

Spatial Upmix

“IMMERSIVE SENSORY EXPERIENCE WHENEVER SOUND GOES.”

Gaudio Spatial Upmix delivers you the scenery with live-like audio that you would feel the story is all around you. When watching movies or TV series, you would feel as if you are in the same event with the characters as the story unfolds. And when listening to music, you would feel the music come alive and surround you.

Where to apply

- MEDIA PLATFORM** OTT • music streaming • live-streaming and more
- ELECTRONIC DEVICES** smartphone • tablet • TWS • laptop • TV and more

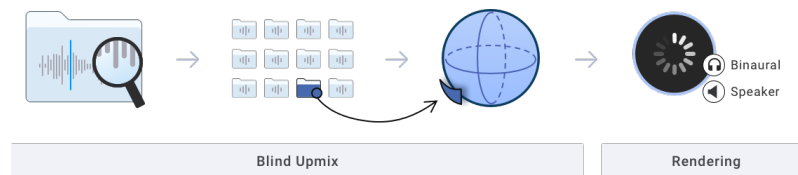
FEATURES

- **High quality sound** : Improves spatial quality without degrading the timbral quality
- **Low complexity** : World's first scalable spatial audio technology that even runs on TWS.
- **Complete SDK** : Ready to integrate on any platform and device
- **Customer oriented customization** : Onsite & remote technical supports ensure complete integration in any environment.
- **Audio input format** : Support for stereo/5.1/7.1/5.1.2 channels with standard sampling rates up to 192kHz

TECHNOLOGY

* Spatial Upmix performs full audio functionality with **ELEQ** **Loudness Normalization** **Smart EQ**

Gaudio Spatial Upmix separates input stereo mix into sound-components and places them virtually anywhere in space. This space is then rendered for headphones with Gaudio's international standard winning binaural rendering technology which is necessary in major broadcasting and immersive media standards. Gaudio Spatial Upmix reduces computational complexity significantly by reconstructing independent signal processing blocks into one coherent architecture. It can be seamlessly integrated into high energy efficient computational devices such as TWS and mobile device. (Optional) Spatial Upmix can deliver the same sound experience on any stereo speakers when you further apply Gaudio Spatial Speaker Extension.



SOFTWARE SPECIFICATION

	Spatial Upmix	Spatial Upmix Lite
Deliverable Type	<ul style="list-style-type: none">• Cross platform native C/C++ library• Android • iOS native SDK or any DSP and embedded MCU	
Complexity	24.1 MCPS on Qualcomm Hexagon DSP	8.4 MIPS on Tensilica HiFi2 DSP
Latency	24.9 msec	0.7 msec
Memory	180 kB	22 kB
Library Size	900 kB	64 kB