

ANOTHER ÉON ART PRODUCT THAT IS OUT OF THE ORDINARY

By MICHEL DALLAIRE

Éon Art is a Canadian manufacturer located in Chandler, Gaspé. According to its founder, Stéphane Hautcoeur, it is one of the best-equipped electronics laboratories in Canada in terms of audio equipment design. I had the privilege to test for TED Magazine, the Quark integrated amplifier. My conclusion at the time was that it is in the league of great brands in the world of high fidelity. In this article, I will have the privilege to test the Boson, a monophonic version of the Quark, but with a substantially increased power supply and performance. The Boson is therefore a monophonic power block to which the pre-amplifier section of the Quark has been retained. These two monophonic amplifiers are connected to each other by a connecting cord. The idea behind this unusual approach is to completely separate the left channel signal from the right channel. Let's see if this solution works, i.e., eliminating all crosstalk in a high-caliber stereo listening context.

The philosophy behind the Boson amplifier

According to a study published in the journal **Science**, the *W Boson* is a major challenge to the standard model of particle physics. Can the same be said of the new *Boson* integrated amplifier from *Éon Art* regarding the physics of sound wave reproduction? Science is also part of **Stéphane Hautcoeur's** approach to the design of high-fidelity equipment. Not only is he a music lover / audiophile, but he is also a man of science trained in robotics and software engineering. **Eon Art's** facilities include extensive quality control equipment as well as a research and development laboratory equipped with a powerful 800-core computer that computes algorithms for the design and optimization of printed circuit boards.

Éon Art amplifiers use reliable technologies that have their origins in the medical, aeronautical and marine electronics fields. Its amplifiers are, according to **Éon Art**, expertly crafted to reproduce music as seamlessly and naturally as if you were there when it was recorded. All this, of course, without losing sight of the environmental aspect, thanks to reliable products that can be updated and repaired over the long term. A capacitor replacement program is provided for this purpose every 5 years and the warranty covers the units for 10 years. At **Éon Art**, science and computers are the fundamental tools for designing the instruments, but the final evaluation is always done in the ear and in a specialized listening room.



First-class design

Visually, the *Boson* is virtually identical to the *Quark* stereo amplifier with its beautiful enclosure manufactured by **Oracle Audio Technologies** in Sherbrooke. Besides being a monophonic integrated amplifier, its weight of about 40 kg is justified by its generous dimensions and its quality of construction. The front panel is machined from a solid 19 mm plate and attached to a rail system that serves as a drawer for easy maintenance and replacement of the preamplifier tubes. This front panel will be graphically reproduced on a future application that will turn your tablet or smartphone into a touchscreen remote control. The 7 mm thick aluminum case is fixed on a semi-precious stone base called labradorite. At the rear, a lock secures the rail system that provides access to the circuits inside. All surfaces, except the back plate, are covered with a beautiful mirror finish clear lacquer. On the front panel, there are

four buttons, including the one on the left for powering on, followed by a button for selecting sources and two buttons, on the right, for increasing or decreasing the volume.

At the back, there is the grid plate for ventilation, which consolidates the structure of the case. This plate has a fairly large rectangular opening that gives access to the back of the removable drawer. It shows a series of *LED* indicators that can be used to diagnose a problem on one of the *Boson's* circuits, if any. Then there is a *SPLIT (On/Off)* switch that allows up to six *Bosons* to be chained together for multi-amplification. The other switch turns off the front panel *LED* lights, which come back on temporarily when the remote control is used. The *SPLIT* switch in the *On* position determines that this *Boson* becomes the *master* amplifier that will control all others in stereo or multi-amplification. For this purpose, small multi-strand sockets are installed at the

back to connect one or five other *Boson* amplifiers to the one designated as master. All this is done with special cables, provided, at predetermined lengths when ordering at **Éon Art**. Once connected together, all these amplifiers can be controlled by a remote control. There is also a plate at the back that closes off a space for future options such as a *DAC* card, a headphone output, a phono input or a balanced input on *XLR* connector. On the *RCA* side, there are four line inputs as well as a stereo output for multi-amplification. Each *Quark* or *Boson* amplifier comes in a sturdy **Pelican** transport case on wheels and surrounded by thick foam protection.

The interior of the beast

The *Boson* volume control consists of a set of individual medical grade metal film resistors of very high precision. These are transistor driven, eliminating the need for relays or a conventional mechanical po-

tentiometer. This configuration ensures the lowest possible distortion rate while eliminating long-term mechanical wear. On the signal path, the capacitors used are all audiophile quality and brands such as **Amtrans**, **Clarity**, **Duelund**, **Mundorf** and **Solen**. Their quantity is adjusted in order to eliminate any phase rotation. All internal wiring is done with tin-plated *OFC* wire and covered with silicone or *PE* foam, or carbon-doped nylon.

The printed circuit boards consist of eight layers, each with a double thickness of copper. They are subjected to automated and very rigorous tests after the electronic parts are soldered. To do this, specific computerized analyzers are used. Then, the devices are subjected to a 24-hour endurance and stability test under the supervision of a 64-channel *M300* data acquisition system. Finally, an **Audio Precision** analyzer certifies that each amplifier meets the manufacturer's rigorous standards and criteria before packaging.

The power supply is provided by three transformers whose fifteen secondary windings total 840 VA. The power supply capacitors are mounted on a separate board to facilitate their replacement every five years as suggested by **Éon Art** in its maintenance program. The power of the monophonic *Boson* is 250 W at an impedance of 8 ohms. At 4 ohms, the power increases to 400 W. This is 20% more power than its brother, the *Quark* stereo, and twice the reserve of the latter. As with

the *Quark* design, the idea of a tube preamp stage combined with a transistor output stage with modules operating in class *D* was retained. For a single channel of amplification, the *Boson's* power supply has been almost doubled, which further improves its ability to drive demanding or difficult low impedance loudspeakers. To this end, **Éon Art** stipulates that the *Boson* should be stable regardless of the speakers that will be associated with it.

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Installation and listening conditions

Mr. **Stéphane Hautcoeur** came personally to install the two *Boson* amplifiers at my home. He was accompanied by a collaborator for the handling of these two animals of nearly 40 kg





each. Given their generous dimensions (438 mm by 435 mm by 320 mm), I had to install them on the floor on each side of my audio cabinet. They were individually connected to my two dedicated circuits of 20A each. I had the opportunity to use them in listening with a trio from **Merging Technologies**, that is to say the *Nadac Player* streamer / converter with its *Nadac Clock* external clock and its *Nadac Power* external power supply. These three devices were at my house for a previous test bench.

The music source came from my **CoolBOX** server and the access to its content was done through my *Ethernet* network and the *RAVENNA* transfer protocol. The streamer section of the *Nadac Player* was equipped with the *ROON* playback software, which I could control from my tablet on which the application is installed. The speakers I used were the same ones I usually use, even though they were a totally disproportionate debalance compared to the value of the electronics. For the first time in my life and as an audio reviewer, I had about \$165,000 worth of electronics to test, in my living room, including the pair of *Boson*. As this kind of experience is probably a *once in a lifetime* experience, I made the most of it with high resolution *PCM* files as well as *DSD*.

The Boson pair in action

I begin my listening by revisiting **Lyle Lovett** who has just released his last album after almost 10 years of absence on the musical scene. This American songwriter evolves in a style that goes from bluegrass to blues to folk and jazz. In this album entitled *12th of June*, **Lyle Lovett** is back in the saddle with his **Big Band** surrounded by **Sam Bush** on vocals, mandolin

and guitar. **Mace Hibbard** plays tenor saxophone and clarinet. On drums we have **Russ Kunkel** and on bass **Viktor Krauss**. On some pieces, singer **Francine Reed** forms a superb duet with **Lyle Lovett**. This album, which I bought as a *FLAC* file (24 bits / 96 kHz), starts with an instrumental piece called *Cookin' at the Continental* in which the **Big Band** shows all its know-how and power. The recording is sharp, precise and impressively dynamic. The *Boson* pair shows me exactly what it is all about in terms of the separation of the left channel from the right. The orchestra stretches out in front of me, while at the same time extending far beyond the confines of my speakers. The horns have an incredible punch, while the rhythm section composed of the drums and the double bass forces me to tap my foot. On *Gee, Baby, Ain't I Good to You*, we are dealing with a blues where Ms. **Reed** comes into play. Her warm, slightly husky voice blends beautifully with the higher, sweeter voice of **Lyle Lovett**. The pianist's playing is superbly deconstructed by the *Bosons* and I can hear perfectly the rubbing of the brooms on the snare drum. Once again, the horns are gleaming and **Mace Hibbard's** saxophone is sensual as can be. The pair of *Bosons* are definitely not hiding anything from me and are telling me the truth, the whole truth.

I follow up with another recent acquisition of mine, which is a jazz album called *Nightjar in the Northern Sky*. I discovered Icelandic singer and pianist **Anna Gréta**. In what is her first album on the **ACT** label, she totally charms me with her sweet voice and a well assumed piano playing. On some pieces, her voice reminds me of the Polish artist **Anna Maria Jopek**, another of my favorite jazz singers. The monophonic *Boson* duet allows me to fully enjoy the sensuality and sweetness of **Anna Gréta**. Once again, his piano is perfectly rendered in all its tonality and harmonics. **Elinar Sheving's** drums and **Skuli Sverrisson's** bass have all the impact and weight necessary to make

me believe that my small, freestanding two-way speakers have become three-way speakers with a woofer of at least 20 cm. The effect of presence is incredible and the naturalness of the timbres makes me discover a level of transparency that I had not experienced until now.

I end with the album of excellent harpist **Valérie Milot** and cellist **Stephane Tétreault**. This recent opus entitled *Transfiguration* features pieces by several contemporary composers, the oldest of whom is **Camille Saint-Saëns**. This recording, purchased as a *FLAC* file (24 bits / 96 kHz), is superbly produced by the **ATMA** Classique label. The dynamic margin is exceptional. The pair of *Bosons* allows you to hear everything from the softest to the most playful passages. **Valérie Milot's** harp is superbly ethereal while **Stephane Tétreault's** cello has such a real woody character that I feel like I can smell his varnish in my living room.

The last piece is an adaptation of a composition by English band **Gentle Giant** entitled *Cogs in Cogs* in which drummer **Bernard Riche** plays. The result is a stirring performance that *Boson* duo serves up with aplomb and confidence. In the segments where the trio is having a great time, I have a clear view of each of the musicians' performances without the stereo image becoming blurred or overloaded. The definition is superlative, but without exaggerating in the sense of asepsis or disembodiment of the artists in their performance.

Conclusion

Even if the auditory memory is not the best in the long term, I think I can say that the *Boson* monophonic blocks by manufacturer **Éon Art** are certainly an advancement compared to its *Quark* stereophonic integrated. With the *Boson*, we gain transparency, control over the low frequencies and the stereophonic image which becomes panoramic. The *Boson* also facilitates multi-amplification at a very high level. Testing such equipment was an honor and a pure pleasure for me and, at the same time, it was a harsh revelation of the limits of my own high-fidelity equipment. My stereo system is indeed more modest, but it still provides me with a reference to be able to evaluate and appreciate as much the entry-level equipment as those that rise to the top of the world competition. The *Boson's* performance puts it directly in the league of the big international brands. Its unit price is indeed not within the reach of everyone, but if we compare it with the best in amplification, it is, surprisingly, not the most expensive in its category. The detractors of the *D* class will not be able to reproach it with a cold, acid or disembodied sound. Its hybrid circuit with tube preamplification combines the best of both worlds while being environmentally responsible in terms of power consumption and durability. Combining the *Boson* pair with a high-performance digital source is like bringing the title of **Led Zeppelin's** *Stairway to Heaven* to life. As I am unfortunately not the heir of a rich unknown uncle, it is with regret and a twinge of sorrow that this *Boson* duo will have to leave, and remain for me in the realm of the dream.



GENERAL INFORMATION

Price: \$56 670 per unit

Warranty: 10 years by following the manufacturer's maintenance program. This maintenance program can extend the life of the *Quark* to over 30 years.

Manufacturer: Éon Art, T. : 418.360.4332, <https://en.eon-art.com>

Mediagraphy

Lyle Lovett, 12th or June, Verve, *FLAC* 24 bits / 96 kHz

Anna Gréta, Nightjar in the Northern sky, ATC, *FLAC* 24 bits / 96 kHz

Valérie Milot and Stephane Tétreault, *Transfiguration*, ATMA Classique

Woodkid, S16, Universal Music Group, *FLAC* 24 bits / 44.1 kHz

Mercan Dede, Breath, White Swan Records, WS0078

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