

SPEAKERS WITH THE X-FACTOR

The Børresen X2 speakers have the most magnificent rear end since Jennifer Lopez. But they sound even better.

Text: [Roy Ervin Solstad](#) Photo: Roy Ervin Solstad and Audio Group Denmark

It's not often that I start a speaker test by looking at the back, but I cannot recall ever seeing such a magnificent back of a speaker as Børresen have achieved with this product.

The speakers appear very neat despite measuring 30 centimetres wide, 55 centimetres deep and 110 centimetres high, including the legs. Especially when viewed from behind. This is because the speaker enclosure is no more than 17.5 centimetres wide at the front and slopes backwards in a smooth arc to a backplate no wider than 32 millimetres. Six small tubes with a diameter of around 47 mm protrude from the razor-thin backplate and act as ventilators for the tweeter and bass reflex ports for the two large elements. It looks stunning and my first thought was that the Danish designers had taken the idea from the taillights of a 1957 model DeSoto Firesweep.

Now, the rear of a pair of speakers might not be the most important factor for most purchasers, but some of us position our speakers in such a way that you see the rear of at least one of the speakers when you enter the room. For me, when walking into the room from the hallway, it is obvious that the rear of the Børresen X2 is both the most beautiful and the most understated speaker I have ever laid eyes on. Even my wife thought they looked good, despite not really being all that keen on piano-lacquered speakers.

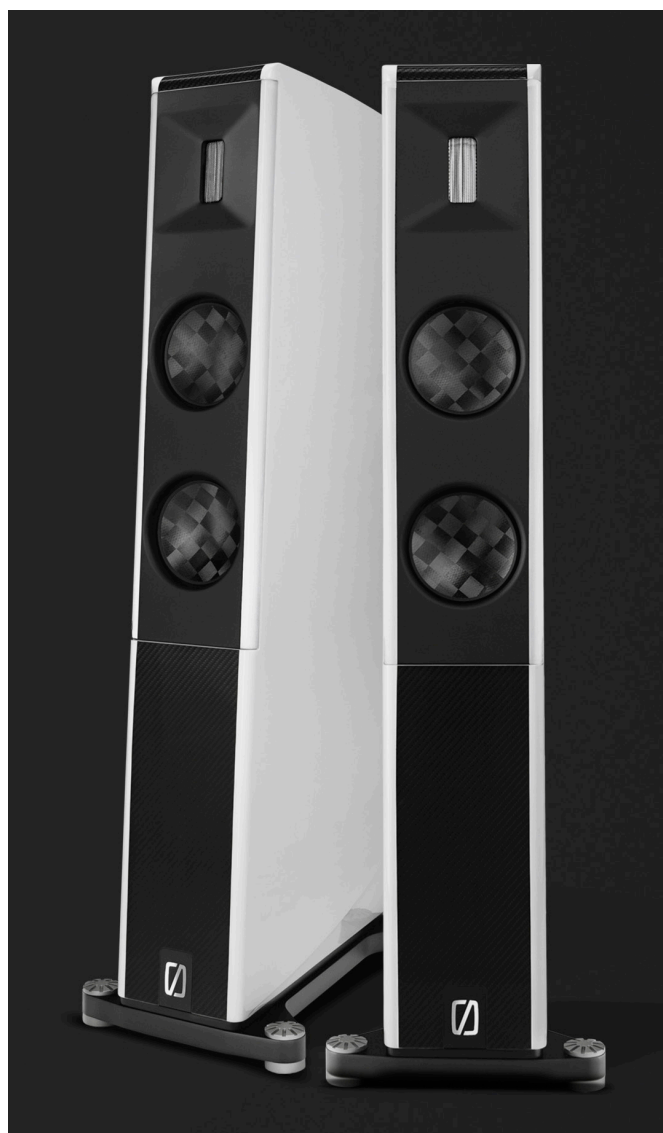
Børresen X2

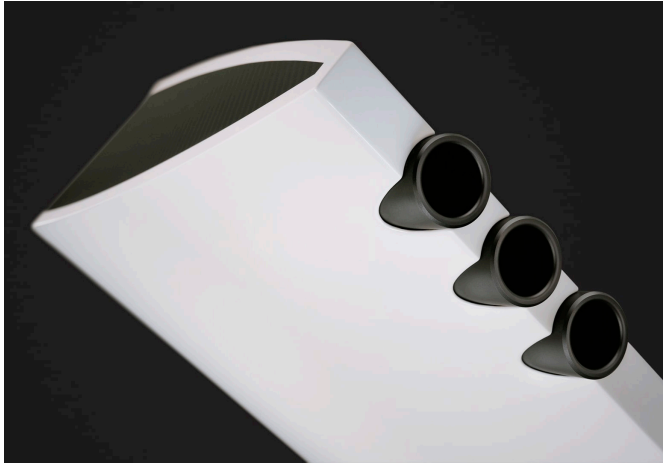
Enough about the rear of the X2 for now. The X2 speakers are by far the most affordable floor-standing speakers available from Audio Group Denmark. The company manufactures Aavik and Axxess electronics, Ansuz cables, power cleaners and tweaks, as well as Børresen speakers.

Overall, the Danes have created four series, with the most expensive being the M-series, followed by the O-series, Z-series and X-series, which is

the entry level series from Børresen. Admittedly, it's not really aimed at people purchasing their very first hi-fi system. The new X2 speaker costs just under NOK 95,000 a pair, while the top model, M6, costs around 63 times as much, i.e. NOK 5,990,000.

For those of us who spend the latter amount on buying homes for which the majority of the money has been borrowed, the Børresen M6 will remain nothing but a distant dream. Fortunately, Børresen has allowed the technological knowledge gained





from developing the most expensive series to also trickle down to the cheaper models. Even in the X2, you will be able to recognise elements from more expensive speakers. The reason for this is, of course, the fact that Børresen set out to design a speaker that still sounds like a Børresen speaker, despite the much lower price class.

The tweeter is based on the same design used for all Børresen speakers, but a reduced magnet size and tweeter mass have allowed the Danes to reduce the price. Admittedly, this has also resulted in a reduction in the sensitivity of the tweeter element, but it still manages a more than acceptable 90 dB (compared to 94 dB in the larger Børresen tweeters).

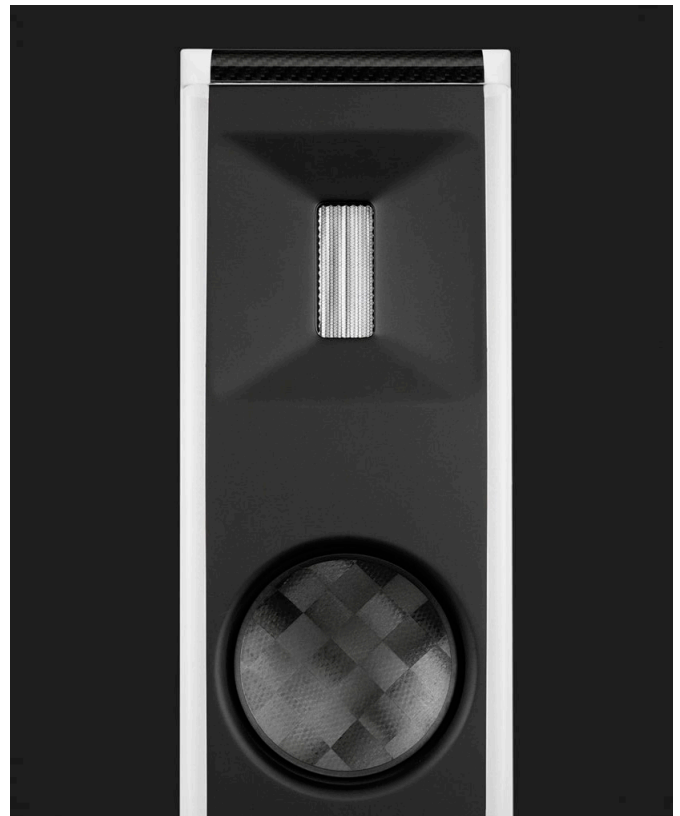
The element itself is a ribbon tweeter and the diaphragm weighs no more than 0.01 grams. The crossover frequency is 2500 hertz and most of the music signals you hear fall within the area of the bass and mid-range elements.

These have been designed using a material the Danes refer to as X-diaphragm. This builds on the development of the cost-no-object elements used for the M-series and consists of two layers of carbon with a layer of aramid in a honeycomb structure between the two carbon layers. According to Børresen, this should result in a highly rigid and lightweight element with minimal self-resonance. Here too, the size of the magnet system has been reduced in order to push the price down. This system is the actual “engine” of a speaker element and includes two copper rings that will contribute to lower distortion and very low inductance.

The elements are also very small, with a diameter of only 4.5 inches, and the uppermost element plays both bass and mid-range, while the lowest

element plays bass only. The system is, in other words, a 2.5-way system. Børresen specifies the lowest frequency response as 40 hertz, but upwards it does not stop before the dogs have given up, i.e. at 50 kHz. The sensitivity is 88 dB and the impedance does not fall below four ohms. This means that Børresen recommends using the speakers with amplifiers of 50 watts and up. I used both transistor and tubes in testing and experienced no issues with 38 tube watts, so the recommendation does not need to be taken literally.

The same applies to the placement of the speakers. In the manual, Børresen suggests that a good starting point for great placement would be to place the speakers 50 cm out from the front wall and at least 15 cm from any side walls. Ideally, there should be at least three metres between the speakers. This placement did not sound great in my space. The bass was unclear and ruined the mid-range, so that was not a good placement for them. After some trial and error, I ended up placing them around one metre out from a shelving unit housing my vinyl records that runs along most of the wall behind the speakers. I also angled the speakers pretty much straight towards my listening place. This resulted in a tight bass and a





really great focus, as well as an extremely large soundstage.

The only thing that remained was to enjoy some music.

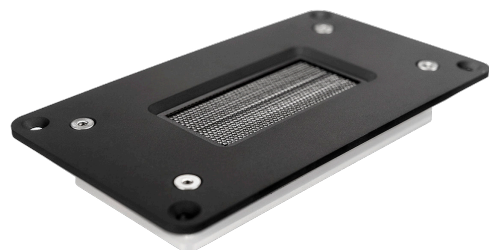
The sound

Enjoying the music was no challenge with these speakers. I also learned not to follow the instructions too carefully. Børresen states a lower frequency of 40 hertz, but in my space with the speakers far out on the floor I would swear that the bass sounded great all the way down to the 30s. I would not have protested if it specified 34-35 hertz as the lower level.

This actually means that, for the vast majority, X2 will provide more than adequate bass and the funny thing is that this is not just a dry, "theoretical" bass reproduction. When I turn the volume up, I can feel the vibration both from the floor and in my trouser leg, showing the surprising amount

SPECIFICATIONS:

- **Type:** 2.5-way floor-standing bass reflex speaker
- **Frequency response:** 40-50,000 Hz
- **Sensitivity:** 88 dB
- **Impedance:** greater than 4 ohms
- **Tweeter:** Børresen Planar Ribbon
- **Mid-range/bass element:** 4.5" Børresen made from carbon and aramid
- **Bass element:** 4.5" Børresen made from carbon and aramid
- **Size:** 110 x 30 x 55 cm (HxWxD)
- **Finish:** Black or white piano lacquer
- **Weight:** 36.4 kilograms



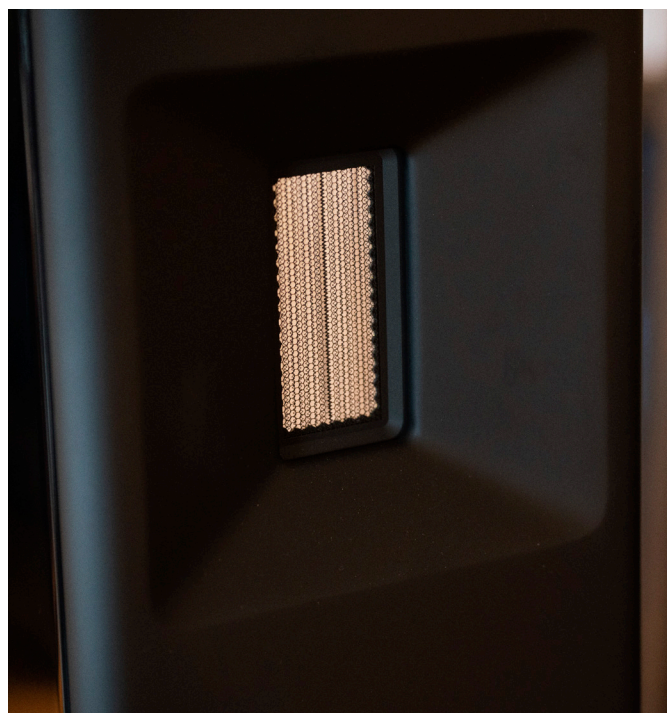
REFERENCE SYSTEM:

- **Preamp:** Topping Pre 90
- **Power amplifier:** PrimaLuna EVO 400
- **Integrated amplifier:** Axxess Forte 3
- **Turntable:** TechDAS Air Force III Premium S
- **Tonearm:** Reed 3P Gold (12")
- **Pickup:** Hana Umami Red
- **Turntable 2:** Clearaudio Concept
- **Tonearm 2:** Clearaudio Satisfy Kardan
- **Pickup 2:** Clearaudio Concept MM
- **Turntable amplifier:** Accuphase C-47
- **Streamer:** Hifi Rose RS130
- **SACD player/dac:** Accuphase DP-750
- **Power Cleaner:** Lab12 Gordian, Supra DC-Block MDO1-16EU
- **Speakers:** Revival Audio Atalante 5
- **Speaker isolators:** Stack Audio Auva 100
- **Rack:** Atacama Elite 24 Reference
- **Rack isolators:** Stack Audio Auva 50
- **Component feet:** Iso-Acoustics Mini Pucks
- **Speaker cables:** Mogami 3103
- **Balanced Signal Cables (XLR):** TelluriumQ Black Diamond, Mogami W2549, Lilleeng Reference
- **Unbalanced Signal Cables (RCA):** Vovox Sonorus Direct S (RCA)
- **Digital cables:** Supra (USB), Ecosse The Director (coaxial)
- **Power cables:** Audioquest NRG Z3, Supra Lorad SPC
- **Network switch:** English Electric EE8

of air that can be moved by the small elements. It also means that the music seems more physical than I was expecting from the speakers. In my book, that is definitely a plus.

The same goes for the speakers' ability to disappear in the soundscape. Of course, the simplest way to achieve this is to connect one of the speaker cables incorrectly, so that you end up with phase error, but that means that everything flows into one. Properly connected and configured, X2 provides excellent focus in the mid-range AND the ability not to leave its own acoustic footprint in the soundscape. That is, of course, unless the instruments have been mastered only to play in one of the channels. In those cases, you will clearly be able to tell where the speaker is situated. In all other cases, the sound comes from the entire wall in front of me, at a tremendous depth and breadth. Even the precision is superb. I have often found that ribbon tweeters can be a bit less precise holographically than dome tweeters. The X2 may not be quite on a par with the best dome tweeters I have heard, but it is definitely one of the best ribbon tweeters I have heard.

On Friar Alessandro's 1. Kyrie from the album *Voice from Assisi*, there is a Gregorian chorus that is rendered in all its glory, while Alessandro's voice stands out in the middle of the soundscape and takes centre stage in front of the choir.



The timbre balance might lean a little towards the dark, but I like the fact that Børresen have chosen not to allow the tweeter to take all of the attention away. It is very homogeneous and the small bass and mid-range elements are quick enough to keep up with the ribbon tweeter. This results in excellent micro and macrodynamics and transparency in the sound reproduction. I am actually quite impressed by how good the dynamics are in these speakers. The title track from the soundtrack to the *Pink Panther* starring Steve Martin packs a real punch. You notice the same punch when you listen to the *Queen of Blues*, Beth Hart, and her *War in My Mind*. We are not quite at Klipsch Cornwall IV level, but, with a bit of volume on the playback, Thomas Fonnebæk's double bass sounds snappy on the duo recorded together with the Danish jazz vocalist Sinne Eeg. Perhaps the bass could have been a bit sharper, but the kick notes that the X2 produced when I played *Deadmau5's Seeya* would undoubtedly have filled a dancefloor in seconds. It is actually astonishing



that such small elements can reproduce such kick notes. Of course, the speakers cannot go all the way down to the greatest of depths. This is evident from Janelle Monáe's "Make me feel", in which the abyssal bass roar at the beginning of the chorus is simply missing. But, apart from the above and the slightly dark timbre balance when using my own amplifiers and Audio Group Denmark's integrated streaming amplifier, Axxess Forte 3, this is very impressive.

Conclusion

Børresen X2 are incredibly beautiful speakers that produce impressive sound. In my experience, the speakers need plenty of air around them to perform at their best. They probably should not be paired with overly dark-sounding electronics, but the speakers' combination of homogeneity, transparency, dynamics and the ability to disappear completely in the soundscape is impressive regardless of price. Ergo, both the sound and the design are the X-factors for these speakers. X2 is therefore the perfect name for the model. This is simply a brilliant speaker.

WE LIKE:

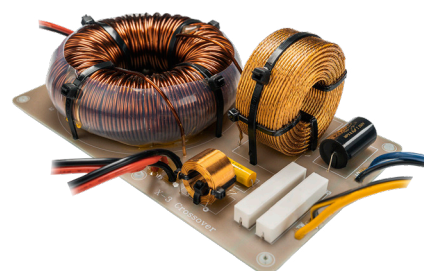
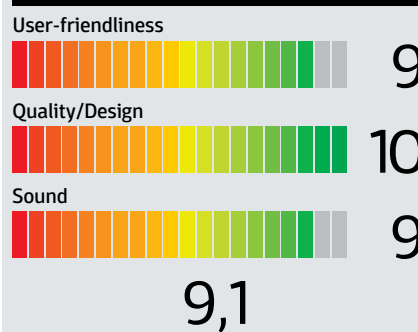
- Gorgeous design
- Impressive bass and dynamics
- Fantastic holography

WE DON'T LIKE:

- Does not play the deepest bass
- Can feel a little dark in the timbre balance
- Need plenty of air around them

STEREO+ SAYS: This is Danish dynamite.

SCORE



Stereo+

★★★★★

HIGHLY RECOMMENDED

Børresen X2

PRICE:	Kr. 94.990,-
IMPORTER:	Mala Audio
LINK:	www.malaudio.no