

“ Rich Bass even in Lower Volume ”

The human ear perceives loudness of a sound depending on its frequency. According to the “Equal-Loudness Contour” model, the louder we listen to music we are able to hear the sound better at low and high frequency, which makes people turn the volume up. Gaudio ELEQ allows listeners to hear detailed sound including deep bass and hi-hat even in the lower volume. Therefore end consumers do not need to make the volume loud to enjoy the detailed sound, which follows the World Health Organization’s initiative of “Make Listening Safe” to defeat the high risk of developing hearing loss from unsafe listening practice.

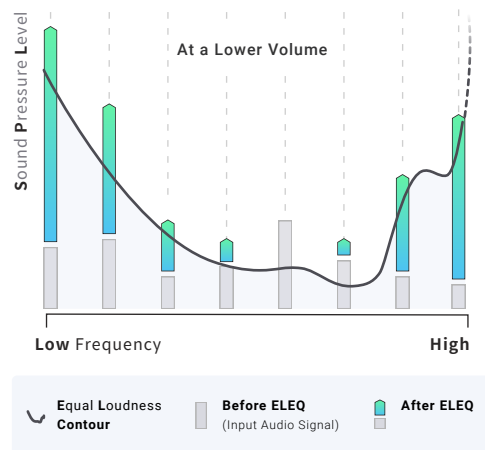
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FEATURES

- **High quality sound** : Experience detailed sound even at a lower volume
- **Low complexity** : World’s first scalable spatial audio technology that even runs on TWS.
- **Complete SDK** : Ready to integrate on any platform and device
- **Customization**: A set of ELEQ filters is customized to fit to a target audio system specification. Onsite & remote technical supports ensure easy and complete integration
- **Audio input format** : Support for stereo/5.1/7.1/5.1.2 channels with standard sampling rates up to 192kHz

TECHNOLOGY

Gaudio ELEQ is inspired by psycho-acoustic relationship between frequency and loudness level. It applies an ELEQ filter to audio signal depending on user setting volume and loudness information derived from input audio signal analysis. The ELEQ filter is optimally designed to compensate the difference in perceptual frequency sensitivity of a human at a present reproduction loudness level. Consequently even at a lower volume level, Gaudio ELEQ enables to reproduce every details of the sound as if the audio is played at the maximum volume.



SOFTWARE SPECIFICATION

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	9.3 MCPS on Qualcomm Hexagon DSP
Latency	1.3 msec
Memory	15.3 kB
Library Size	50 kB