Rear/Center Channel

Rear/Center Channel plug-in was engineered for audio processing applications with the need for deriving a sum/difference signal from a stereo source. Along with large delay line and the choice of (L-R) or (L+R) modes, this plug-in combined with a miniDSP kit is a perfect fit to easily complement your existing audio systems with a center/rear speaker.

Software features

- Extensive set of audio algorithms
- Live tuning, hear the changes real time
- Save/Load configurations
- Optional offline system tuning
- Extensive plotting capabilities
- Plug & Play setup requires no driver
- Free Un-limited Upgrades, your plug-in evolves as we evolve!

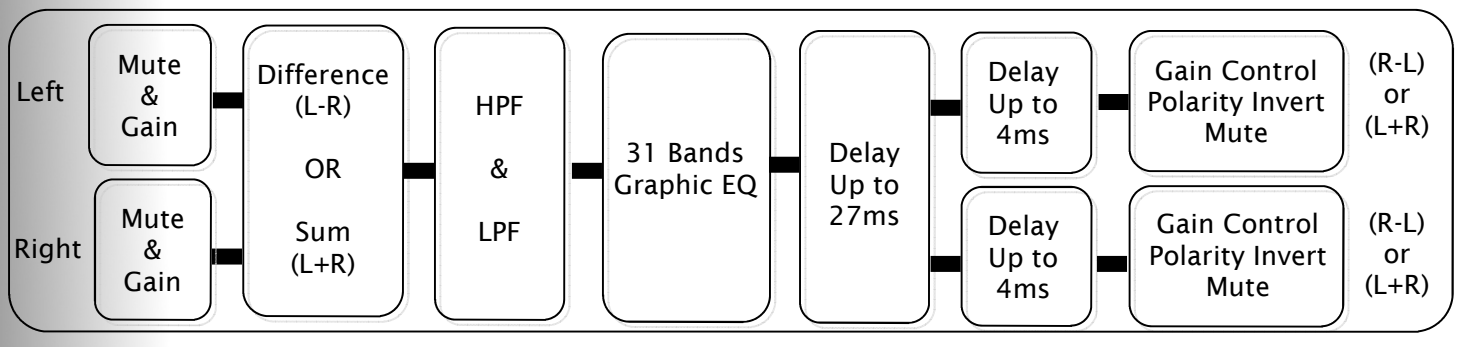
Applications

- Rear Fill speakers (L-R mode)
- Center channel (L+R mode)
- Folded horns with long delay
- Sub Equalizer

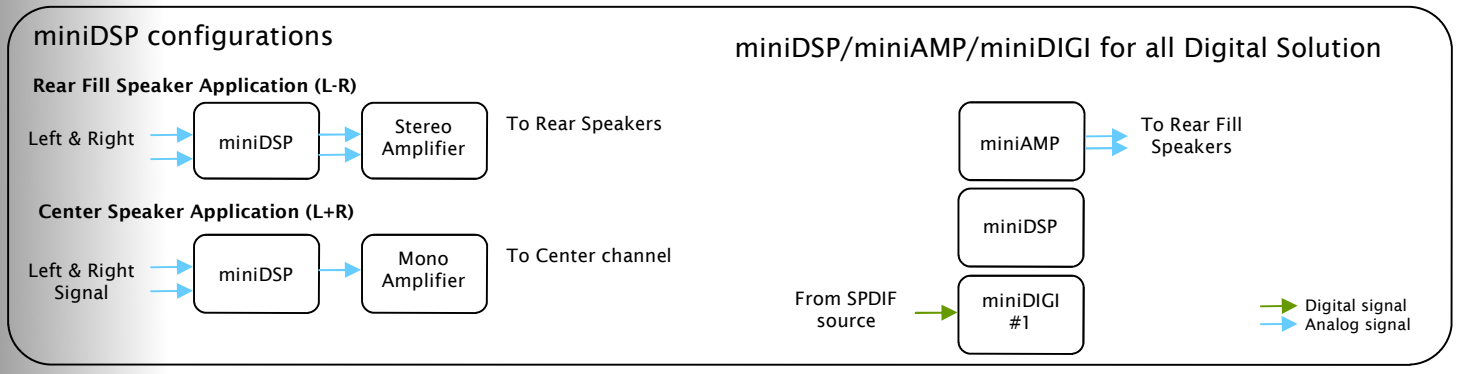
Algorithm and plug-in configuration

Item	Description
Sampling frequency	48kHz
Algorithm resolution	Double precision for best audio quality (56bits resolution)
Digital Inputs Digital Outputs	Plug-in IN#1&2 selectable on I2S_Data_In7&8 Plug-in OUT#1/2 available on I2S_Data_Out1/2/ Un-processed signal from ADC on I2S_Data_Out5/6 Un-processed signal from Digital IN on I2S_Data_Out 7/8
Input mute/select	Click-less input mute per channel and input selection
Digital Input gain	Fader gain control from –80 to 0dB
In/Out RMS meters	Monitoring signal from –80dBFS to 0dBFS - 150ms refresh
Low/High pass filters	Butterworth/Bessel second order (-12dB/oct) Linkwitz-Riley fourth order (-24dB/oct) Bypass feature
Difference/Sum mode	Difference mode: (Left - Right) Sum mode: (Left + Right)
Graphic Equalizer	31 bands, 1/3 Octave Boost +/-12dB
Delay	Up to 27ms(927cm) with 0.02ms increments Additional 4ms per channel
Polarity	Invert polarity 180degree per channel
Master output gain	Analog potentiometer control master output digital gain fader from –80 to 0dB. Disabled if no pot connected.

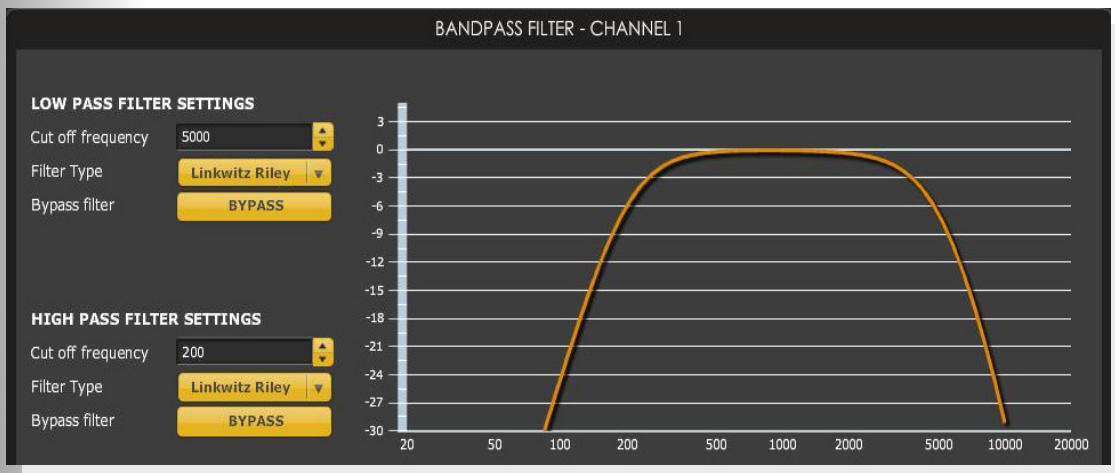
Audio flow chart diagram



Application diagrams



BandPass with selectable slopes



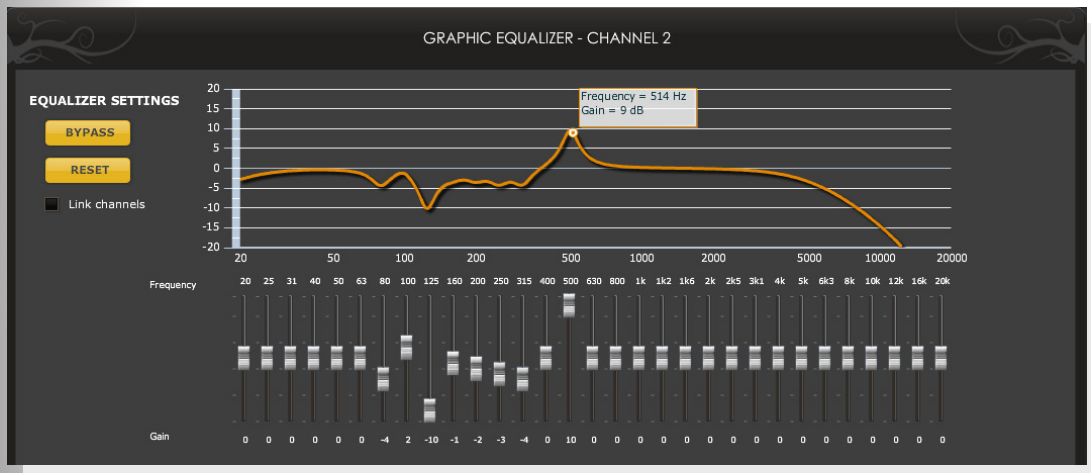
Double precision algorithms (56bits) for greater resolution in low frequency range.

Filter choice to better fit your application.

Complex plotting displays the combined effect of low pass, equalizer and high pass filter.

Bypass feature to listen to the effect of filter settings.

31 bands Graphic Equalizer

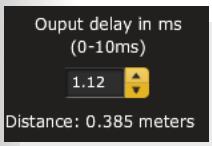


Double precision algorithms (56bits) for greater resolution in low frequency range.

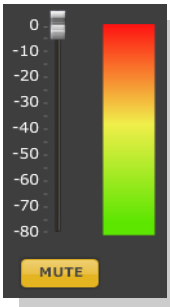
Complex plotting displays the combined effect of low pass, equalizer and high pass filter.

Bypass feature to listen to the effect of your equalizer settings.

Delay, Polarity and input/output metering



Delay
Control delay per output channel to better time align each channel.
To simplify your calculations, the equivalent distance in cm is calculated for you.



RMS meter displays for input and output channels. Resolution from –80 to 0dBFs (Full scale)

Custom firmware

Looking for a custom firmware for a specific application? Want an OEM version for your own product line?

Our sales and engineering can help. Just email us with a description of your requirements and we'll get back to you with a quote.

Software & Hardware requirements

PC Hardware requirements
- 1GHz CPU
- 512MB RAM
- USB V2.0

Software requirements
- Windows XP/Vista/7
- Adobe Air environment
- Net 3.5 environment

Mac

Mac Hardware requirements
- Intel Core Duo or faster
- 512MB RAM
- USB V2.0

Software requirements
- Mac OS X v10.4, 10.5, 10.6
- Adobe Air environment