

FRAUNHOFER INSTITUTE FOR  
INTEGRATED CIRCUITS IIS

# SYMPHORIA®

The concert hall to go





[www.symphoria-sound.com](http://www.symphoria-sound.com)

Fraunhofer Symphoria is a 3D surround sound post-processing technology for upmixing and playing back any type of audio content in a car. This high quality, universal rendering solution significantly improves the audio quality perceived at all seats independent of the available hardware configuration.

Symphoria improves the listening experience in today's and tomorrow's vehicles by offering high quality audio and authentic surround sound experiences. Both front and rear passengers perceive an individual, broad and clearly defined front stage, as well as a natural, perfectly balanced surround sound field.

### **How Symphoria works**

Symphoria applies modern signal processing algorithms based on a semantic approach. The objective is to "understand the music" and give the listener a realistic impression of the recording environment by identifying relevant signal components that have a semantic value. Information about direct sound, early reflections, reverberation or acoustical ambience is acquired from the input signal to draw conclusions about the original room characteristics – a process that also enables the extrapolation of vertical room information for the generation of 3D sound.

### **Availability**

As of fall 2015, Symphoria is available in the new Audi A4. The technology's authentic sound can also be enjoyed in the new Audi Q7, the Audi TT and the Audi R8.

Symphoria is available as optional feature as part of the Bang & Olufsen sound system.

### **Contact**

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