

Förster Audio Technology – Two-Way Speaker FA5.3

The emotional dimension of listening

Sometimes the good lies so close at hand – an insight that is well-known. So what took us so long to get to know Förster Audio Technology? Why was it not earlier that we came across Thomas Förster? To be honest, the topic has been on our agenda for several months. With this year's sensational performance of the loudspeakers at the HighEnd ("Best Of Show") the project we had adjourned for so long all of a sudden came to our minds again. So we quickly arranged an appointment and off we went to Gauting, a small town situated in the south of Munich, right between the city and Lake Starnberg.

The Owner, the technical brain behind

Thomas Förster, a very likeable man in his „young-fifties“, makes a rather reserved impression on first sight. But when the conversation comes to his passion, time-coherent listening, he immediately catches fire and starts talking about the early years. A back then pretty expensive speaker system fell victim to his saw when he was barely tender 15 years old, only because he wanted to see what kind of technical refinements were in it ... "Somehow that incident paved my way into electroacoustics", a grinning Förster noted during our interview. Years later, the technical brain behind the company Förster Audio Technology receives an award which was promoted by the Bavarian Government for developing the most innovative coherent loudspeakers. At the end of 2002 Förster Audio Technology came up with its time-coherent reference monitor equipped with Manger sound transducer and in-phase polarity chassis. Basically, it is self-evident, but building real time-coherent loudspeakers requires meticulous research and implementation. Without wanting to offend anybody, the author certainly is willing to confirm that unfortunately time-coherent reproduction in particular is no matter of course for many of the passive crossover systems on the market. This is completely not true with active crossover systems, although that shall not be our subject here, even if Thomas Förster originally comes from recording studio technology. So it is small wonder that he was awarded by the Munich Academy of music of the contract to design the loudspeakers for the Academy's new large recording studio.

Fundamentally good sound

"Why is the correct step response proof of time coherence? And why is time coherence not all, but yet almost everything? Or: In which way does low total harmonic distortion cause clear sound?" Förster stresses that these questions are of fundamental importance. And he adds immediately, that in almost 20 years of research he discovered which technology makes loudspeakers sound best, how they generate the pure, nature-identical sound which reflects unchanged - one-to-one - what the artist has recorded.

The philosophy

The loudspeakers of Förster Audio Technology are to be nothing more than a reflection of the actual sound. In his typical accurate way, beginning with the design, followed by extensive hearing tests and thorough measurements, the concept is brought to perfection and virtually, Thomas Förster has created a speaker design reflecting every given sound impression. His reference monitors offer greatest clarity and transparency

and range amazingly precise down to low bass frequencies, while high frequencies mercilessly "pierce the skin". So much of our listening impression may be revealed at the moment. The sympathetic to Thomas Förster's character is that besides his very pleasant quiet kind he does not want to be a "Jack of all trades". That is why he deliberately left „designing" to a pro. Christoph Matthias, a renowned industrial designer, creates the visual appearance of the company's loudspeakers in close cooperation with the development team and is strictly sticking to the motto "form follows function".

Sandwich structure

Owing to their multi-layer structure of the housing (e.g. silica sand filled walls and strong bracing on the inside) all FA speaker models truly are unshakable. In these loudspeakers definitely only the chassis produces the music - devoid of any housing resonances! Special metallic precision parts interact in a new way as coupling/de-coupling means so as to ensure safe standing of the loudspeaker, at the same time enabling coupling and de-coupling of the housing to the ground.

Special rubber sheets ensure mutual de-coupling of the individual housing units, so that the different sound-emitting chassis can operate independently from each other, i.e. they play separately so as to make music together.

Piano lacquer

Piano lacquer gives the loudspeakers their glossy optical finish. The housings are coated with the lacquer in several layers, thus resulting in an absolutely immaculate and smooth high-gloss surface in a brilliancy never before witnessed by the author. Even well-accredited lacquer specialists of an Italian manufacturer were not up to par with Förster Audio Technology standards. A "weird" boss? Yes, but in a positive sense with regard to the quality of his products.

The precision-engineered Corian fastener is an optical treat which keeps the individual units of the housing together and provides permanent stabilization. Moreover, the fastener clearly marks the left or right loudspeaker, respectively of one pair. In that way, setting up the loudspeakers should be no problem at all, despite the silica sand.

Components

"If something special is to be created, every individual part is of importance. Another stunning statement. "How far do you go with that?", was my question, "we only use the cream of the crop, piece by piece strictly selected", was his answer. From the outside even the tweeters may hint to that fact. As midrange tweeter either the Air Motion Transformer, the Manger transducer or the Vifa ring radiator is implemented in FA loudspeakers, which therefore set the tone in our loudspeakers.

Due to the clearly more authentic sound impression, the Bavarian company prefers to use capacitors made by Mundorf. "Owing to their fine sound, we use MCap SUPREME, MCap SUPREME Silver/Oil and Silver Mica (Glimmer) capacitors in our loudspeakers. When it's about obtaining the optimum sound, we go for the best components money can buy."

Well, that says a lot about the standards set by Thomas Förster. Even the cables are his creation. They are system cables which continue the shielding of the cable inside the loudspeakers right up to each individual chassis via a third contact. Since contact quality also decisively influences sound (keyword: contact resistance), the manufacturer generally uses Mundorf binding posts made of solid copper. In addition, he relies on WBT-nextgen™ contacts, WBT crimp technology and WBT silver solder for contacting - not least for reasons of sound. Mundorf CFC copper film coils are highly suitable for use in the loudspeakers, since they show low susceptibility to

vibration. This type of coil is clearly superior to conventional ferrite and core coils. Since conventional resistors with their available standard values are not capable of authentically reproducing acoustic colors, only small high-quality resistors - sometimes up to one hundred of such resistors - are soldered in parallel in places of the signal path that are essential for sound. The high production costs which go hand in hand with it are compensated by the finest nuances of sound that are second to none.

Time coherence

How can one differentiate between time-coherent and not time-coherent? The listener immediately perceives time coherence as clear, natural sound. If loudspeakers do not operate time-coherently, the listener has the certain feeling that "something is wrong...?" The reproduction of voices shows the effect very clearly. Just imagine a soprano singer singing in a concert hall. She does not change her position at the edge of the stage while her voice according to the aria descends into a lower region. Therefore, in the course of the aria the listener in the concert hall localizes the voice of the soprano singer in the same position, i.e. at the edge of the stage. Time-coherent loudspeakers give the same auditory impression. This is completely different in case of loudspeakers that do not operate time-coherently.

They give the impression that there is another soprano singer in the rear area of the stage who sings the deeper tones, which strongly confuses the listener at the latest when suddenly higher tones are sung again by the soprano singer at the edge of the stage. In conventional loudspeakers the technical reasons for sound sources moving dependent on the pitch lie only in the fact that in that tonal area in which the bass/midrange speakers and the tweeters reproduce almost the same pitch, the tweeter generates the sound much earlier than the bass/midrange speaker (keyword: moving mass). "Such spatial misinformation of sound sources does not occur in nature. This is why listeners are greatly confused by timing errors of loudspeakers and why music from loudspeakers that are not operating time-coherently is perceived as inauthentic," Thomas Förster tells me. And he continues: "At the end of the production process every single pair of FA loudspeakers is completely acoustically tuned like an instrument so as to compensate for the slightest tolerances. Naturally, there are plenty preceding measuring sessions and the ear has the final say." Just like a musician does to strings of an instrument Thomas Förster changes the size of tiniest electronic components until the correct tune is reached.

The audio test

My first encounter with the FA5.3 was in the acoustically perfectly tuned show room of the company (reminder:

Thomas Förster is a meticulous hi-fi fanatic who leaves nothing to chance)

I did not touch it, I stuck my „nose“ to it real close, though. The quality of the lacquer was out of this world, I have to admit. A striking structure, but in the end it is all very stringent (s. fig.). Just like the figures of the product:

Dimensions: 124.7 cm x 33.5 cm x 58.6 cm (h/w/d), the rigid braces and silica sand filled walls result in a weight of 125 kg, i.e. per speaker. No resistor with ferromagnetic characteristics in the signal path, frequency response from 35 Hz to 28,000 Hz, Accuton ceramic chassis, the AirMotion, which I already knew, and so on and so forth. Only top-notch quality built in.

Listening impressions

The seat „front-row, right in the middle“ was mine and the moment the first song "Moonlight Serenade - Round About Midnight" from Ray Brown and Laurindo Almeida's album "Reference" started, the acoustic guitar music played the instrument

vividly. It sounded absolutely natural, spatial and clear. The next song was Livingston Taylor`s "Isn't She Lovely" and I inevitably had to laugh, "the gag of the show", of course.

A short moment later I caught the hair on my forearm fight for some standing room, meaning I (a meticulous hi-fi fanatic myself) got a goose bump. I could hear myself say: "Can you please turn down the volume and play it again?", because every time I really want to know, I deliberately turn the volume down and listen real deep into the given musical scenario. And what did I experience? I am listening to the sounds and arrangements, concentrated and fascinated. Incredible?!

Kari Bremnes'"Byssan Lull" from her 1998 album "Svarta Bjorn" was even more fierce. Fierce because the thought came to my mind, that I rather seldom heard something that brutally honest before.

I ask for a little break. Espresso is a quite different delight. I start philosophizing about the marketing of such high-end products with Förster and after talking about its price I immediately say: "That cannot be true. That is too inexpensive, because I've heard a lot of much weaker products in the passive segment." Laughter breaks loose. "I've heard that one several times before", was Förster reply...

Finally, we listened to a live version of the Eagles' "Hotel California" from 1994 which appeared on the LP "Hell Freezes Over". We did so at original volume ... HEAVENS ...! Well? It was the first time that I dispense with a longer listening session. Why? Simply because I am afraid that that I-got-to-have-it switch in my head is turned on. I know that all too well. Honestly, the price range is too high for my wallet. Although, there is a due building savings contract, but in case I would take the money to "rearrange" my musical listening room, my wife will eat me alive. Divorce? No, no question, then I will be real broke ... ! Thoughts, hell yeah ...

Hit the mark

If you'd like to listen to some extraordinarily well constructed, great sounding passive speakers "live" in real life you simply have to contact Förster Audio Technology. That's as easy as it is. Me - I'll keep in touch with Thomas Förster, because there is a lot more to be listened to...

ALEXANDER ASCHENBRUNNER

Information

Two-Way Loudspeaker FA 5.3

Price per pair: 32.000 €

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