

10x10 Xover v1 is a plug-in compatible for the miniDSP 2x8 and 8x8 platforms. It is designed to be used for flexible configurations ranging from a multi-zone audio processor to multi-way crossover. Operating at 48kHz, both analog and digital input (I2S) are being mixed to the matrix mixer for complete freedom.

Software features

- . Extensive set of audio algorithms
- . Live tuning, "hear changes real time"
- . Channel linking to synchronize settings of two channels (PEQ/Crossovers)
- . Save/Load configurations
- . Up to four preset configurations stored
- . Extensive plotting capabilities
- . Plug & Play setup requires no driver
- . Custom Input/Output labels
- . Free Un-limited Upgrades
- . Custom biquad for REW compatibility

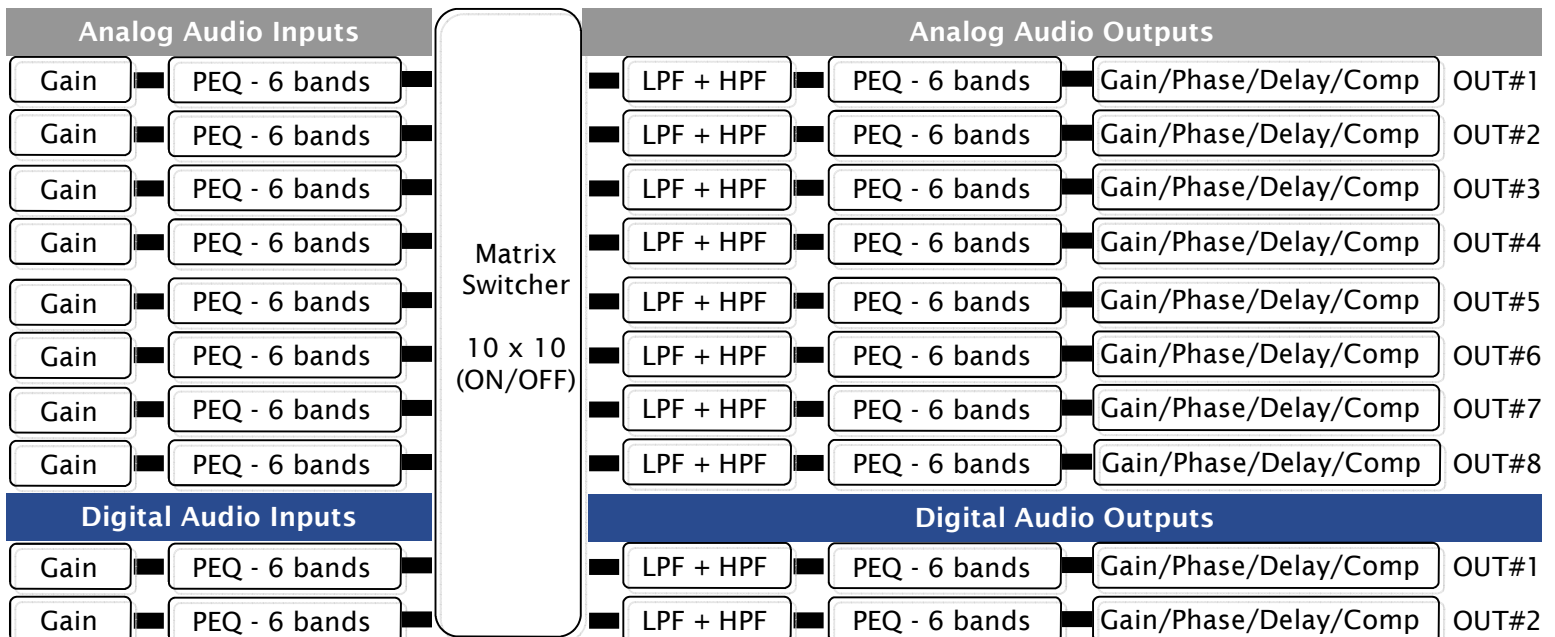
Applications

- . Active loudspeaker processor
- . Custom amplifiers
- . Car audio processor
- . Small PA processor
- . Custom Pro Audio boards

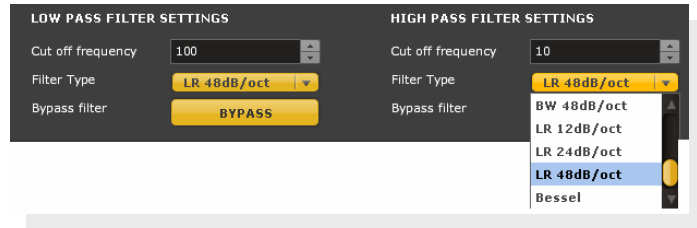
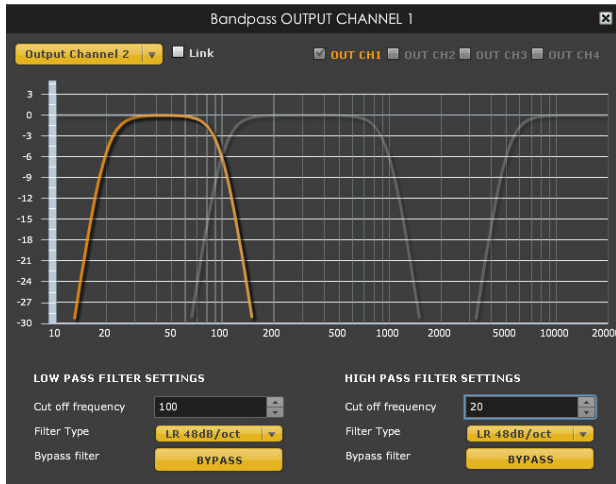
Algorithm and plug-in configuration

Item	Description
Sampling frequency	48kHz
Inputs/Outputs	Inputs: Up to 8 analog inputs, up to 2 digital inputs (I2S) Outputs: Up to 8 analog outputs, up to 2 digital outputs(I2S)
Algorithm resolution	Double precision filters (56bits resolution)
Input mute/select	Click-less input mute per channel and input selection
Digital gain	Fader gain control from -70 to +12dB
Input/ Output meters	Monitoring signal from -80dBFS to 0dBFS - High refresh rate
Low & High Pass filter types	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 Frequency: 10Hz to 20kHz in 1Hz increments
Parametric Equalizers (Peak/Low&High shelf)	6 PEQ bands per input, 6 PEQ bands per output Frequency: 10Hz to 20kHz, 1Hz increments Gain: 0 to 16dB, 0.1dB increments Q: 0.5 to 50, 0.1digit increment Type: Peak or Shelf (low/high) & Per-band bypass feature
Mixer	Central mixer for 4 x 10 cross-point configuration (ON/OFF)
Delay	Up to 15ms per channel for analog outputs Up to 8ms per channel for digital outputs
Polarity	Invert polarity 180degree per channel
Comp/Limiter	Compressor limiter with Threshold, ratio, attack/release time
Master output gain	Analog potentiometer control master output digital gain fader from -80 to 0dB. Disabled if no pot connected.

DSP Audio flow chart diagram



Low Pass and High Pass filter per output channel



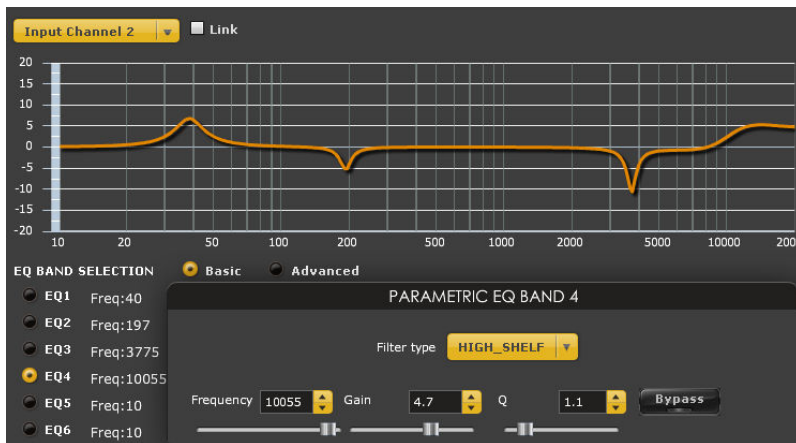
Double precision algorithms (56bits) for greater resolution

Wide range of filter choices Up to 8th order (48dB/oct) with

Channel linking feature to link up settings to Left & Right channels

Complex plotting displays the combined effect of low/High pass

Parametric Equalizer (Peak/Shelf/Advanced)



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

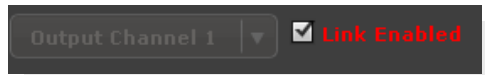
Up to 5 Bands of parametric equalization with complete freedom on Frequency, Gain and Q settings

Peak/Low Shelf/High Shelf selectable per band

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

Real time channel linking to keep PEQ settings of two channels synchronized

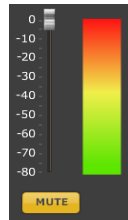
Advanced biquad programming for custom biquads



Delay, RMS metering, Compressor/Limiter

delay in ms (0-15ms)
0.4
Dist: 0.138

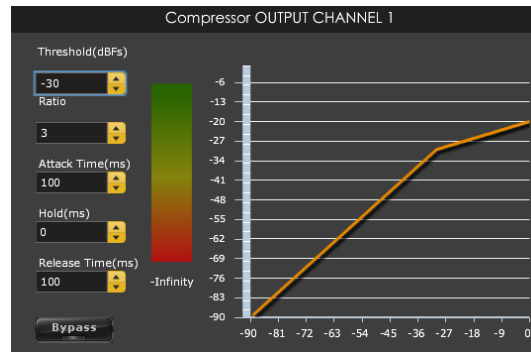
Delay
Control delay per output channel to better time align each channel.



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

10x10 Matrix Switcher with custom labels

	Analog Out								Digital Out	
Analog In	Room1	Room2	Output 3	Output 4	Output 5	Output 6	Output 7	Output 8	S/PDIF 1	S/PDIF 2
Left	On	Off	Off	Off	Off	Off	Off	Off	Off	Off
Right	Off	On	Off	Off	Off	Off	Off	Off	Off	Off
Input 3	Off	Off	On	Off	Off	Off	Off	Off	Off	Off
Input 4	Off	Off	Off	On	Off	Off	Off	Off	Off	Off
Input 5	Off	Off	Off	Off	On	Off	Off	Off	Off	Off
Input 6	Off	Off	Off	Off	Off	On	Off	Off	Off	Off
Input 7	Off	Off	Off	Off	Off	Off	On	Off	Off	Off
Input 8	Off	Off	Off	Off	Off	Off	Off	On	Off	Off
Digital In est	Room1	Room2	Output 3	Output 4	Output 5	Output 6	Output 7	Output 8	S/PDIF 1	S/PDIF 2
	Off	Off	Off	Off	Off	Off	Off	Off	On	Off
S/PDIF 2	Off	Off	Off	Off	Off	Off	Off	Off	Off	On



Comp/Limiter for all outputs.

Fully featured with threshold, ratio, attack/hold/release time and compression meter.

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