The very great clarity of the orchestra came shining out into my listening room from the first notes of Vivaldi's *Four Seasons*, with a sweetness I had never heard before. Was it just because I hadn't heard the recording for some time, or was it simply typical of this turntable and cartridge combination? I asked myself this as the reproduction reached a remarkable level of quality. Everyone has a favourite season in this work and mine is Autumn. I listened with the greatest attention so as to describe how the Simplex and the Charisma MC-2 handle it. Right from the introduction, Pina Carmirelli's violin was admirably revealed, and I'm sure a musician would be able to tell the name of the violin

maker! I followed the harmonies with great ease, even in the most complex passages. I followed the music and discovered virtuosity, I discovered the music and followed virtuosity, in perfect reciprocity. Turning to the *Pictures at an Exhibition*, this LP was recorded with a digital processing method as well as being labeled "FFRR", which means Full Frequency Range Recording. The subjective result is as you would expect, and the music reaches a high degree of definition. Unfortunately such recordings are difficult to find today; you might find one on the second hand market. My sample was an imported one and bought in France in 1982. The true-to-life quality is what strikes the ear right away (as it strikes every ear!) and listeners who aren't used to it may be astounded, even troubled, to have to accept they are hearing a vinyl disc! The feeling of space and the dynamics of this disc are what charm and beguile especially. Our Well Tempered Lab and its Charisma MC-2 worked admirably in concert, and concert was the operative word!

With my jazz-psychedelic rock album [by] Sweet Smoke, I have to say I was quite surprised to hear such a rich and well-defined flute, perfectly placed physically in my listening room. The soundstage was really beautiful and lively, and in the exaggeratedly stereophonic moments, movement from the left to the right channel occurred without a hole in the middle — a sign of perfect cohesion in reading the disc. With The Stooges the atmosphere changed radically, and yet the representation was just as masterful. On the track *Dirt*, Iggy Pop was astonishingly present, more than usual, and the guitar solo was a total rediscovery for me. This combination of the Well Tempered Lab turntable and the MC2 cartridge turns out to be incredibly versatile musically.

To continue the show I chose a beautiful female voice and a masculine one no less beautiful: Sade Adu and Jacques Bertin. The Simplex table met Sade's sensuality in a *Jezebel* which was all nuance, and met the touching richness of Jacques Bertin in the piece *Carnet*. Both were a total success and I was impressed by the spectacular realism which this analog setup offered. The voices were especially well reproduced, with a human warmth I have rarely encountered.

### Conclusion

I own a good many vinyl records of flawless quality, especially considering that some of them have spent more than 30 years with me. I have never wanted to part with them, for sentimental reasons firstly, but also because of the quality of the solid, durable, physical medium. The present vinyl comeback doesn't really surprise me, and I think I understand why new audiophiles are so passionate about the black pancake. The music takes over your room instantly, right from the first notes of your favourite disc, the moment your chosen track starts up, at the first "tock" as the diamond point lands and its journey starts... the rapture happens and will happen whenever you decide to spend any time with your own vinyl discs. Obviously, I can only recommend that you give special consideration to this combination of the Well Tempered Lab Simplex and the Charisma MC-2 cartridge, because if you do, you may well hear music as you have never heard it before.

### RENSEIGNEMENTS GÉNÉRAUX

Simplex Turntable

Price : \$2,525.00

Guarantee : 2 years, parts and labour

Charisma MC2 cartridge

Price : \$1,720.00

Guarantee : 1 year, parts and labour

Distributor : Charisma Audio, 905-470-0825,

[www.charismaaudio.com](http://www.charismaaudio.com) or [www.welltemperedlab.net](http://www.welltemperedlab.net)

Discography

Vivaldi, I Musici, *The Four Seasons*, Philips 6514 275

Mussorgsky, *Pictures at an Exhibition*,

Cond. : G. Solti, London LDR 10040

Sweet Smoke, *Just a Poke*, EMI Columbia 2C 062 28 886

Stooges, *Funhouse*, Elektra EKS 74071

Sade, *Promise*, Epic EPC 86318

Jacques Bertin, *Domaine de joie*, Le Chant du Monde, LDX 74701