

FIDELITY 48

MUSIC AND HI-FI

48

D €12.50 A/IT/BENELUX €14.40 CHF 20.60 S 151 SKR02/2020 19th year March / April 2020



Licensed excerpt from FIDELITY 48 - 2/2020 for www
Mastersound Evolution 300B



Mastersound Evolution 300B

ONE TUBE FOR LIFE

By Hans von Draminski. Photography: Ingo Schulz, manufacturer

The new MastersoundD 300B from “Bella Italia” is something special – simply because its circuit design is always based on one still newly available cult tube.





Licensed for www.use.in.DACH for Baris & Partner | Praeler Straße 3 | 6020 Innsbruck | Austria | Tel. +43 516 596026 | www.audioverkauf.com

Level control, input selection and remote control – that's all you need for full tube magic. The 300B offers four accesses, via "Direct" you can route external sources directly into your power amplifier.



— Now I have to make a historical arc. Because in the beginning there was the tube. And not only in the hi-fi world, which was a radio world in her childhood days - I'm leaving out the gramophone, which works purely acoustically without any electrical amplification or conversion of sound events - but also for me, very personally. "He's not that old," you'll say. True. But when I was young, money was tight in our family. While some of my schoolmates already had stereo towers, I used my parents' post-war radio receiver - keyword "magic eye" - to listen to Bayern 3, and later also to the then new classical station Bayern 4.

At some point I discovered that the tube radio in question, a Telefunken model, even had a DIN input and output. The combination of confirmation money and a birthday present allowed me to buy a Grundig mini cassette deck in 1981, which was connected to the old tube receiver and enabled me to record my favorite radio shows - even with Dolby B on the then brand new ferrochrome tapes.

I couldn't have imagined back then that I was not only combining two generations of devices that were many decades apart, but also that I was also gaining a certain sound preference. Stereo panorama was possible for both of them

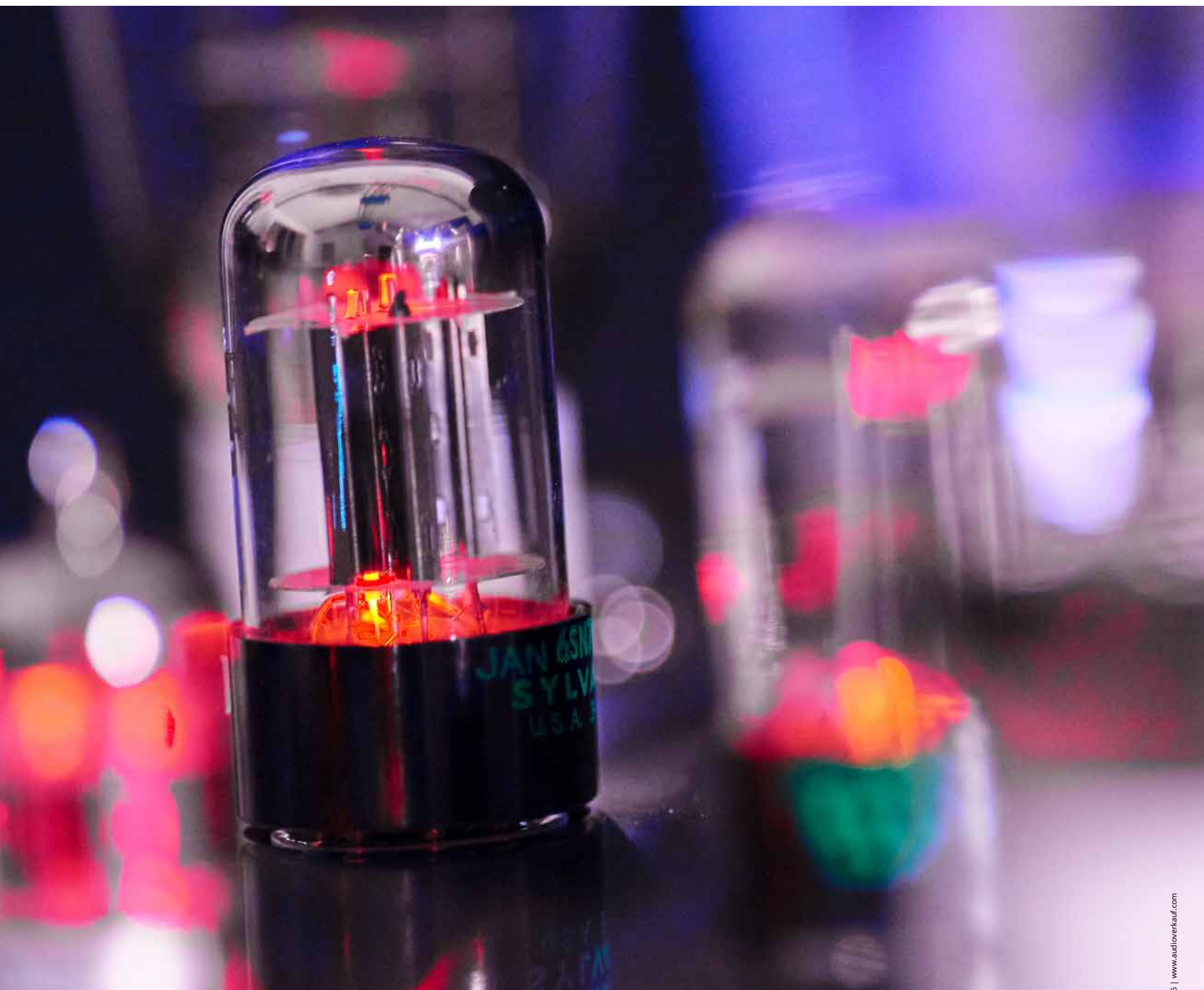


There is hardly any question of the radio receiver's built-in broadband speakers. But what it had to offer in terms of the naturalness of the voices and the luminosity of the colors was, in retrospect, worthy of all honor - for a box that was already a good 30 years old when I snatched it from the dust of the attic.

The fascination for tube devices has remained with me, which is why the FIDELITY team hardly has to make any effort if they want to give me a tube device to test. Of course, I'm smarter today, and over time I've read up on a lot of tube knowledge and gradually thrown some clichés stored in my head overboard. As a journalist you have to look at some things from a distance anyway

and you should refrain from being overly euphoric about the devices to be tested - you can't keep them all anyway.

At this point, the online encyclopedia Wikipedia makes an effort: "An electron tube is an active electrical component with electrodes that are located in an airless or gas-filled bulb made of glass, steel or ceramic. The electrode connections are led outwards from the tubular bulb. In its simplest form as a diode, an electron tube contains a heated cathode (hot cathode) and an anode. Electron tubes are used to generate, rectify, amplify or modulate electrical signals. ►



Negatively charged elementary particles emerge from the hot cathode as free electrons and are moved to the anode by the effect of an electric field. This electron flow can be influenced by a control grid between the cathode and anode, because different grid voltages or electric fields inhibit the flow of electrons to a greater or lesser extent. This is the basis of the use of the electron tube as an amplifier or oscillator.”

So much for the lexical wisdom. Although the transistor began a worldwide triumph after its invention in 1925, the tube never completely disappeared from the amplifier business. Because their sound is fundamentally different and because their distortions are obviously classified by the ear as more “harmonious”, more coherent and closer to reality. Some developers go out of their way to make transistor circuits sound “like a tube,” which is sometimes the case

However, it can also result in a deceptive “loveliness” that no longer has much to do with high fidelity.

However, the Mastersound Evolution 300B integrated amplifier, which is manufactured in Vicenza in northern Italy, is free from the suspicion of having been tuned for a beautiful sound with little detail. For just under 8,600 euros, tube amplifier fans get a straightforward concept – “Single Ended Class A” – which works with the classic triode 300B and always mobilizes a sufficient 24 watts per channel. One of the key points of the specifications is the absence of any feedback in the signal path, which on the one hand helps to minimize distortions typical of tubes - the 300B is by no means free from this - but on the other hand could increase the amplifier's tendency to oscillate on some speakers. Then “it distorts like crazy,” ►

Antonio Ferro, head of the Italian tube manufacturer Mastersound, about the Evolution 300B integrated amplifier

“GOOD QUALITY NEVER GOES OUT OF FASHION”

The products of the Italian amplifier manufacturer Mastersound, which is based in Arcugnano near Vicenza, are in the high-end premier class. Anyone who chooses a classic 300B assembly in the 21st century usually has good reasons. At Mastersound, too, they don't chase short-lived fashions, but rather place the sound of a component above everything else, as company boss Antonio Ferro (pictured left next to his developer Luciano Savanio) reveals in an interview.

FIDELITY: Signor Ferro, two of the classic Type 300B amplifier triodes are used in the new Mastersound Evolution 300B integrated amplifier. Are there certain “fads” regarding certain types of tubes? As I remember it, the KT88 was very popular a few years ago - now the developers seem to prefer the 300B again. What are their advantages?

Antonio Ferro: Good quality never goes out of style. For fans of high-quality music reproduction, the 300B is a timeless institution as part of the triode family. Their sound is absolutely characteristic and distinguishable from other tubes. The 300B is famous for reproducing voices and instruments particularly delicately, opening up a deep and wide space. It traces the harmonic structure of the music completely and very satisfyingly, strictly preserving the original timbre of the sound (without discoloring, editor's note). Other tube types that deliver more power are serious competitors to the 300B when it comes to driving even the most difficult speakers. But they just don't achieve the particularly subtle sound of a 300B tube amplifier. Thanks to our special output transformers, Mastersound amplifiers that use this wonderful triode deliver enough power combined with exceptional dynamics and transparency. We at Mastersound never particularly liked and used the KT88, which we used in the previous version of the Duetrenta integrated amplifier (which has two 33-watt pentodes but is switchable to a 16-watt triode, editor's note). Today I prefer the higher quality KT120 - in order to have a few more watts available than with the Duventi integrated amplifier. The classic EL34 is installed in it, but it never looked like that

sold well like our triode models, such as the Compact 300B. It only delivers half the wattage, but costs much more. Because the KT88 does not have the harmonic structure of a 300B in terms of distortion and remains rather vague in terms of tonality, it lacks the elegance of reproduction that is typical of triodes à la 300B. This tube made many people fall in love with high fidelity.

The basic circuit design of tube amplifiers has not changed significantly in the past few decades. Nevertheless, the Mastersound Evolution 300B sounds exceptional, especially in terms of the resolution and the virtual space it creates. What tricks and tricks does an amplifier designer use to optimize a well-known and actually exhausted circuit?



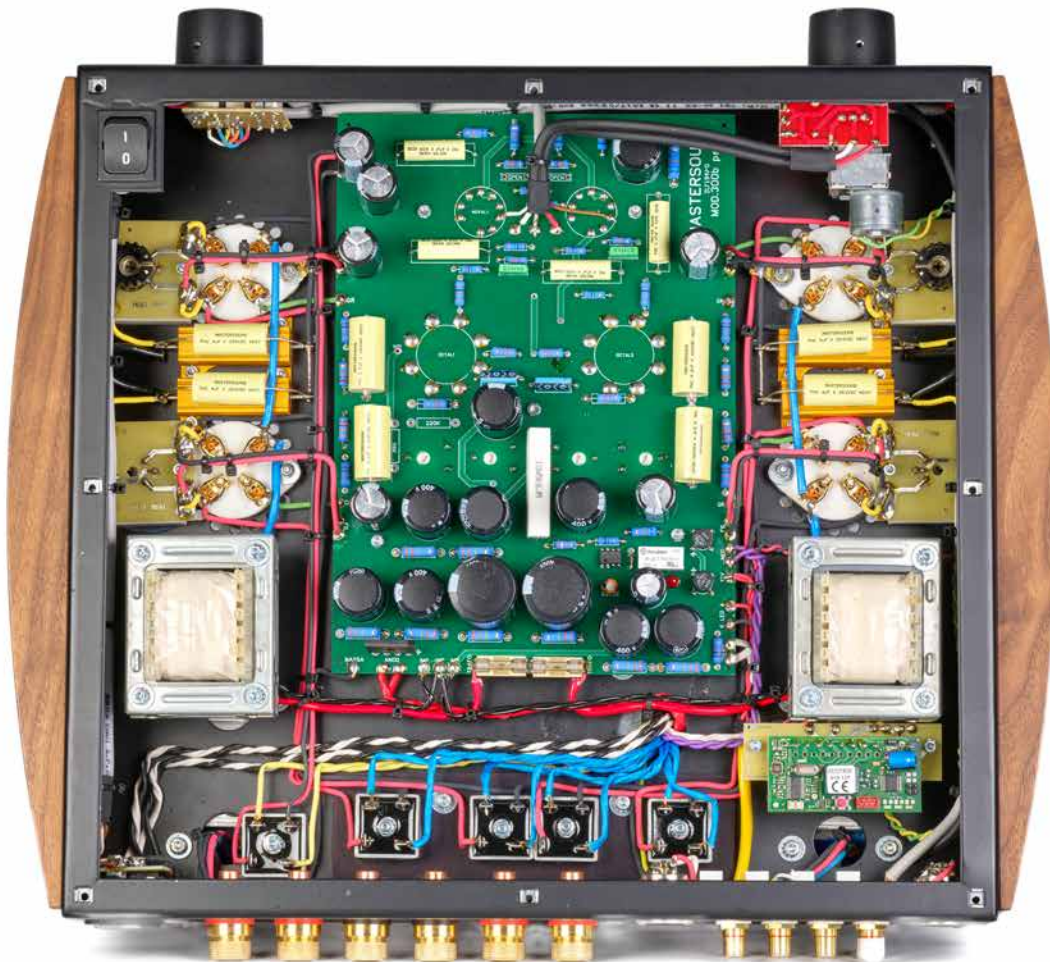
All Mastersound amplifier projects are developed and supervised by Luciano Savanio, who learned the art from his father Cesare. Over the years, Luciano has constantly optimized the design of every single detail and worked to improve the parameters of sound reproduction. For example, the low noise, the wide harmonic spectrum, the step response, the control of the low frequencies and the transparency. Almost all components of the circuit are either manufactured by suppliers according to our specifications or made by hand directly in our company. For example, our output transformers, one of the key components in a tube amplifier. If you want to build a triode amplifier, you have to think very carefully about which components you use and how you arrange them in the housing, for example to improve the noise performance. The perfect optimization of one

A circuit can only be achieved after years of constant work on it - and various improvements that this work brings with it. This has taken the “tube amplifier” concept to a level that would have been unimaginable just a few years ago. The limits of the tube amplifier have been greatly expanded and the enormous sound quality has been improved once again.

In the Mastersound portfolio there is a “bigger brother” of the Evolution 300B, called Evolution 845, in which the ECC802 tube is used. The program also includes the PF100 monoblock with 6SN7 and 845 in the circuit. Is this already the “end of the flagpole”, the “highest end”? Or, to put it another way: How would a Mastersound amplifier be equipped if money doesn't play a role?

The 845 is also part of the large triode family and is considered one of the best compromises when it comes to delicate sound combined with powerful reproduction. However, the 845 is very power hungry and not only requires a correspondingly powerful mains transformer, but also a lot of attention in the development and construction of the circuit. Only a few amplifier manufacturers worldwide are able to adequately use this triode. In addition, the size and weight of amplifiers in which the 845 is used are correspondingly higher. The Evolution 845 and especially the Monoblock PF100 are oversized when compared to conventional amplifiers. With the Evolution 845, which was named “Best Integrated Amplifier in the World” by a German trade magazine in 2013, we have reached the top in terms of sheer amplifier performance and sonic refinement. With 55 watts in Class A operation, it can drive practically all loudspeakers on the world market without ever having the feeling that the sound would be better with a pre/power amplifier combination. The ECC802 tube, a particularly low-noise version of the ECC82, is also used in all of our integrated amplifiers for the preamplifier stage and sometimes also in the driver stage. In the triode amplifiers we use the ECC802 instead of the 6SN7 for the driver stage. What is also very important: the correct setting of the quiescent current, which enables perfect alignment of the two stereo channels with the appropriate instruments. ■

Custom-made: As can easily be seen from the thick yellow resistors, Mastersound can produce its own components. The controller board of the remote control (bottom right in the picture) looks tidy. Amplifier layout almost like a foreign body.



as a Franconian hi-fi dealer friend of mine used to complain in such cases.

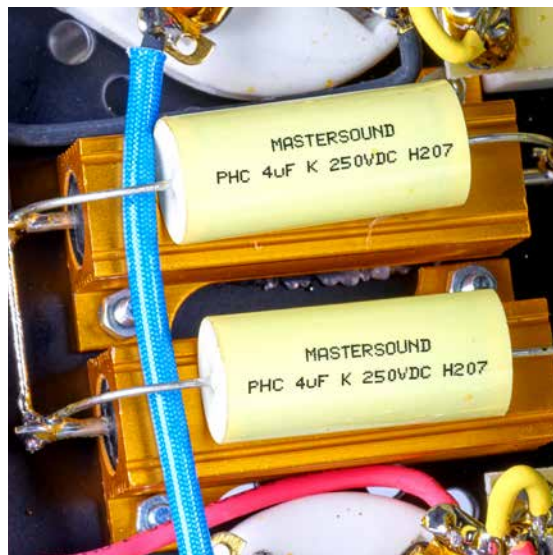
The Mastersound also boasts extremely generously sized power supplies that feel like they weigh tons, carefully filtered, as well as very broadband output transformers that are wound in-house. These contribute to the strikingly high resolution of the Mastersound. It is not a breach of style to add high-resolution sources from HiRes streamers to SACD players to this amplifier.

The eponymous 300B is of course the central component, the cultically revered triode piston found in countless replicas and new models, which was last produced by Western Electric in the eighties of the long-faded 20th century - after having been in the range for almost 70 years. Nowadays you can get good, reliable, paired goods from Russia, among other places, where the makers of Mastersound also use their products. At this point it should be noted that a solidly constructed device like the Italian amplifier with its convenient automatic quiescent current setting naturally also allows experimentation.

So if you have "their" 300B that you swear by, a super tube that has found its way into your home listening room from dark sources over stony mountain paths in the neighboring valley of Shangri-la, you are welcome to transplant it into the Mastersound 300B.

Of course, only when the really excellent Russian tube assembly works has died down after a few thousand hours of operation. At this point, a note about the service life: You shouldn't leave a tube amplifier switched on permanently; on the other hand, triodes like the 300B need a certain amount of time to reach the optimal operating temperature. In the end, each user has to decide for themselves how wide the gap is between the time window for listening pleasure and the durability of the tubes. If I'm listening and have a day off, the device stays on even during my "lunch break". If I go out of the house for a long time, I turn off the tube amplifier for safety reasons, which also saves me money on the electricity bill and therefore the environment.

In the FIDELITY listening room, the Mastersound Evolution 300B was allowed to play under optimal operating conditions. After all, tube amplifiers, even with 300B components, usually neither

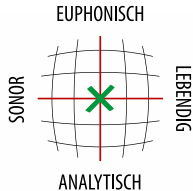



Efficiency monsters are still performance miracles, you should treat them to sound transducers that can make “a lot of noise” even with comparatively few watts. Among other things, the brand new Heco La Diva was on display in the editorial office, whose name says it all: in a good mood and well-positioned, she has the potential to be a feel-good queen, bathing music lovers in good sound like a wave pool does with bubbling water. This loudspeaker is also a real diva when it comes to its demands: Madame doesn't want to bother with a field-forest-and-meadow amplifier, possibly made in Japan, and then likes to express her displeasure about it in a shrill and pointed manner a pleasant partner. La Diva, on the other hand, immediately got along with the chic pretty boy from Italy: The Mastersound drew a multi-colored, shimmering sound spectrum, opened up very wide spaces in orchestral recordings and not only assigned a precisely defined place to each instrument in large orchestras, but also created the dynamic dramaturgy of the respective conductor is understandable. I have various recordings of Mahler's expansive Eighth Symphony with European and US orchestras


available. These include standard-setting classics such as Eliahu Inbal's recording with the Radio Symphony Orchestra (RSO) Frankfurt (today: hr Symphony Orchestra), which was recorded by Denon as a one-point recording for posterity, or the version from San Francisco with Michael Tilson Thomas on the SFSO's desk (a sparkling clean multi-channel SACD production, by the way, but more about that another time). Mastersound and La Diva allow me to immerse myself deeply in the “Veni, creator spiritus” opening choir including the large organ and make it possible to understand the different intellectual approaches of different baton wielders to Mahler's highly complex meta-music.

The German-Italian team also does a creditable job with contemporary pop, marching along in London Grammar's song “Hey Now” (which is infamous as a test piece thanks to the abysmal computer bass) without distortion and effortlessly, but missing the last bit of soul and also a certain crispness during hard impulses. Without further ado, the Heco La Diva, which in itself is very fine, has to be changed and plugged in and has to make way for another, much more expensive “girl”: Wilson Audio's Sasha DAW. ▶

The **Mastersound Evolution 300B** is also an unproblematic playing partner for non-tube freaks: "marry" it with high-efficiency loudspeakers, let it warm up for about an hour - and enjoy music of all kinds!



HERAUSFORDERND =  A component is 100% intuitive when you can immediately use it to its full potential.

INTUITIV = 



It is a monument, the perfectly optimized "granddaughter" of the rightly legendary Watt/Puppy from Wilson Audio. Sasha costs more than four and a half times as much as the German diva - and the Mastersound Evolution 300B makes the differences between the two ladies immediately audible and understandable.

The basic impression is a feeling of significantly increased sovereignty, fueled by countless details, a "This is how you do it" for which Sasha doesn't even have to raise her voice, a clear more of everything that doesn't need an increased level to be effective. "A good chain sounds extraordinary even at room volume" – what sounds like a truism that is difficult to implement becomes tangible reality here: The Mastersound Evolution 300B pushes the exceptional American speaker to sonic heights without any effort; He also appears to be the ideal playing partner to access Sasha's typical abundance of meaningful details, and he fully exploits the Wilson's fine dynamic potential. Not bad for a component without a five-figure price tag. Especially since the Mastersound Evolution 300B also seems suitable for satisfying the gaming instincts of some tube fans. Finally, I'll treat myself to something nice and quiet: with the help of blues musician Herbert Pixner, the South Irish man Manuel Randi recorded an acoustic guitar album that's worth listening to,

that simply bears his name. Delicate sounds, recorded up close and well-balanced, with the sonic presence that one immediately associates with the term "high end". Thanks to the Mastersound Evolution 300B and Wilson Audio Sasha DAW, Signor Randi sits in front of me and plays just for me. Overwhelming. ■

Tube integrated amplifier | Mastersound Evolution 300B | Performance:2 x 24W | **Tube configuration:**4x300B, 2xECC802, 2x6SN7 | **XLR inputs:**1 x line, 1 x direct | **RCA inputs:**3 x Line, 1 x Direct | **Transmission bandwidth:** 8Hz to 40kHz, 0db | **Output resistance:**4 to 8 Ω | **Negative feedback:**0dB | **Particularities:** automatic quiescent current setting, remote control (only loud/quiet) | **Dimensions (W/H/D):**46/28/42cm | **Weight:**34kg | **Warranty period:**2 years | **Price:**around €8600

Barisic & Partner | Pradler Straße 3 | 6020 Innsbruck | Austria | Tel +43 676 5906026 | www.audioverkauf.com

COMPETITORS

CD player:Mark Levinson 390s | **SACD player:**Marantz SA14 V1, Sony SCD 333 ES, Pioneer D6, Denon CX2 | **Turntable:**Clearaudio Innovation Compact, SoReal Audio Seismograph, Dr. Feickert Volare | **Pickup:**Clearaudio Da Vinci and Jubilee MC, Denon DL-103R | **Integrated amplifier:**Marantz HD-AMP1, Mark Levinson 5805 | **Preamplifier:**Mark Levinson No. 38S, Trigon Snowwhite, Marantz SC-22 | **Power amplifier:**Mark Levinson No. 27, Marantz MA-22, John Curl Jc3, Trigon Dwarf II | **Phono amplifier:**Musical Fidelity M-VNVL, Clearaudio Basic | **Speaker:**Infinity Kappa 7.2 Series II, MuSiCa NoVa PlethorA | **Accessories:**Spikes and device coasters from ViaBlue