

Ortofon SPU Century & Grandinote Celio

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According to the 2018 edition of the UN's World Happiness Report, Denmark is the third-happiest nation on Earth, trailing only its neighbors Finland and Norway.

I heard that yesterday afternoon, on NPR. The reporter even spelled out the word used by Danes to describe their feelings of happiness: *hygge*.

Apparently, at present, Denmark is positively rotten with *hygge*.

But I was uncertain that I'd heard correctly. And I was dubious that the UN publishes such a thing as a World Happiness Report. I'd been listening to the radio while driving through Troy, New York (where *hygge* appears to be on back-order), so when I got home I did a Google search on Denmark-happy-*hygge*. Turns out it's all true. Even Oprah has been to Denmark in recent weeks, to report on the record levels of cozy contentment there.

I came over with the *hyggenauts*

Coincidentally or not, Denmark is also home to the oldest continually operating manufacturer of audio playback gear, Ortofon A/S (footnote 1), located on the island of Lolland. Ortofon was founded in 1918 as FonoFilm, and entered the domestic cartridge market in 1948. Since then they're been responsible for a disproportionately large share of Europe's total happiness exports, some of which I've sampled. I was in my early 20s when I bought my first Ortofon phono cartridge—a VMS 20E, which got a rave in Stereo Review (footnote 2)—and for the past dozen or so years I've always had in my possession at least one cartridge from their SPU (for Stereo Pick Up) line. SPUs are generally low-compliance, low-output things, and all but a rare few are configured as interchangeable pickup heads rather than as standard-mount cartridges (ie, a cartridge with two mounting bolts spaced 0.5" apart)—just like the vintage cartridges they continue to resemble.

In the 60-plus years since the line's introduction, Ortofon has never ceased making SPUs. Indeed, throughout that time, this happiest of companies has continued to tweak the SPU formula, judiciously applying some of the technologies they've developed in the making of other, more decidedly modern cartridges, while remaining dedicated to the SPU's most beloved characteristics: its well-textured and altogether substantial sound, and its extraordinarily forceful way of describing music's dynamic contrasts. Last May, at [High End in Munich](#), Ortofon celebrated their 100th anniversary by introducing three distinctive, limited-edition models: the Concorde Century (\$700), the ultra-high-end MC Century (\$12,000), and the model I found most exciting, the SPU Century (\$5000).



The SPU Century is a G-style (52mm from mounting collet to stylus tip) pickup head whose four signal-contact pins are aligned in what vintage phonophiles (ambiguity intended) call the SME standard—ie, it works with most contemporary tonearms to which interchangeable headshells can be fitted. The upper portion of its shell is made, by means of Selective Laser Melting (SLM), from aluminum, coated with diamond-like carbon (DLC). The lower portion of the shell, which takes the place of the usual SPU belly pan, is CNC-milled from Danish beech wood, and treated with a polymer that stabilizes the wood to prevent it from warping or cracking. The aluminum and wood pieces meet on edges curved to suggest the shape of the upper half of a violin or guitar laid on its side; also like a stringed instrument, the figuring and grain pattern of each SPU Century's beech-wood belly is unique to that cartridge.

Not only is the SPU Century fitted with a Shibata stylus—a hyperelliptical profile developed in the early 1970s and never before used in an SPU—but its suspension elastomers are optimized for that specific stylus shape and its behavior in the groove. The stylus is nude—ie, the (longish, in this case) diamond shank and tip are ground as a single piece—and mounted to an aluminum cantilever, the likes of which one sees in the vast majority of SPUs of any vintage. Also in keeping with SPUs of yore, the Century's motor uses an alnico magnet and a square coil armature made of soft iron. Specifications include an output of 0.2mV (that's low), lateral compliance of $8\mu\text{m/N}$ (that's low, too), and a recommended downforce of 4gm (that's high).

I'm going through a cycle

In November 2018 I received a review sample of the SPU Century and almost immediately set about installing it. My EMT 997 tonearm is mounted to a bronze armboard, fitted to my Garrard 301 turntable's plinth in such a way that I can quickly adjust the spindle-to-pivot distance to suit the pickup head or cartridge in use. I mention that because, at first, I reset the tonearm position a little too quickly and carelessly, only to later find that extra setup time and effort are required to keep the Century's treble range silky smooth—this degree of persnickitiness demanded, no doubt, by the profile of that Shibata stylus. (For the record [ahem], I settled on a spindle-to-pivot distance of 318.8mm, with null points 62 and 111.5mm from the spindle center.)



Even without break-in, the dialed-in Ortofon SPU Century sounded remarkable—dynamic, colorful, forceful, well textured but never harsh, and thoroughly engaging—from the first song I played: "Shadows," from Tony Rice's *Native American* (LP, Rounder 0248). As countless other music writers have noted, the better part of Rice's guitar tone comes from his hands, not the instrument he happens to be playing, and he brings to every one of his lines in this Gordon Lightfoot song a warmth and a buoyancy that are difficult to describe. Ortofon's newest SPU did more than just honor those qualities—it elevated them. I was shocked at how vividly Rice's guitar tone poured from my system with the straight-from-the-box SPU Century in place; more than once, I said as much to the empty room, with varying degrees of profanity. In the days to come, the new Ortofon's highest trebles became ever so slightly sweeter—after the dialing-in described above, they were already quite agreeable—and its musicality only more potent. My Wagner love-fest continues unabated, the object of my recent affection being the recording of *Götterdämmerung* by Georg Solti, the Vienna Philharmonic, and Birgit Nilsson et al (6 LPs, London OSA 1604). With the SPU Century doing the honors, the spatial mysteries in those stereo grooves were unlocked to a degree that Ortofon's similarly recent SPU Wood A didn't quite manage. With the SPU Century, in Act III, iii just before Hagen enters the Hall of the Gibichungs with the news that he's killed Siegfried, Gutrune's (Claire Watson) movements across the stage as she sings "das ich zum Ufer schreiten sah?," and during her calls upstage to the absent Brånnhilde, were put across convincingly, as was Hagen's (Gottlob Frick) own entrance from far upstage, stage right. The SPU Wood A lacked that precision of location, and didn't match the Century's ability to suggest the stage depth captured in producer John Culshaw's remarkable 1964 recording.

Yet for all that added detail—which made itself known inconspicuously and, I dare say, naturally, as opposed to keening at me from within some etchy aural glaze—the SPU Century sounded no less well balanced, no less substantial and believably warm, than either the SPU Wood A or any other SPU of my acquaintance. The meaty glow of Wagner tubas endured, the singing voices weren't thinned, and in Siegfried's funeral music, the force of not just the drums but of the strings and brass as well was shockingly believable.

The new SPU also did a fine job playing what has become one of my favorite King Crimson albums, the live *USA* (LP, Discipline Global KCLP12). With the Century in place, in "Larks' Tongues in Aspic (Part II)," the note decays of Eddie Jobson's electric-violin solo (stage right) intermingled with the decays from Bill Bruford's drum kit (center and slightly upstage) in a way that made the space between the players sound convincingly big. (

Because that may have been a stereo effect created during mixing—at the beginning of the song, Bruford's gong occupied precisely the same space as Jobson's fiddle!—I've avoided the word realistically.)

But the goodness of the SPU Century went beyond mere stereo. Compared to the SPU Wood A, when I played USA with the Century, I found myself tapping my foot and moving in time with the music. Literally every element in the recording, even John Wetton's voice, was more compelling, and had a greater sense of momentum, of sheer drive, with the latest SPU.

Then there were those recordings that showed all of the SPU Century's strengths, none better than the Seldom Scene's *Live at the Cellar Door* (2 LPs, Rebel STRP 1547/48). With the new Ortofon, the very small space between the band and their fans was made clearer than ever before. Not just the singers, but individual voices from the audience had startling clarity and reach-out-and-touch-them spatial presence. The late John Duffey's mandolin lines leapt from the system, his characteristic odd timing honored and, again, elevated to the level of high art. And every voice and instrument had the right color, the right texture, the right heft. With the SPU Century, the group's performance of Phil Rosenthal's "Muddy Waters" was so spine-tingling that I had to lift the stylus and play it over again, this time with the lights out.

Deal of the Century

I can't recall how many different SPUs I've heard in my system: surely no fewer than eight or nine. All have offered at least very good performance, and two (footnote 4)—the spherical- and elliptical-tip versions of the SPU #1, which respectively sell for \$599 and \$659—offer extraordinarily high value. But the SPU Century was obviously something special: Notwithstanding its Shibata rather than spherical stylus and its high-tech body, this was the most vintage-sounding—the most SPU-sounding—of the modern SPUs that I've heard. To find out why, I called Leif Johannsen, Ortofon's chief officer of acoustics and research. I asked him about the whole *hygge* thing, too.

As Johannsen sees it, "the SPU sound comes from a different combination of components—the housing is one of them. It depends on what you want from the housing: Do you want it to contribute to the sound, to resonate? Or do you want to control [the housing]? I have made the decision that I want to control it—I do not want it to have its own life."

Johannsen went on to explain how Selective Laser Melting—which, in some previous Ortofon models, was used to manufacture small frame-style cartridge bodies—can be used to make a better SPU shell: "The lasers melt very fine powder. In some areas of the housing, if you decide to melt some of the powder but not all, you can—so you can decide the properties of the housing from one area of the housing to another. This is additive manufacturing—not subtractive."

In other words, SLM is the opposite of machining a product from a solid, homogeneous billet; if you wish to make a non-massive product immune to resonances by strategically varying its density, the former manufacturing technique will succeed where the latter fails.

Johannsen also spoke of the subtle differences between the SPU Century's suspension and those of other SPUs: "The rubber suspension in any Ortofon moving-coil cartridge has two functions: damping resonances in the needle-vinyl interface and applying the appropriate stiffness [to the cantilever]. This is the first time we have used a Shibata stylus on an SPU, and the [stylus-to-groove] interface created by that profile has influence on this resonance. So you can choose the rubber compound to give the right compliance and the right damping. We are producing our own compounds for our suspensions, so we can make these parts—in this case, the rubber suspension between the armature and the pole piece. So we have two ways of tuning, by adjusting the pre-tension put into the rubber and determining what compound to use. We adjust these until we have the sound that we want."

And sound is still the ultimate determinant, according to Johannsen, who spoke passionately about making sure that this newest SPU sounded like an SPU—for which reason, in the Century, Ortofon reverted to the same combination of magnetically permeable armature and alnico magnet that had characterized the very first SPUs: "Having this square armature made out of pure iron really enhances the influence of the magnet. We use a magnetic system with a quite big alnico magnet, which behaves very differently from a system with a neodymium magnet. Each time when you make a new SPU, you adjust this system."

As for the SPU Century's status as a limited-edition Ortofon, Johannsen admitted that "I have been part of spreading some misinformation: I told you we are going to limit it to 250 pieces. After coming back from the Munich show, where we got so much good feedback from people, we decided that 250 would be too little. We decided to raise it to 350 pieces." Johannsen's fondness for the product may also have played a role: As the man who designed some of Ortofon's most modern, high-tech phono cartridges admits, "At home, I have had prototypes running of the MC Century and the SPU Century for two years. I love both of them!"

As for world happiness, Johannsen declined to play the nationalist. "Is this special to the Danish? I'm not so sure—lately, some people have made it so for us. But I'm sure you can have just as much hygge where you live." At the moment, I surely do.

A grander note?

Speaking of Munich, during my visit to last May's High End show, some of the finest sounds I heard were from the system assembled for that event by the Italian brand Grandinote Audio, a maker of loudspeakers and low-powered solid-state amplifiers (footnote 5). According to company owner and chief designer Massimiliano Magri, the latter are designed and built more like tubed than transistor amps, so much so that he's coined for the company the trademark Magnetosolid.

Some background: At High End, manufacturers who exhibit on one of the central display floors rather than in one of the individual rooms at the floors' periphery, and who wish to play music, must do so in a portable, pre-fab room installed on the spot for that purpose. What those smallish spaces lack in their potential for good sound—bass response, in particular, suffers in the face of nonsturdy room boundaries—they make up for in their potential for atmospheric lighting and a pleasantly cocoonish feeling that has me once again reaching for the words cozy contentment. So it was in Grandinote's room, a comfortable and well-decorated space that offered the additional benefit of an excellent selection of non-audiophile recordings. Perhaps surprisingly, music reproduced in that FEMA-esque room was strikingly colorful, forceful, and involving.



Four months after High End, I took delivery of Grandinote's Celio phono preamplifier (\$8750), a smallish (7" wide by 5.75" high by 12.5" deep, 15.4 lb), roughly shoebox-shaped device whose steel case is finished in black crinkle paint. Inside, mounted on its steel chassis, a single circuit board takes up most of the available space; below the chassis is a toroidal mains transformer.

The Celio is a two-stage solid-state design using bipolar transistors for gain and buffering. Passive parts include JB film capacitors and Caddock resistors. Gain is user-selectable—45 or 66dB—by means of a dual-mono pair of rear-mounted toggle switches; also on the rear panel is a dual-mono pair of DIP switches, for selecting from 10 load impedances that range from 10 ohms to 47k ohms. The impedance values associated with various switch settings are printed on the rear panel itself—no problem if you lose the owner's manual (which appears to exist only on Grandinote's website).



The Celio's throughput is single-ended rather than balanced: its left and right inputs and left and right outputs are all RCA jacks. But—just above them on the rear panel are one male and one female XLR jack, unlabeled. This sent me scurrying to the owner's manual, where I learned that one XLR is an input and the other an output, and that the Celio is capable of functioning as a balanced phono preamp—but only for a single channel. If balanced stereo throughput is desired, you must buy a second Celio.

Another curiosity is the Celio's on/off switch, a smallish illuminated pushbutton: I don't mind that it's on the rear panel, but I can't imagine why something the user can't see is made to light up. Moreover, as I learned during my first few hours with the Celio, the switch must be pushed inward farther than at first seems necessary before it will remain on: When that switch is pushed inward just a little, the front-panel power-indicator LED lights up and stays lit up for over 20 seconds before fading to dark. During the Celio's first day in my system, I wondered why it was turning itself off—until I realized that it hadn't actually been turned on, which requires a bit of effort. Okay, so maybe I do mind that the pushbutton is on the rear panel . . .

A final curiosity: Also on the rear panel are two ground terminals, labeled 1 and 2. At first I assumed they were channel specific: hobbyists such as I, who own true mono cartridges (footnote 6), in which signal appears on only two pins, have surely all experienced the need for single-channel grounding. But it turns out that Gnd 1 is a signal ground (for both channels), and Gnd 2 is a chassis ground. In my system—with a Garrard 301 turntable and EMT 997 tonearm, and with the Celio preceded by an Auditorium 23 Hommage T1 step-up transformer and followed by the line stage of my Shindo Monbrison preamplifier—I found that connecting my tonearm's ground lead to both of the Celio's ground terminals resulted in the best, most hum-free performance.

It's also worth noting that, while using my reference phono electronics, with the Grandinote Celio powered on but not hooked up to my system, audible hum intruded; when I turned off the Celio, the hum ceased. This suggests that the Grandinote phono pre is a fertile enough source of electromagnetic radiation that extra care should be taken in its siting.

When I used the Ortofon SPU Wood A pickup head with the Hommage T1 transformer in the system and the Celio at its lower gain setting, the latter proved sonically enjoyable and musically very competent. Listening to "Little Sadie," from Tony Rice's landmark *Manzanita* (LP, Rounder 0092), I heard a slightly different timbral balance from the phono stage built into my Shindo Laboratory Monbrison. With the Grandinote, notes played by double bassist Todd Phillips were a little less plummy, while the slightly reedy texture of Rice's voice was brought to the fore, albeit not at the expense of that voice's overarching richness.

Musical timing was portrayed well: The Celio made clear a vanishingly slight ritard in the midst of a Dobro solo by the young Jerry Douglas.



The Celio equaled the Shindo in excavating Ahmed Abdul Malik's double-bass lines in "In Walked Bud," from the Thelonious Monk Quartet's *Misterioso* (LP, Riverside/Analogue Productions RLP 1133), but not in its faithfulness to the kick in Roy Haynes's kick drum: Here and elsewhere, the tubed Shindo stage proved a better communicator of force than the solid-state Grandinote. That said, the Celio brought to the sound of my system something unique: a "grippy" quality that made seemingly every musical sound—not just percussion instruments—seem more physical, more whole, than usual, and thus a little easier for my ears to grab on to and get comfortable with. (I'd say it was a "fatter" sound, but that implies tonal colorations, and I heard no such things.) Music played through the Celio had substance and color; I think those qualities aided my system in doing an even better job than usual of holding my attention.





With the Grandinote Celio set for high gain, and without a step-up transformer, the sound was similar in terms of tonal balance and freedom from gross colorations—which is to say, similarly very good. But regardless of the load-impedance setting, by omitting the step-up transformer I also left behind the last word in physicality and human touch.

I hope to try at least one or two more cartridges with the Celio before returning it to the distributor. But so far, with a low-output, low-internal-resistance cartridge such as the SPU Wood A, its performance is impressive, notwithstanding the idiosyncrasies noted above. I'm somewhat less enthusiastic about the Grandinote's value for the money: Try as I may, I have difficulty seeing nearly \$9000 worth of parts and workmanship in its simple, single enclosure. As such, the Celio is up against considerable competition, including the [Lamm Industries LP 2.1](#) (\$9390) and the [Shindo Aurieges Equalizer Amplifier](#) (\$7895), the latter with its two beautifully made steel chassis and various hard-to-find NOS tubes and parts.