## **Voice-Acoustic Cardioid Manual & FIR Presets**



Voice-Acoustic, a German manufacturer of sound reinforcement technology, has published a new practical manual for directional subwoofer configurations and simultaneously introduced FIR loudspeaker presets for its in-house VADAS and HDSP MK3 amplifier platforms. These innovations offer professional users the indepth knowledge and technological tools needed to operate their sound systems with greater precision, flexibility and higher sound quality.

The "Voice-Acoustic User Guide for Directional Subwoofer Configurations" is a practical publication that offering sound engineers valuable support when setting up and using subwoofer configurations. It provides in-depth knowledge about the physical relationships behind bass arrangements. For example, it demonstrates ways to focus the bass energy towards the front while significantly reducing unwanted sound radiation behind the subwoofers. The handbook also explains the differences between the company's own CSAG (gradient) and CSAE (endfire) cardioid settings in detail. With practical tips on optimally placing subwoofers in various application scenarios, the manual is aimed at both beginners and experienced technicians who want to improve bass reproduction in practice. The manual is now available to download for free as a PDF on the Voice-Acoustic website.

At the same time, Voice-Acoustic is now implementing FIR filter technology in its loudspeaker presets, which are now available for the VADAS and HDSP MK3 amplifier platforms. A major advantage of this technology is the linear phase response, which allows independent optimisation of frequency response and phase. This avoids sound-reducing phase shifts and makes the transition between the

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subwoofer and top section more coherent.

All new FIR presets have a uniform latency of only 3 ms and an identical phase response, enabling all Voice-Acoustic speaker models to be combined without any problems. Even the mixed use of self-powered Paveosub-sp-8K4 subwoofers and passive systems, or the operation of subwoofers on a VADAS power amplifier and top sections on an HDSP MK3 power amplifier, is now seamlessly possible. This cross-system compatibility, previously impossible, will be extended to earlier device generations through a planned firmware update for HDSP-DA/DDA models in Q4 2025.

"With the new manual, we are putting our expertise in the hands of our users to make their work easier and enable them to achieve optimal results," says Stefan Rast, founder and managing director of Voice-Acoustic. "In combination with our new FIR speaker presets, which ensure seamless compatibility across all our products, we are underlining our commitment to innovation, quality and providing a transparent sound experience for each of our users."

Visit Voice-Acoustic, TENNAX and BAGAX at LEaT con 25 in Hall A1, Stand C10. The trade fair will take place from 14 to 16 October 2025 in Hamburg.

www.voice-acoustic.com