



FLAGSHIP'S ESSENCE INHERITED

BØRRESEN Z5 CRYO EDITION FLOOR-STANDING LOUDSPEAKER

In one of our past editions, we've introduced everyone to Denmark's brand, Børresen. This name is taken from the last name of famous loudspeaker designer, Michael Børresen. Indeed, this brand is created by this person, which is based on his last name. This name evidently shows the brand's importance.

Recently, the distributor of Børresen, Precision Audio Ltd invited us to listen to the all-new Z5 Cryo Edition Floor-Standing Loudspeaker. Z5 is considered a top model of the Z-series, which utilized the best technology of Flagship 0-series. The Cryo Edition may be considered an upgraded version or extreme version of Børresen's loudspeaker. Granted, the Z5 Cryo Edition is the best work in Børresen's Z-series. If buyers don't choose to purchase Børresen's 05 due to its budget, the Z5 Cryo Edition may become the target of these buyers instead. Before introducing you to the Z5 Cryo Edition, I would like to discuss the background of this product series first.

Michael Børresen's Creation

Michael is incredibly well-known in this industry. Many classic high-end speakers are created by him. He used to be an engineer at Nordost. After, he joined Denmark's Raidho Acoustics as a loudspeaker designer. Therefore, he has extensive designing experience with both cables and loudspeakers. After leaving Raidho Acoustics, he founded 3 new brands: Aavik, Ansuz, and Børresen.



One of the brands, Aavik, specializes in amplifiers, DAC, streamers, and RIAA. Currently, Aavik has newly released products of the 180/280/580 series. These are considered very high-end. Ansuz specializes in cables and accessories. Since Michael has designed at Nordost for many years, he was able to easily launch Ansuz due to his prior experience. From the time he was a student to when he was an engineer, he has accumulated extensive knowledge regarding these topics, which is what he is most familiar with. Lastly, Børresen is the newest loud-speaker brand. The work of this brand is also drawn from his expertise.

From cables and amplifiers to different levels of loud-speakers, Michael Børresen has covered everything within the audio system. He is also the chief designer of these 3 brands. You might ask: why has Michael founded so many brands? From my understanding, other than his capability to do so, these 3 brands combined create an amazing high-end system and "ecology." What are the benefits to creating this "ecology?" From a marketing perspective, the buyer wouldn't have to buy one system from separate manufacturers. Michael has all the products you would need. Secondly, a good product "ecology" can decrease

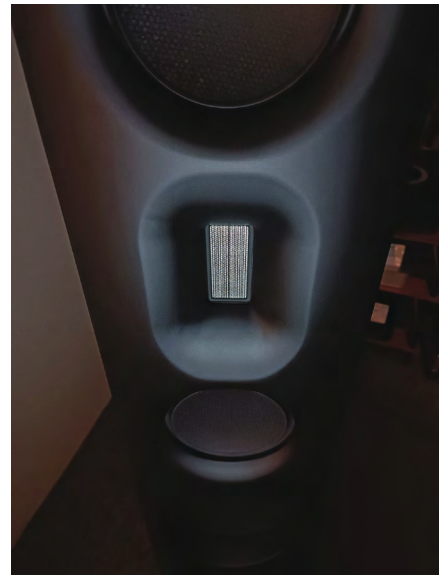
the buyer's chances of having a bad-sounding system due to the mismatching of products. This is also beneficial from a consumer standpoint. Indeed, the 3 brands are outstanding. The last piece of the puzzle, the Børresen loudspeaker, after the 0-series, the Z5 Cryo Edition Floor Standing loudspeaker of Z-series was released in Hong Kong, China. We are able to fully witness Michael Børresen's high-end and complete "ecology." Michael Børresen once said that he hoped to create a whole music product line, in order to display comprehensiveness in his products.

Two Series of Børresen

Børresen has two loudspeaker series: 0-series and Z-series. Each series has four models, including one bookshelf loudspeaker and three different sizes of floor-standing loudspeakers. The 0-series is at a higher grade than the Z-series, consisting of all the top technologies and innovative designs. In comparison, the Z-series has more traditional designs and components, yet the performance isn't inferior from the 0-series. The performance and components of the Z-series are newly designed, which are results of Børresen's extensive research and creativity. Yet this isn't a lazy or simplified version of the 0-series, evident in our experience with the Z5 Cryo Floor-Standing Loudspeaker.

Although the 0-series has a fusiform shape, the Z5 Cryo edition is more rectangular. Unlike the 0-series, it lacks the wooden pattern on the side, which is replaced by a matte black or white instead. It also looks elegant and minimal. This look is more suitable to be placed in many differently decorated rooms.

The specialties of the 0-series box include its concavity on the side of the tweeter and its presence of air vents. The Z-series also has air vents and concavity. This design can increase the sound performance, clarity, and details in high frequency. The bottom side of the Z-series also has a concave design, which is believed to also increase bass performance.



Signature Cryogenic Treatment

Every Børresen model has a Cryo Edition option. As mentioned before, Børresen uses their cryogenic processing on their Cryo Edition. This processing subjects crossover and the inner wires to extreme cooling, with temperatures down to -315 degrees Fahrenheit (-192 degrees Celsius). This processing is common within high-end cables. Granted, Michael Børresen of Ansz is aware of the benefits that come with this treatment. When electronics jump from one crystal structure of a metal to another, and the signal's transient path is more straightforward, then the jamming signal or electrical noise lessens. Cryogenic processing increasingly contracts the crystal structure of the metal, making it more like the monocrystal, which increases conductivity, decreasing signal path resistance and harmonic distortion. Therefore, this Cryo Edition can be considered an upgraded or extreme edition.

The adjustable feet of the ground cross plate of the Z5 Cryo Edition have a special design, allowing the use of Ansz Acoustics Darkz resonance control, which has 3 titanium balls, ensuring a great mechanical grounding to the floor.

New Unit, New Design

Z5 Cryo Edition is a 2.5-way, 7 units floor standing loudspeaker. All speaker units are Børresen's standard components that are used in other models. One planar ribbon tweeter is the manufacturer's new product with new technology. Extensive finite element methods are used to optimize the magnetic flux field, facilitating driver movement, and ensuring high efficiency and outstanding linearity. This tweeter is of a closed ribbon design, in which its moving mass is extremely low at 0.01 grams. The efficiency is as high as 94dB. High frequency can be extended up to approximately 2.5 KHz upwards.

The bass/midrange of two 4.5 inches and of four 8 inches both used the best technologies of the 0-series. The patented iron-free driver system is used in the 0-series, which is possible to reduce induction to an amazing 0.04 mH. The induction performance is 1/10 of other common driver systems. The driver is less affected by powerful movements, resulting in the sound being more concise, clear, and with power. In the Z-series, its iron-free driver is an all-new design, which is less costly. Its voice coil is 8mm and induction is only 0.06mH. By linearizing the magnetic field, the driver is less affected by actual movement, exhibiting a faster and more powerful sound.

Z5 Cryo edition and 0-series both use the same membrane. This membrane consists of a composite of two layers of very thin carbon on both sides of a 4mm Nomex honeycomb



core. The manufacturer states that this type of composite structure is similar to the one used in formula 1 type of racing cars, which is stiff and lightweight. Therefore, the membrane movement is fast and stable. This membrane is very low in weight, at only 5.5 grams, allowing a very high acceleration factor in the driver and resulting in both higher resolution and efficiency.

Furthermore, you can see that the speaker unit's edge is a shallow horn streamline shape. This creates a bigger projection angle for the soundwaves.

Crossover

In terms of crossover, the Z-series is fitted with a parallel crossover configuration with the same components from the 0-series. This ensures a very mechanically stable crossover, minimizing resonance. This crossover undergoes cryogenic processing, so the metal almost has a superconducting characteristic. Therefore, its distortion becomes very low.

Delicate High Frequencies, Natural Sound

When playing "Szeryng plays Kreisler" Mercury, the violin immediately gives me a clear feeling with a quiet background. The sound of the violin is very fine, but not dry or thin, and is very realistic. Actually, the sound of the violin in the Z5 Cryo Edition is not dry or thin, possessing a great tonal balance. We can hear that this loudspeaker has a fine and smooth sound. Every aspect is balanced, without anything that unevenly jumps out. This Z5 Cryo Edition presents a beautiful and elegant violin sound. When initially listening to this loudspeaker, the fast response, clear bass, and detailed violin made me misinterpret that it had a cool-toned performance. However, when I heard Charles Reiner playing the piano after, its full and clear sound made me change my mind. The sound was fresh, cheerful and natural. When the violin became louder, and as I listened extensively to the Z5 Cryo Edition, I started to think that the violin sounded very charming. Upon listening to different types of recordings, I more so believe that this loudspeaker has a very good tonal balance.

When playing "The Four Seasons" Ozawa Seiji, the Z5 Cryo Edition has a very clean sound. The distortion of mid/high frequency is very low. The end doesn't sound dragged out. The high extension and harmonics are very good. The strings are very rich and powerful. The cello and double bass are both outstanding. The mid/bass dynamic and tenacity are very good, firm, resilient and clear. The bass of the cello



has great resolution. If only the positioning is slightly adjusted, Z5 Cryo Edition in this listening room can easily perform a spectacular sound stage.

Clear Vocals, Lifelike

When playing “Little Town of Tamsui” Tsai Chin, the Z5 Cryo Edition exhibits natural vocals. Tsai Chin’s vocals sound very charming. The sound stage is very big. The mid/high range sounds bright, but not excessive. The minor sounds from the mouth are also very noticeable and clear. Z5 Cryo Edition performs very smooth vocals. We can hear the singer’s gentle mouth movements. It also sounds real, as if she was standing by the Hi-Fi rack.

When playing “Jazz Them Up Once More” Bianca Wu, the Z5 Cryo Edition performs a very gentle and emotional expression of female vocals, showcasing her delicate and sweet voice. The sound is very clear and focused, with accurate positioning. It sounds very natural and lifelike with a great tonal balance, without anything unevenly standing out. It is as if the female vocalist was standing right in front of us.

Spectacular Sound Stage, Astonishing Dynamic

When playing Wisdom in an Empty City in “Three kingdoms,” the sound stage is huge without compression. It’s as if the setting of war was happening right in front of my eyes. The performance is very realistic. The Z5 Cryo Edition accurately portrays the astonishing dynamic of the recording. The control is great and the low notes weren’t loose. The Z5 Cryo Edition accurately exhibits the harsh, desolate setting of war portrayed in the music. There seems to be a big, war-like setting playing out right in front of me.

Z5 Floor-Standing Loudspeaker is the top model of Børresen’s Z-series. The Cryo Edition additionally performs the best of Z5. I’m very impressed by the Z5, especially with the details and extension of high notes, along with the performance of its huge sound stage. I was able to witness Børresen’s excellent performance.

Specifications:

Frequency response	25Hz-50KHz
Sensitivity	90 dB/1W
Impedance	>4 ohms
Recommended Amplifier	>50W
1 x Tweeter	BØRRESEN planar ribbon tweeter
2 x Driver	BØRRESEN bass/midrange driver – 4.5 inches
4 x Driver	BØRRESEN bass/midrange driver – 8 inches
Size	H: 151 x W: 23 x D: 70 cm
Weight	75 kg