



FIDELITY

DAS BESTE AUS 10 JAHREN



Die 25 Top-Storys

Die High-End-Highlights

editor's cut

digitally remastered

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FIDELITY is celebrating its tenth anniversary and invites you to join in the celebration with this artbook, released by Germany's leading high-end magazine. Out of more than 1,000 articles created over the span of an eventful decade, our editors have compiled the most outstanding ones. The goal is nothing less than to convey the most moving, exciting and thrilling music on this planet in a way that is equally compelling, gripping, emotional and as authentic as possible. There are many ways to achieve this goal, and 25 of them are assembled in this book. On top of that there is also a groundbreaking innovation that has the potential to imprint its mark on the topic of „HiFi“ for decades to come. There can be no doubt about it: High End is alive and kicking. And the future looks promising indeed.

»Perfection is finally attained
not when there is no longer
anything to add but when
there is no longer
anything to take away.«

Antoine de Saint-Exupéry

* 29.06.1900 † 31.07.1944

TEXT: STEFAN GAWLICK. PHOTOGRAPHY: INGO SCHULZ











VORSPRUNG DURCH TECHNIK!

OR IMMENSELY POWERFUL PERFORMANCE FOR THE BUDGET?

In this case, both. Whichever way you look at them, the Z5 Cryo floor-standing loudspeakers from Børresen Acoustics are simply extraordinary.

The top league of our hobby has climbed exclusive spheres in recent years. This is not only true for hi-fi and high-end: In the early 1990s, a well-equipped VW Golf cost around DM 17,000—a pretty steep price for such a car, even back then. Today, you have to pay just under 28,000 euros for the basic version. While the financial outlay appears reasonably easy to justify here, this gets somewhat more difficult when it comes to hi-fi. Especially for loudspeakers, many manufacturers rely on components from established suppliers. Modern simulation software is so powerful that prototype construction only begins at a stage in the process where, in the past, many failed attempts were consigned to the scrap press. I can also see and hear the converse argument though, because on the other hand, you were never before able to put such superb func-

tional monsters in your chain as you can today.

When the editors announced a loudspeaker for around 50,000 euros, all my reflexes switched to defense. After arriving at the editorial office, my skepticism quickly gave way, because everything about these speakers is special. You can take that literally, not even the feet are outsourced. They were developed specifically for the Z5. So please bear with me if the description of this speaker takes up a bit more space...

Michael Børresen, (co)founder, CEO and developer of the company Børresen Acoustics, is by no means an unknown quantity. Some chassis from Philips originate from his pen, the constructions of the company Raidho have been designed by him for many years. The subject of resonances is a particular concern of his. The extremely quiet cabinets, the resonating and self-composed stand constructions of the small loudspeakers were unique. It was the classic tale of a mastermind

who wanted to explore his own ideas without compromises, and thus decided to go it alone. He started with his own line of cables, followed by electronics and then finally loudspeakers. With the many innovations that are in the Z5 Cryo Edition, existing concepts have been fundamentally questioned and—if necessary—ingenious solutions were devised to let a good principle find itself.

Take the cone drivers, for instance, which are manufactured in-house like all other components. The drive caught Børresen's eye: The iron, which was inserted into the pole plates to center the magnetic field, was said to cause distortion. So they experimented until they came up with an almost iron-free and magnetically wonderfully centered drive. An induction of 0.06 millihenry is impressive and is not surpassed by any competitor.

The diaphragm consists of a high-tech sandwich: two wafer-thin layers of carbon enclose a thin core of Nomex hon-





eycomb. Outstanding stability with minimal weight—this is what loudspeaker manufacturers dream of. The fact that the coils are made of copper-plated aluminum can be seen as a nice bonus. The tweeter is an evolutionary version of an old Philips patent. Børresen laminates fine aluminum conductor paths onto a wafer-thin foil made of polyethylene naphthalate. A moving mass of 0.01 grams (!) faces a very potent magnet system and is driven effortlessly. Distortion is alien to this construction. The tweeter mainly makes itself known by what we don't hear: Artifacts.

The crossover is also different from typical designs: We find a couple of semiconductors on it. In fact, a square wave frequency generated by a microcontroller is supposed to have an electromagnetic effect on the components of the crossover and stabilize operating points, reduce crossover distortions. Whether this works, we cannot say for lack of comparison to a box without this ingredient.

Børresen subjects all metal parts of the cryo version of the Z5 to cryogenic treatment. This involves cooling the components—

even the screws—down to -196°C before gradually returning them to room temperature. This is intended to relieve all material stresses caused by casting, milling, cutting and so on, and to give the material the properties of a monocrystalline structure. The parts that come into contact with the signal benefit from a six to eight percent improvement in conductivity.

Sonically, the Børresen Z5 Cryo are amazing: they don't sound big, or wide, or deep, or whatever. In fact, they don't sound at all. If the first reaction is a bit of disillusionment, because a lot of big cinema was expected for a lot of money, you quickly realize that resonance control and materials research taken to the extreme avoids most of the flaws in the principle of operation. Assuming that the development is not finished, I believe that Michael Børresen will eventually find a few more knobs to turn. Well, how does it sound now? Just as the recording, room and connected equipment allow for.

We begin with Zubin Mehta's recording of Richard Strauss's *Salome* with the Berlin Philharmonic (Sony). Rarely

have I been able to listen so deeply, to look at Eva Martin's lips during the completely wacky ending. The Z5 Cryo paint a wide and completely unstrained picture of this complex musical event. This is due to the low resonance and distortion of these speakers, which do not even allow the well-known masking effects to occur.

Often it is a tiny bit of distortion that adds a little crowning touch to a sound, helping it to become more assertive. So one thinks to hear "more". That is omitted here, and the inattentive listener may find the Z5 Cryo boring. But if you prick up your ears, you realize how much less bad and how much more good the Børresen treats you to. We listened across our playlists and were treated to fascinating discoveries from Adams to Zappa.

Yes, the Børresen Z5 Cryo are exclusive speakers. However, here you get a speaker that employs so many new approaches and proprietary design solutions as hardly any other. Such a depth of production in a high-wage country has its price. Big money, but also big performance. ■





Die Innovation des Jahrzehnts

