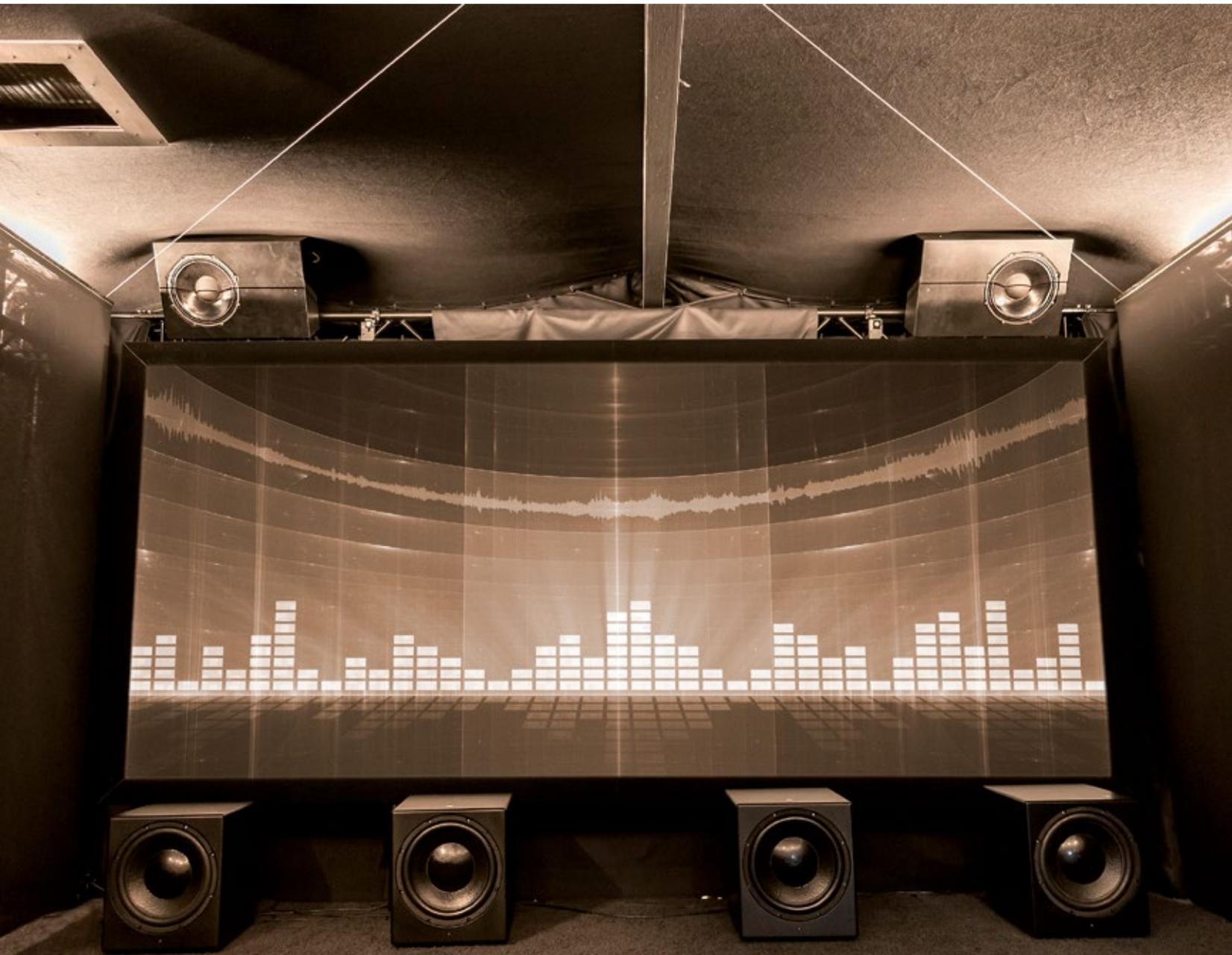


▶ ART OF SOUND

MOVIES ARE MOVING PICTURES BUT THEY ARE NOTHING WITHOUT GOOD SOUND. THAT BECOMES VERY APPARENT IN THIS SPECIAL CINEMA.

Photos: Olaf Adam / Thinkstock.de





Functional yet beautiful – AIA loudspeakers come in a variety of shapes and sizes

When „The Jazz Singer“ marked the dawn of sound in movies back in 1927, more than just a few contemporaries saw it as the death of the young medium of moving pictures. But however despicable „Jazz Singer“ might have been on many levels, it started a revolution that spread quickly. Only a few years later silent movies were history, the future belonged to the 'Talkies'.

PLAYING THE EMOTIONS

But the cinema never was truly silent. Most early screenings were accompanied by someone playing the cinema organ, and larger theaters often even used full orchestras. Music was part of the cinematic experience from the very beginning, and it was deliberately used to emphasize the emotional aspects of the on-screen action. The only thing added by the Talkies was dialogue.

Music still is an indispensable part of every filmmaker's toolkit. Suspense, happiness, sadness – music addresses the viewer's subconscious directly and therefore has the power to evoke any desired emotion at will. Adding to a modern movie soundtrack are of course the dialogue and the effects. While dialogue is often mainly used to tell the story, effects have the ability to create a picture of what cannot be seen. The picture is limited to the rectangle of the screen but sound puts it into context. This is especially true since 3D sound formats like Dolby Atmos, DTS:X and Auro-3D have added the third dimension

Sound in movies paints entire landscapes on an infinitely large screen

to the possibilities of sound design. Like on an infinitely large screen, the sound engineer can now paint entire landscapes into the theater or the living room. But for this to be convincing, the system used for playback must be perfect. If you want to experience one of the best examples for such a system you only have to come to the small town of Ansbach in the south of Germany.

FRANCONIAN INNOVATION

Ansbach is located close to Nuremberg, in the northern region of Bavaria called Franconia. It is here that German speaker manufacturer Ascendo design and test their innovative Ascendo Immersive Audio technology (AIA). AIA depends on a unique way to address and network individual speakers. Every speaker in an AIA System is equipped with its own amplifier and receives the sound signals via an Ethernet cable, using the AVB bus technology. This digital connection allows all speakers in the system to communicate with each other, for example to fine-tune time alignment of all channels several hundred times per second, across all frequencies, for every single



▶▶ note. Every speaker also includes a DSP that allows for extremely precise compensation for the speaker's position and other room influences. All these efforts serve only one purpose: To make sure that every single detail of the soundtrack arrives at the listener's ears at exactly the right moment, and exactly as it was recorded, without any coloration or distortion. Or in other words: To create a truly extraordinary cinematic experience.

PERFECT ILLUSION

Every active Speaker in an AIA System comes with 1.000 Watts of amplification, and because different cinema processors can be combined there is basically no limit to how many channels a system can have. At the time of our visit the cinema in Ansbach is configured with a rather impressive total of 26.000 Watts! Yes, an AIA cinema can play very loud indeed.

But more impressive than the achievable volume levels is the fact that how loud you play it doesn't have any perceivable effect on the quality of the sound. Play it at full throttle, play it really quietly, play it anything in between – you'll always experience the same pleasant and luscious sound and the same extremely realistic sound-scape. Even the smallest acoustic details are rendered to perfection and small as well as large sounds move freely through the room on very precise trajectories.

The realism of an AIA System become most obvious with closed eyes. Only when you ignore the distractions of the images on the screen and concentrate on listening alone, you'll be able to fully appreciate the richness and the level of detail in the sound-scape. Quite frankly, who needs 3D images when you can have 3D sound like this?

THE BEAT OF THE MUSIC

Timing is even more important when listening to music because even smallest imperfections can destroy the musicality of any recording. But the AIA system excels here, too. Four subwoofers were used in the setup we saw but they always played as one. Every single bass note was audible, every drum beat could be felt with the entire body. Heavy Metal live on stage, a full orchestra, a solitary violin – the AIA system has zero genre preferences. Any music you play through it will shine and find a way under your skin. Listening to music is one thing. But it's feeling the music that really matters!

When the lights come back on, heart and soul are aching for more while the mind is trying to process the recent experience. Stefan Köpf, one of the creators of AIA, sits off to side, smiling knowingly as if to say 'See, that's how it's done!' And he is right: This is multi-channel sound as was always meant to be. Can we have some more now, please? ■

AIA cinema in Ansbach, Germany: Perfect acoustic illusion courtesy of 26.000 Watts!

