

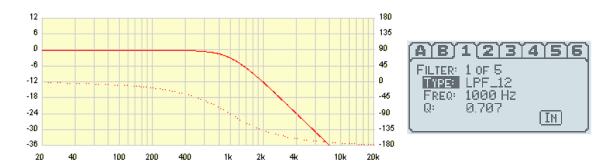


VSX Output Filters

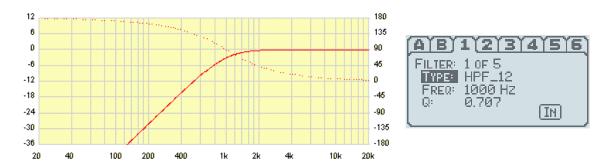


VSX Output Filters

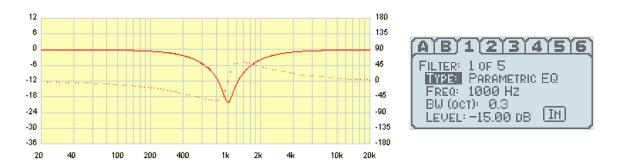
The following is an overview of the filter types in the output of the VSX processors Each filter can be independently configured for one of twelve different filter types using the drop-down box. The Level and Frequency controls are available as parameters for all filter types. The third control may be available depending upon the filter type and may be defined as Bandwidth (in octaves) or Q. Each filter type is shown below with a sample plot displaying the indicated control settings:



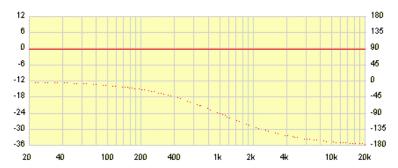
LP_12 - 12 dB/oct Low Pass filter. The phase is shown as a dotted line (scaled on the right).



HP 12 - 12 dB/oct High Pass filter. The phase is shown as a dotted line (scaled on the right).

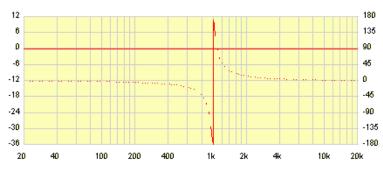


PEQ - Fully Parametric Equalizer. The phase is shown as a dotted line (scaled on the right).



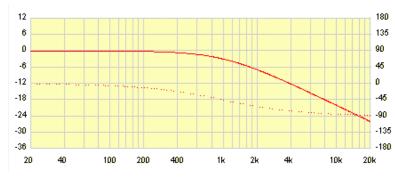


A-P 1 - 1st Order All Pass. Frequency Response is unaffected but the phase shifts by -180 degrees (dotted line). Note that the phase shift is -90 degrees at the corner frequency setting. In this case it is 1000 Hz.



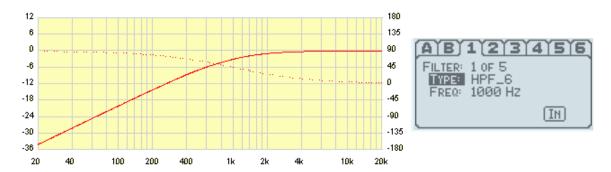


A-P 2 - 2nd Order All Pass. Frequency Response is unaffected but the phase shifts by -360 degrees (dotted line). Note that the phase shift is 180 degrees at the corner frequency setting. In this case it is 1000 Hz.

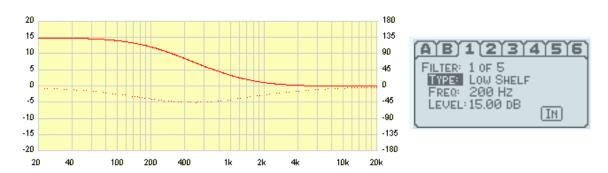




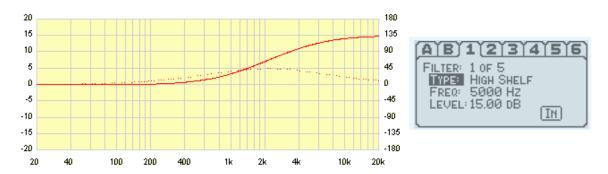
LP_6 – 1st Order Low Pass Filter. The phase is shown as a dotted line (scaled on the right).



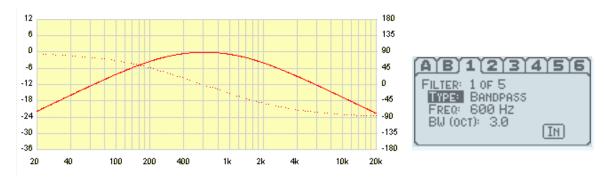
HP_6 – 1st Order High Pass Filter. The phase is shown as a dotted line (scaled on the right).



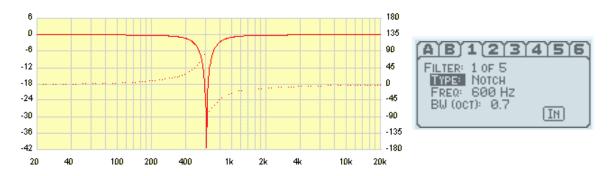
L_SHF – Low Shelving EQ. The phase is shown as a dotted line (scaled on the right).



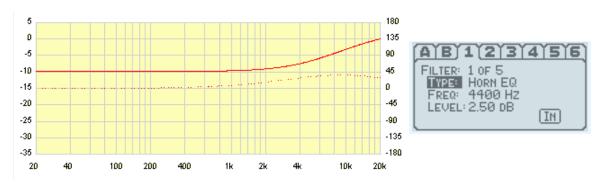
H_SHF – High Shelving EQ. The phase is shown as a dotted line (scaled on the right).



B-P – Band Pass Filter. The phase is shown as a dotted line (scaled on the right).



B-S – Notch Filter. The phase is shown as a dotted line (scaled on the right).



HORN – EQ for CD Horn. The phase is shown as a dotted line (scaled on the right).

Comments

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Audio Channels			3 inputs/6 outputs -VSX 26 5 inputs/8 outputs-VSX 48		RTA Mic input can be summed with Line inputs.
LED Metering			2 inputs/6 outputs-VSX 26 4 inputs/ 8 outputs-VSX 48		LED STATUS: Red = -0.5 dBFS and higher (Clip) Red & Green = -4 to -0.5 dBFS Green = -4 to -40 dBFS Off = below -40 dBFS
Mute Function			Front panel switch and LED for each input and output		LED STATUS: Red = Muted Off = On
ANALOG INPUTS	Input T	rim Range	-6 to +6 dB		Software controlled
Line Sens Settings		+24 dBu or -10 dBV		Software selectable	
Line Input Impedance			4.4k k ohms		Electronically balanced
Line Max In			24 dB		
Line Input CMRR			55 dB		
Line Input Crosstalk			-90 dB		20 Hz to 20 kHz
Line Input Dynamic Range			110 dB		A-weighted, 150 ohm input termination
RTA Mic Gain Range			+20 to +60 dB		Approximately 1/2 dB steps
RTA Max In			+2 dBu (.98Vrms)	+2 dBu (.98Vrms)	
RTA Input Impedance			2.2 k ohm	2.2 k ohm	
RTA Input CMRR			55 dB		
RTA Input EIN			-123 dB	-123 dB	
RTA Phantom Power			+48 volts	+48 volts	
AES Input			On XLR 1	On XLR 1	
OUTPUTS Output Full Scale		+24 dBu		Balanced	
Output Impedance		150 ohms		Electronically balanced	
Minimum Load Impedance			600 ohms		Maximum output @ 600 ohms = 22.5 dBu
Dynamic Range			105 dB	105 dB	
ANALOG INPUT-TO-OUT- PUT Total Harmonic Distortion (+ Noise)		0.007 %	0.007 %		
Frequency Res		Response	20 Hz to 20 kHz		± 0.5 dBr referenced at 1 kHz
Dynamic Range			105 dB		A-weighted, 150 ohm input termination
Latency			< 1 mS	Propagation delay from input to output	
DIGITAL	Sample Rate		48 kHz	QUA	NTIZATION 24-bit 256 x-over-sampled Delta- Sigma AD, DA
Digital Processing		~100 32 bit MIPS Use		s Analog Devices BLACKFIN processors, 40- bit accumulators	
DSP Cycle Speed		500 MHz			
CONTROL/MEMORY	USB	2.0 PC, Memory Stick, PDA Connection			
GENERAL	Dimensions	19" (48.26 cm) W 12.25" (31.12 cm) D 3.5" (8.89 cm) H		without connectors	
Net Weight		11.6 lbs. (5.26 kg)			
AC Power Input Voltage		100 ~ 240 VAC		47 ~ 63 Hz Universal Power Supply	
Power Consumption			14 watts @120 V		163 mA
Power Dissipation			TBD BTU (TBD kcal)		@ 100 V

^{1.} All specifications are typical for any channel(s). 2. All measurements are made in the digital domain. 3. All specifications are for an AC line input of 120 volts RMS. 4. All input measurements are made using a 40 ohm balanced source impedance at +24 dBu full scale. 5. All measurements are made with gain/attenuation set for unity.

UL, CUL, CE, FCC part 15, Class B

Agency Compliance Listings



Pending