

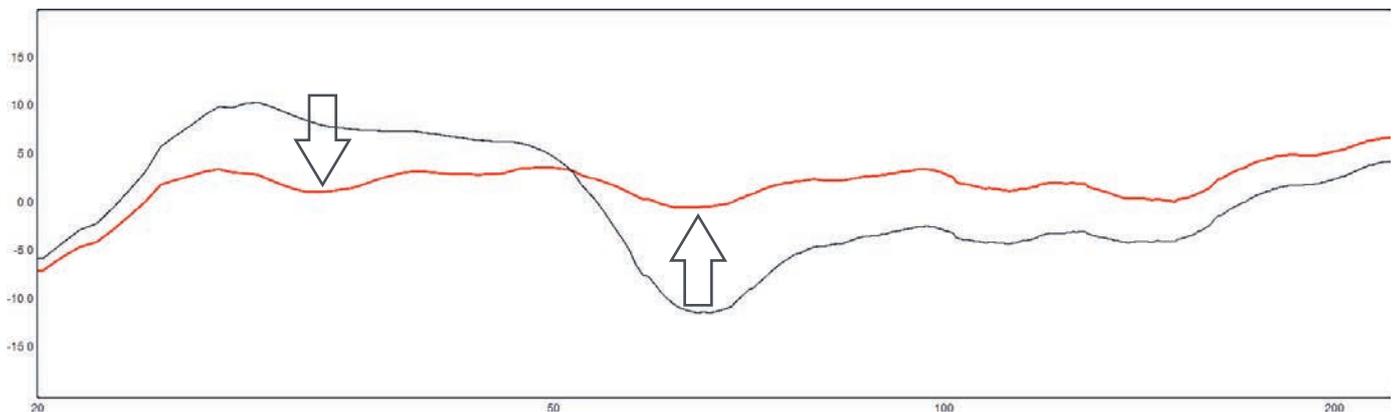
Cosinus

Analogue Room Correction

Analogue Filter and Bass Management including Phase Shifter
for Mastering, analogue Mixing and HiFi



Cosinus analogue filter



Example: Optimized frequency response using Cosinus analogue room EQ

The low frequency behavior of acoustically small rooms (below 40 m²) is determined by room resonances (eigen modes, standing waves) causing cancellations and booming. Bass traps - tuned or broadband - provide focused absorption and are effectively used for correc-

tion in control rooms, home theatres and HiFi rooms. If not enough traps can be used - due to insufficient space or budget - room correction filters are used for optimizing the frequency response at the listening position. Digital systems provide a huge amount of filter

banks but ADDA Conversion between monitor control system or mixing desk and power amplifier is mandatory. That's why we developed the Cosinus for ambitious users who don't want any interference at this crucial point of the signal path.

Features

- Three bandpass filters with continuously adjustable level +/- 10 dB, continuously adjustable frequency between 20 and 240 Hz and Q-factor between von 0,3 and 10
- 100% analogue without ADDA Conversion
- Extreme neutral sound due to intelligent design and premium components
- Compare mode guarantees minimum channel differences
- Bandpass 1 can be used as x-over to generate low pass signals for subwoofer systems. Bandpass 2 and 3 can then be used for either the sub path or main monitors.
- Phase shifter with adjustable phase and level to match phase of subwoofer and main monitors
- Containing two consequently separated channels the Cosinus can drive stereo subwoofer systems.
- Flexible routing due to separated connections for each filter segment

Technical Data

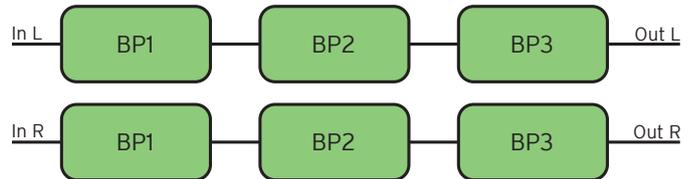
- 19" 2 RU
- high channel separation (> 80 dB)
- input (el. symm.) +6 dBu (max. +20 dBu) 10 kOhm
- output (el. symm.) +6 dBu (max. +25 dBu) 40 Ohm
- transmission band 0 dB (+0,1 / -0,2 dB)
- SNR < 100 dB
- noise UWTD / WTD < 91 dBq / < 81 dBq
- THD+N / 0 dBu 0,007%
- frequency range 20 Hz - 40 kHz (+/- 0,1 dB)



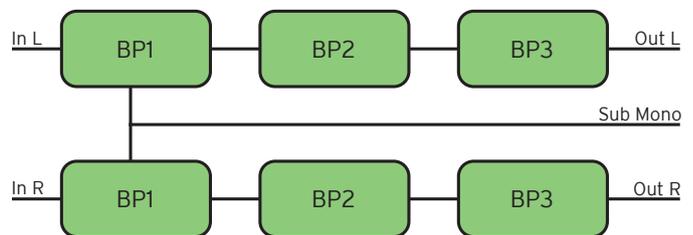
The Cosinus has been developed and is made in Germany for mbakustik by Roger Schult

Routing Examples

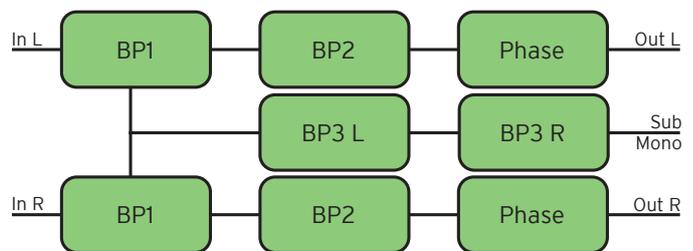
Three filters per channel, no subwoofer



Two filters per channel, mono subwoofer



One filter per channel, mono subwoofer using two filters, main channel using phase shifter



One filter per channel, stereo subwoofer using one filter each, main channel using phase shifter

