

Produce phase-coherent outputs from multiple audio channels that have different EQ settings

Overview

Balanced Phase EQ is targeted at:

- Equalisation of Line Array elements such that there are no phasing/cancellation effects where the listener in the audience is positioned such that they get spill-over from two line array elements
- Avoiding 'unexpected' cancellation/phasing effects when mixing/transitioning between two signal paths that have common source material with differing phase responses

Applications

- Live Sound / Touring Sound / Installed Sound Line Array Equalisation
- Transitioning between complex EQ settings that have common source material and different EQ settings
- Transitioning between channels that share source material (e.g. Empty Stadium/Full Stadium correction equalised settings with fader mixing to produce intermediate results – for example 33% full)

Patent information

1. UK Patent No: 2484360 "Balanced Phase EQ"
2. US Patent No 9,119,002 "Balanced phase equalization"

Sample Use Cases

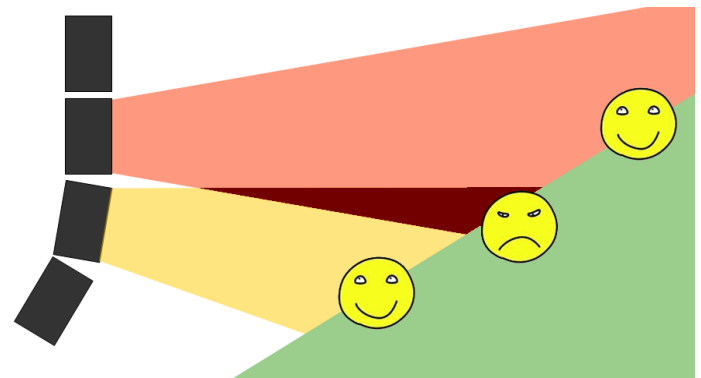


Fig. 1 Without **Balanced Phase EQ**, phase cancellation can occur where the dispersion overlaps

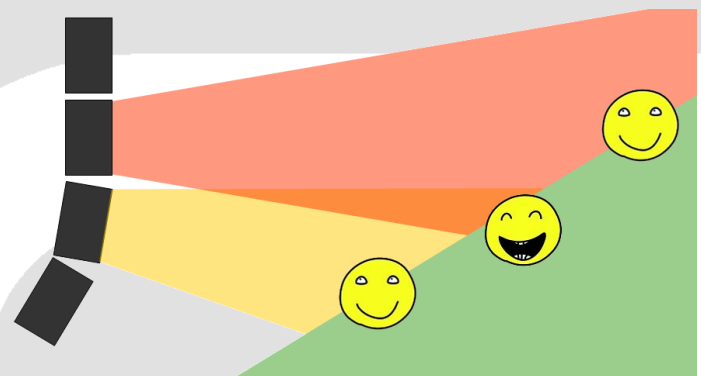


Fig. 2 With **Balanced Phase EQ**, the phase cancellation is compensated for where the dispersion overlaps