

2way Crossover ADV 2.1 plug-in was designed for stereo active loudspeaker configurations with a Sub. Very similar to Crossover PEQ plug-in, this module adds the capability to mix outputs 1 & 2 to a single SUB output and power two satellite speakers on outputs 3&4. Combined with a miniAMP in2.1 mode, it is the perfect fit for a compact all digital solution.

Software features

- . Extensive set of audio algorithms
- . Live tuning, hear the changes real time
- . Save/Load configurations
- . Optional offline system tuning
- . Advanced mode allows custom Biquad filter programming
- . REW integration
- . Extensive plotting capabilities
- . Plug & Play setup requires no driver
- . Free Un-limited Upgrades, your plug-in

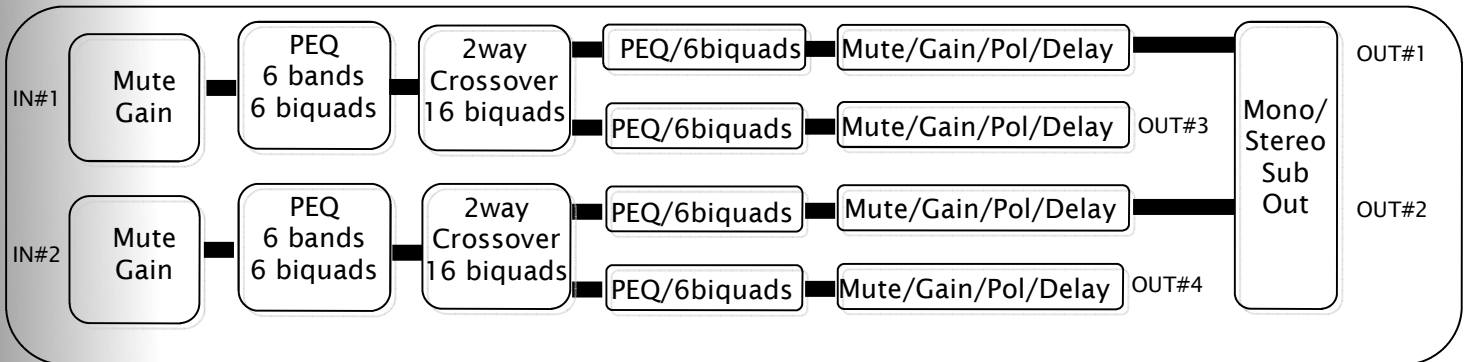
Applications

- . Active loudspeakers
- . All digital active crossover module
- . Custom amplifiers
- . Small PA processor
- . Custom Pro Audio boards

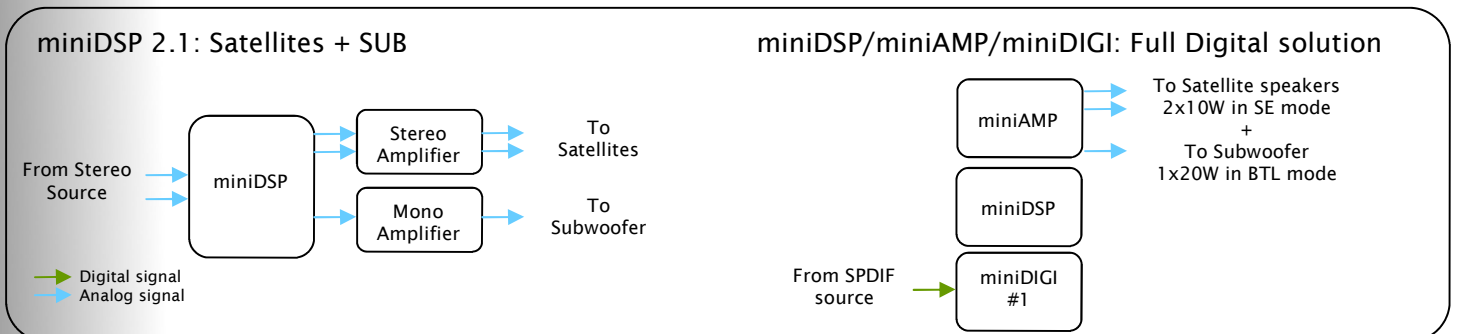
Algorithm and plug-in configuration

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
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
Parametric Equalizers (Peak/Shelf)	6 EQ bands per input, 6 EQ bands per output Frequency, Gain, Q configurable, Peak of Shelf (low/high) Per-band bypass feature
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.
Stereo/Mono Sub	Mono SUB out: Mixing LPF section of each 2 way Xover Stereo SUB out: Outputs are not mixed

Audio flow chart diagram



Example application diagram



2 way Crossover

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
Up to 8th order (48dB/oct) with

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

Bypass feature to listen to

Advanced mode for custom Biquad programming in a table format.

Parametric Equalizer

Advanced mode

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.

Delay, Polarity, Input/output metering and Input toggle

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)

Toggle your input source between Analog (A/D) or Digital (I2S) from a single mouse click.

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 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