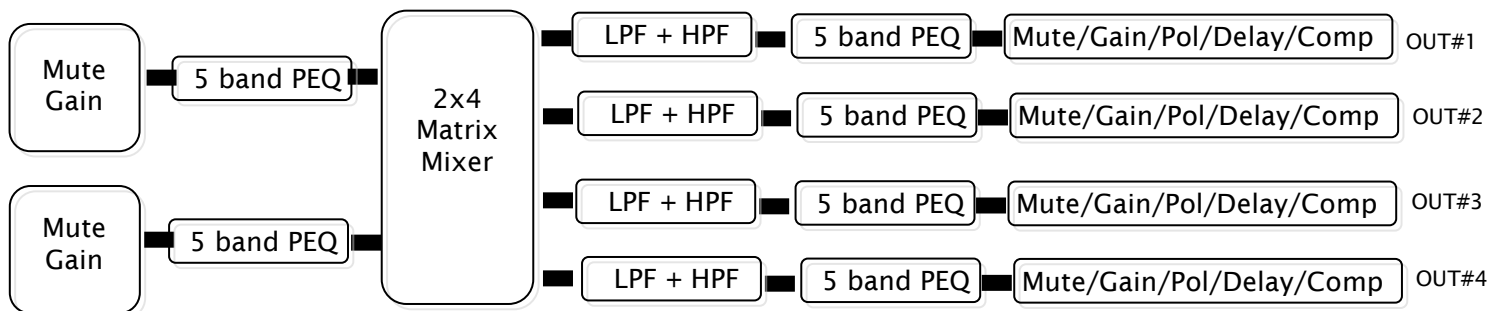


The miniDSP 2x4 advanced plug-in combines the needs for 2way, 3way and 2.1 setup into one configuration thanks to its internal matrix mixer. The compressor limiter on each output channel is another novel feature. Similar to all miniDSP plug-ins, this plug-in is fully compatible with Room EQ Wizard thanks to its tight integration with the Advanced biquad feature.

Algorithm and plug-in configuration

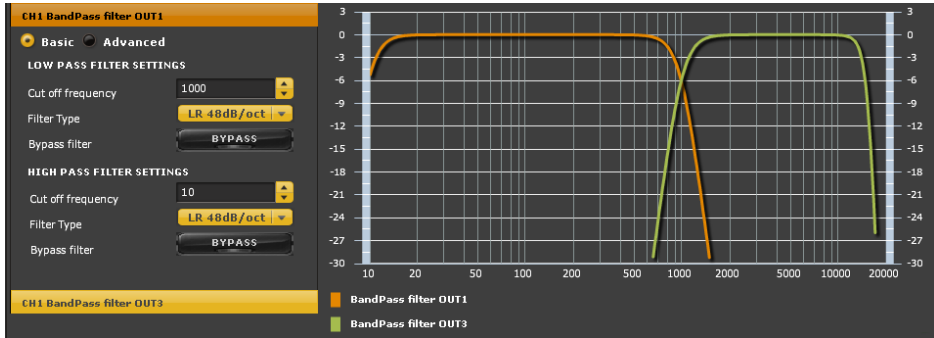
Item	Description
Sampling frequency	48kHz
Algorithm resolution	Double precision for best audio quality (56bits resolution)
Digital Inputs Digital Outputs	Plug-in IN#1&2 available on I2S_Data_In7&8 Plug-in OUT#1/2 available on I2S_Data_Out1/2 Plug-in Out# 3/4 available on I2S_Data_Out3/4 Un-processed 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 gain	Fader gain control from -80 to 0dB
Input/ Output meters	Monitoring signal from -80dBFS to 0dBFS - High refresh rate
Matrix Mixer	Full 2 x IN, 4 x OUT matrix mixer to control the routing of channels
Low & High Pass Filters on each output	Butterworth up to 8th order (6 to 48dB/oct) Linkwitz-Riley up to 8th order (12 to 48dB/oct) Bessel - 2nd order - Bypass per filter Advanced mode for custom biquad input
Parametric Equalizers (Peak/Shelf)	5 EQ bands per input, 5 EQ bands per output Frequency, Gain, Q configurable, Peak or Shelf (low/high) Per-band bypass feature Advanced feature for custom biquad input
Delay	Up to 7.5ms per channel (258cm) with 0.02ms increments
Polarity	Invert polarity 180degree per channel
Output mute	Individual output mute
Master output gain	Analog potentiometer control master output digital gain fader from -80 to 0dB. Disabled if no pot connected.

SYSTEM DIAGRAM



CROSSOVER SECTION

Basic mode for text book filtering (Butterworth/Linkwitz Riley/Bessel)

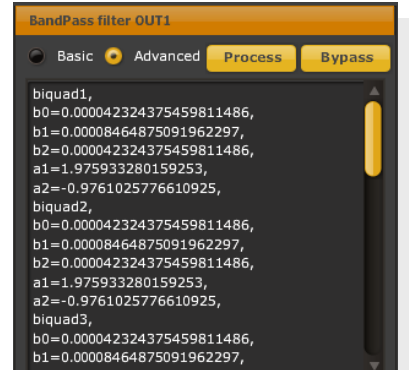


Double precision algorithms (56bits) for greater resolution in low frequency range.

Wide range of filter choices Linkwitz Riley/Butterworth/Bessel

Complex plotting
Quick view of LPF + HPF

Advanced mode for custom Biquad programming in a table format.



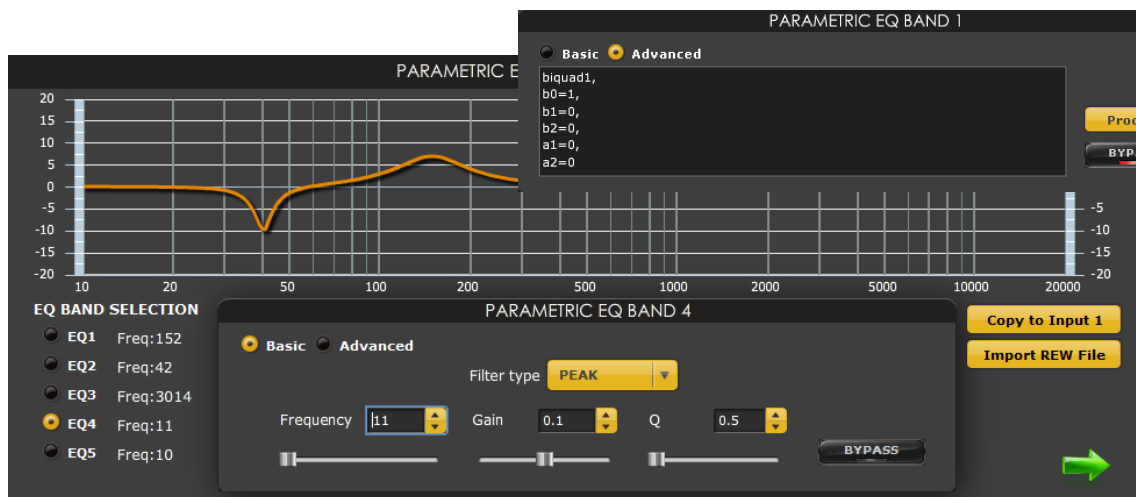
MATRIX MIXER

	OUT #1	OUT #2	OUT #3	OUT #4
IN #1	On	Off	On	Off
IN #2	Off	On	Off	On

Matrix mixer at center of the DSP structures allows routing and mixing of the input channels to any of the outputs.

Perfect to build configurations such as:
Stereo 2way, 2.1, 3way, 3.1, 4way, multiple SUB..

PARAMETRIC EQUALIZER



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

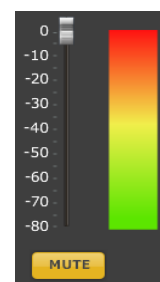
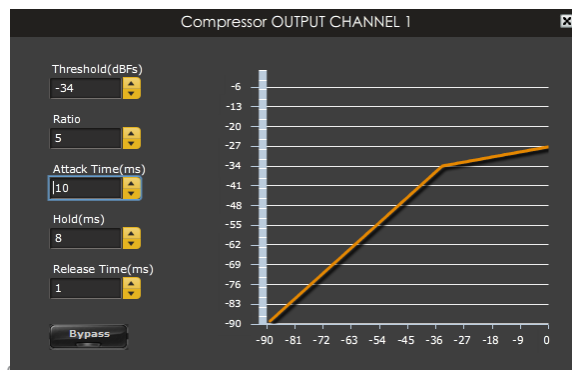
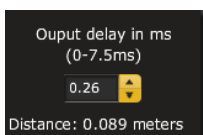
Up to 6 Bands of parametric equalization with complete freedom on Frequency, Gain and Q settings

Peak/Low Shelf/High Shelf selectable per band

Per Band Bypass allows to quickly listen to the effect of your equalizer settings.

Advanced mode for cus-

COMPRESSOR LIMITER / DELAY / RMS METERS



RMS meter displays for input and output channels. Resolution from -80 to 0dBFS