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Technologies and solutions

PersonaSound™

FOR PEOPLE

FOR DEVICES

FOR PLACES

Revision 1.0
October 2015

We are different

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We are all different…

We use different devices…

We are in different places…

How can we **HEAR**
the same **SOUND**?

Let's make it personal

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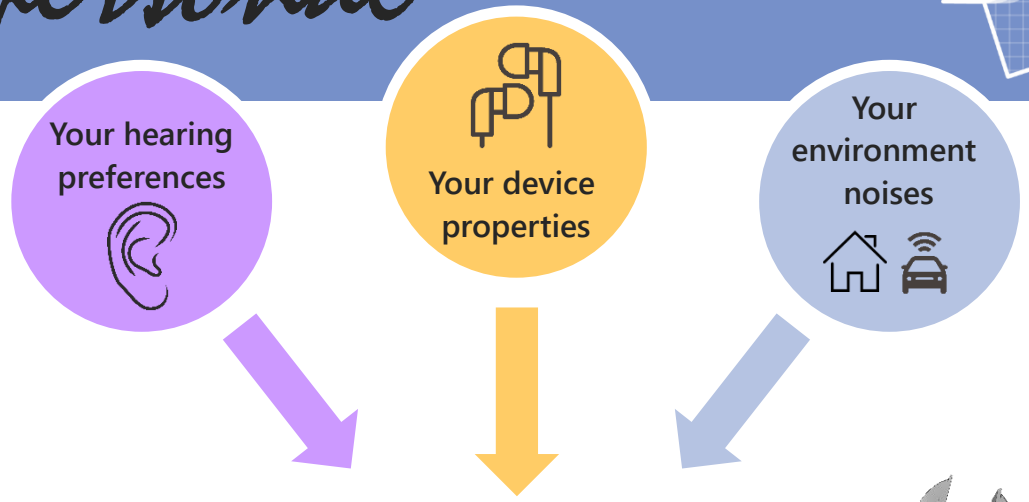

General Sound (voice, music)

PersonaSound™ technology

Your Personal Sound

- **PersonaSound™** optimizes generic voice or audio for your auditory system, your device, and your current location.
- If you have personal preferences (or hearing impairment), **PersonaSound** technology will optimize sound for you.
- If you enter a noisy place, **PersonaSound** will maintain auditory intelligibility and hearing comfort.
- If you use different devices, **PersonaSound** will achieve the best acoustic performance from all of them.

For different people

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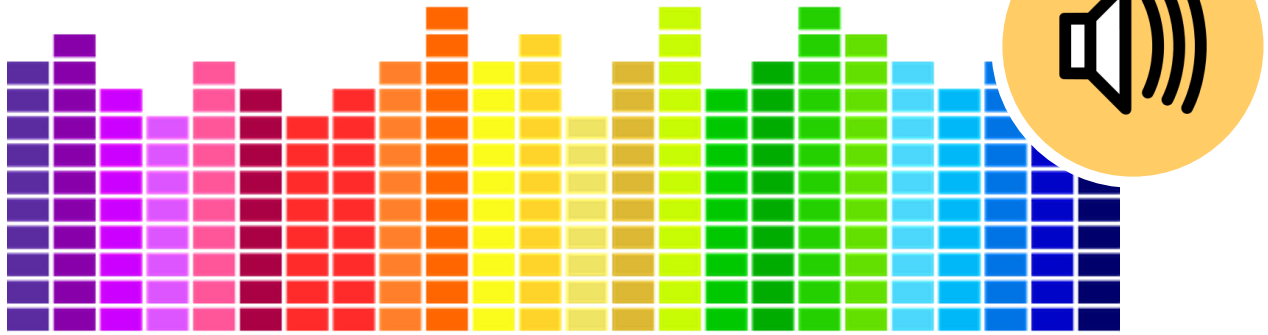
Silent or quiet?

Quiet or comfortable?

Comfortable or loud?

Just loud or too loud?

Too loud or unbearable?



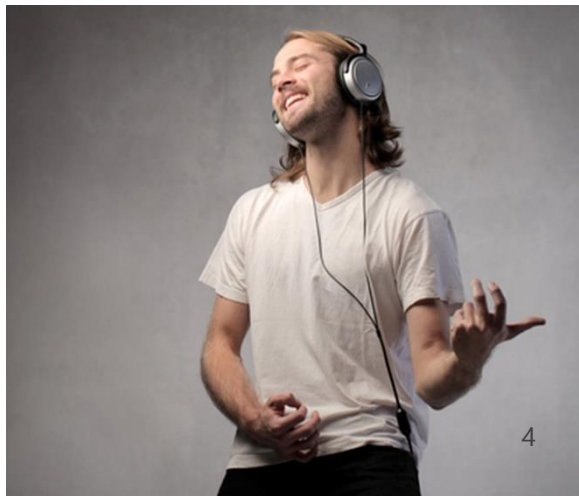
Bright or dull?

Crisp or muffled?

Full or lack of details

It all depends on our age, our lifestyle and our hearing

PersonaSound technology will optimize it individually for each user



Define your hearing

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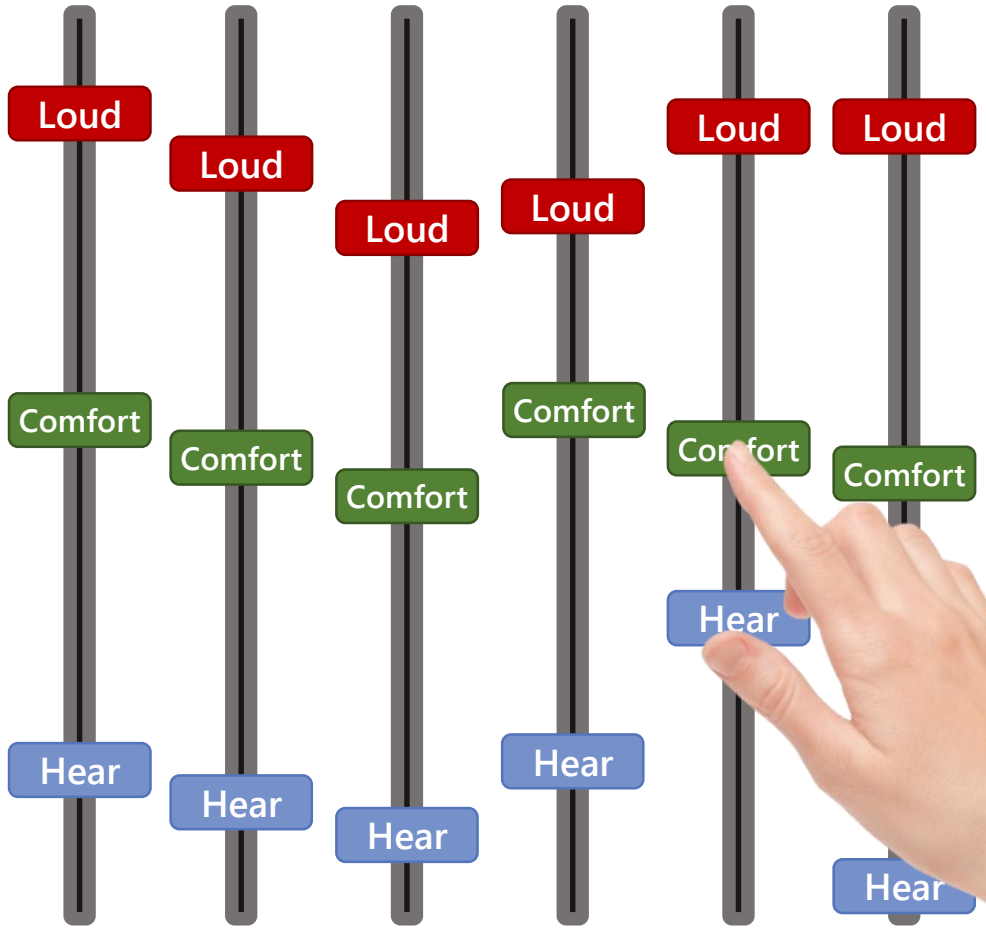
Red Slider – Discomfort level
(sound becomes unpleasant above this level)

Green Slider – Comfort level
(sound is most pleasant and clear around this level)

Blue Slider – Hearing threshold
(sound becomes audible above this level)



For each frequency bar, touch and move sliders from bottom to top to define discomfort, comfort, and hearing threshold levels.

For different devices

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We play the **same music**

AND

We listen with the **same ears**

BUT

We use **different devices**

WHERE

We want to hear the **best possible sound**

SO

We need **MuRefiner™** technology

MuRefiner™

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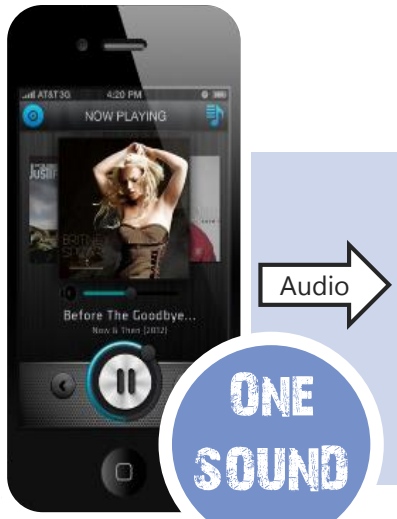
MuRefiner technology improves perceptual sound reproduction by various devices in different conditions according to the device design, acoustic components used and - most important - user preferences.



ONE SOUND

Audio → Stereo Normalizer → Audio → Spectral Compander → Audio → Bass Corrector → Audio → Loudspeaker Correction → Audio

ONE EAR

Stereo Normalizer

Expands, shrinks or normalizes stereo effect optimizing it for a specific loudspeakers type, placement and individual user preferences

Spectral Compander

Reduces the spectral dynamic range enhancing music details making it more enjoyable in mobile conditions

Bass Corrector

Boosting up bass line while preventing the speaker and power amplifier overload

Loudspeaker Frequency Response Correction

Correction of loudspeaker amplitude and phase responses for reproducing natural sound

In different places

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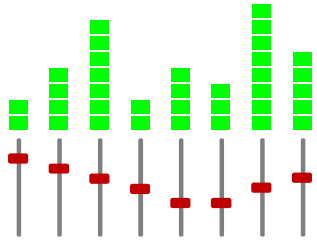
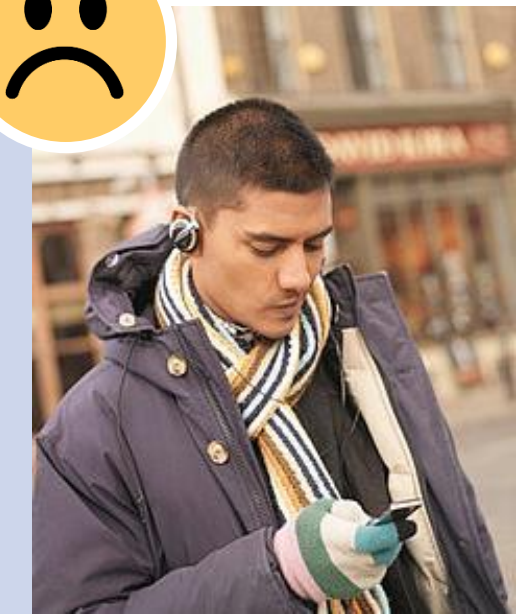
Our hearing is capable to distinguish sounds in a specific frequency region when the **SOUND** level in that region is above the **NOISE** level.

If we want to hear full sound in a noisy environment, we need to amplify it above the noise level in all frequency regions. We can do this with a frequency equalizer amplifying each frequency accordingly.



Cars, trains, busses, streets, airports, beaches, restaurants – all have different and varying noises. We need to use different equalizer settings with fast modification according to noise changes.



Automatic Volume and Equalization (AVQ) technology does this for us automatically optimizing the sound that we are listening according to our current listening environment.

AVQ control technology

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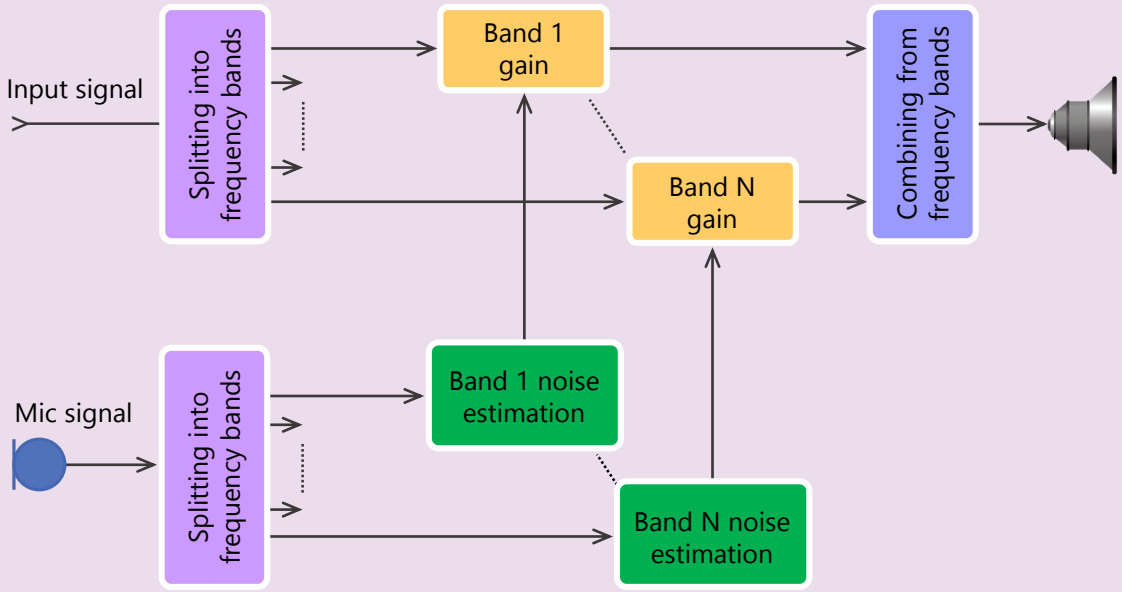
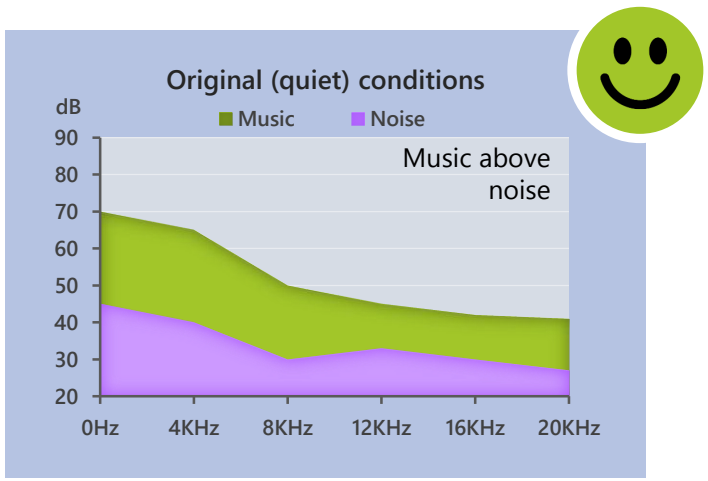
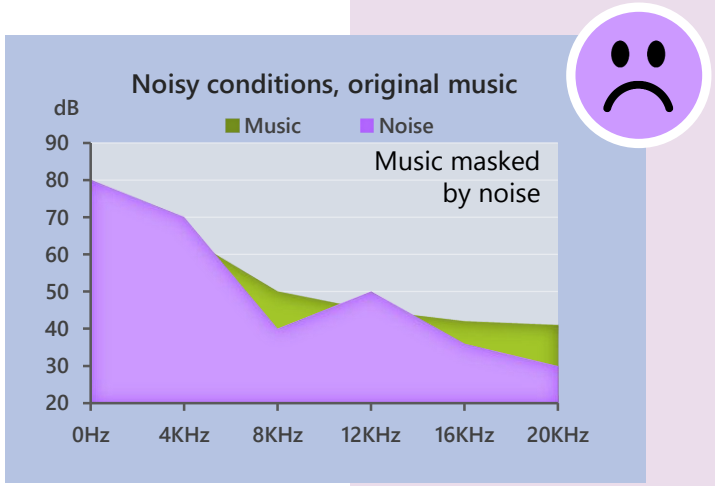
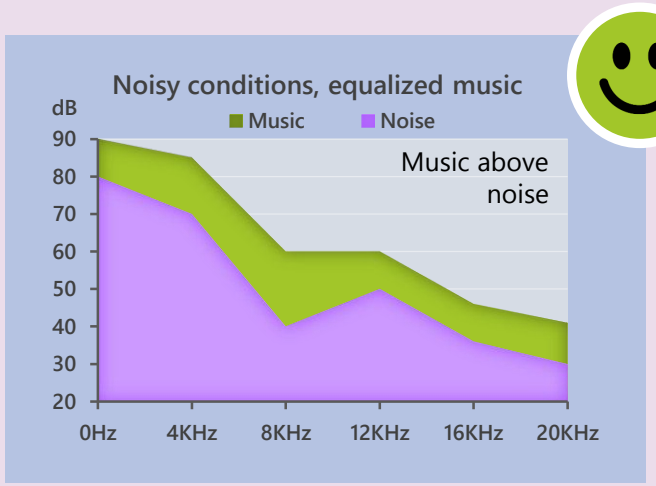
Automatic Volume and eQualization (AVQ) technology provides an efficient, "hands-free" alternative to manual volume and frequency equalizer adjustment dependent on ambient noise changes.

1. A microphone is used to monitor the ambient noise properties.
2. The audio and the microphone signals are each divided into frequency regions according to the human auditory system.
3. Noise level is estimated in each frequency region by a proprietary algorithm
4. The audio signal in each region is amplified individually according to the noise level in that region ensuring optimal hearing over the whole frequency range.









Contact information

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Don’t hesitate to contact us if you want to be our customer or just have any comments.

We are looking forward to hearing from you!

Please, send your questions, comments, thoughts, proposals to info-il@alango.com or specifically

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