# CABASSE PLUS MORE BASS

The French speaker manufacturer has long remained true to its faith in coaxial drive-units: add to the latest generation of the Baltic speaker its massive Santorin 38 subwoofer, and you have a breathtaking system

A solid bass foundation with calibration system and output below 20 Hertz:
Cabasse-Subwoofer Santorin

Cabassa







he manufacturer in question was French company Cabasse, and the effect it was seeking to achieve is these days more consistently implemented in the form of a coaxial arrangement, with the treble driver in the centre of the axis of a midrange or mid/bass unit. It's on this technology that Cabasse concentrates, the coaxial or concentric form being quite common in nature, and asserted by some as the dominant form of higher order – after all, even the most irregularly-shaped object thrown into water produces completely uniform concentric waves.

As early as the early 1990s, Cabasse, a loudspeaker manufacturer founded in 1950, developed the basic driver technology to make acoustic use of these concentric rings. This was a paradigm shift from its already innovative, but more classically designed, drivers, and became a way of thinking to which the company's own headquarters and production facilities in Plouzané have remained true to this day. This makes the appearance of the larger models virtually unmistakable.

# **Acoustic triumvirate**

The Cabasse portfolio is still managed by the founding family within the AwoX Group, and here we have the fourth generation of its Baltic speaker, using a new ultra-light aramid diaphragm, chosen for its stability and self-damping properties, in a special honeycomb structure for the core tri-coaxial – or is that triaxial? – driver. The drivers for the upper and lower midband are compressed to form a homogeneous whole, while the embedded tweeter reaches above 25 kilohertz.

Three drivers in one – and the "horn problem" is partly solved at the same time.  $\blacksquare$ 

Unlike the L'Océan and La Sphère systems in the six-digit price range, which work with fourfold coax drivers and corresponding volumes, the smaller (but no less sculptural) Baltic 4 uses a somewhat smaller main driver system, with the separate subwoofer only covering the two lowest octaves of around 20-80Hz.

### **Breton Colossus**

The Santorin 38 uses an earthquake-generating long-stroke driver with a 38cm Nomex honeycomb membrane – actually the same one found in the company's L'Océan flagship speaker –, meaning that it doesn't just cover that range down to 20Hz, but is actually flat down to 17Hz. Add to that an amplifier capable of a kilo-



 $\dots$  because there is really no horn effect where really large lifting work occurs, due to the geometry.  $\blacksquare$ 



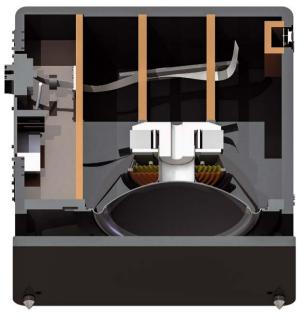
watt of instantaneous power, a gross volume of 187 liters and a whopping 53kg of mass, and you have a bass master that's always noticeable, even when it is not switched on. Beside the very pretty Baltic columns with their superbly styled spherical enclosures, one wonders whether

the Santorin might not have been better realized in a rounder form.

Nevertheless, the sub contains the finest DSP technology for acoustic integration into the room via microphone and automatic or individual measurement and for custom adaptation to the Baltic. All we have to do is set the 65Hz crossover frequency recommended the manufacturer, connected the sys-

by the manufacturer, connected the system via the loudspeaker terminals on the amplifier and the "satellites" output on the subwoofer. Then the supplied,

■ Massive bracing, a



clever decoupling system
and a powerful engine
with DSP ensure "bang".

reproduced with incredible

high-quality microphone is placed for three short measurements at the listening position, once at a height of about 1.50 m at the top left and once in the knee position at the bottom right, and the Baltic/Santorin system is ready to work together seamlessly. Frequency response, location/delay and room characteristics in the bass are taken into account: while the whole thing sounded appealing with intuitive adjustment even before the measurement, after the set-up routine even the quietest boom effect or the smallest asynchronicity was now dispelled. Impressive...

Stunning performance

Apart from the fact that this subwoofer, equipped with all manual possibilities, four configuration memories and a clever decoupling, is one of the best I have ever heard in terms of cellar spirit, namely slack-free precision and enormous power down to the lowest 16-Hertz organ whistle, also prevails in the higher tones.

To honor the Cabasse family's past fame as violin-makers, after over 60 hours of break-in time we started the listening test with Vivaldi's "Four Seasons" – albeit with Anne-Sophie Mutter's Italian Stradivari shining rather than a French instrument. Despite all the clarity and extreme solidity of the soundstage image, the Baltic 4 proved to be gentle-tempered, and with wide dispersion to ensure a pleasing result over a generous area when angled in slightly towards the main listening position.

The music sparkles effortlessly from the Baltic 4 'satellites', the violin being

three-dimensionality, and the same applies to the piano of Tori Amos on "Winter", which is extremely credibly projected. Meanwhile even drummer Charly Antolini in full flight can't overtax this system in terms of timing and maximum level. For several decades it has been a sign for me when my eyes twitched involuntarily with bass impulses, because this only happened with speakers of excellent synchronicity

and speed. With the Cabasse system, it happens!

I honestly don't have the space to do justice to the Santorin subwoofer, which proved somewhat overwhelming at times, but with the Cabasse Baltic 4 speakers it was love at first sight – and sound.

Tom Frantzen

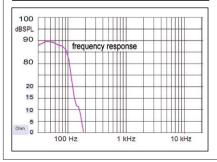
# **CABASSE SANTORIN 38**

€7000

Dimensions: 51x62 x61 cm (WxHxD) Warranty: 5 years (upon registration) Contact: Audio Trade Phone: +33 298/058888 www.cabasse.com

One of the most powerful and best subwoofers STEREO knows, its advanced design dramatically simplifying integration into a sub-sat or multi-channel system, including room bass correction. The bass has exceptional extension — below 20 Hertz — at almost full level, the maximum volume is enormous, yet the sound is effortless, agile and yet powerful. Unfortunately, the Santorin is very large, but the subwoofer worked absolutely superbly in a 20m2 room.

### **MEASUREMENT RESULTS**



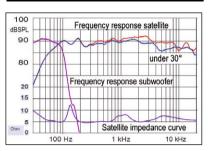
## **CABASSE BALTIC 4/SANTORIN**

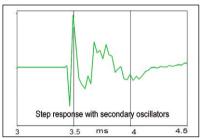
From €11,000/pr (freestanding version, also available from €8000 as wall-mounted and compact version), WITHOUT subwoofer

Dimensions: 40x130x49 cm (WxHxD) Warranty: 5 years (upon registration)

Used with the subwoofer as a complete €18,000 system, the Baltic 4 breathtaking. A high-precision, effortlessly solid and finely etched sound of superb musicality combines with abyssal depth, pitch-black and impressively controlled. Pure high-end, pure music.

### **MEASUREMENT RESULTS**





minimum impedance	4 Ω at 260 Hertz
maximum impedance	12.5 Ω at 140 Hertz
Sound pressure level (2.83 V/1m)	92 dB SPL
Power for 94 dB (1m)	3.6 W
low cut-off frequency (-3 dB)	20 Hertz
Distortion factor at 63 / 3k / 10k Hz	1.0   0.3   0.1 %

# LABORATORY COMMENTARY

The measured values apply to the satellites (Baltic 4), but since the frequency response of the satellites is only up to 74 Hertz, we specify the lower cut-off frequency with subwoofer (20 Hertz) here. Thanks to calibration, the set fits together almost seamlessly and delivers a balanced and quite linear sound. The loudspeakers, which have a very high efficiency of almost 92 dB, should be angled to the listening position. The step response corresponds approximately to that of a three-/four-way speaker.

