SUPERIOR LISTENING SYSTEMS
AUDIO CLARITY REDEFINED

Processor Settings

Model LS8695v2

Crossover

	Frequency	Slope
LF w/o subwoofer - HPF	65Hz	24dB Oct. (4th order) Butterworth
LF w/remote sub - HPF	80Hz	24dB Oct. (4th order) Butterworth
LF w/ adjacent sub - HPF	125Hz	24dB Oct. (4th order) Butterworth (includes SP820 and SP810)
LF - LPF	1,500Hz	48dB Oct. (8th order) Linkwitz/Riley
HF - HPF	1,500Hz	24dB Oct. (4th order) Linkwitz/Riley

Equalization

	Frequency	BW*	Q	Level
LF	750Hz	.25	5.76	-4.5dB
LF	1,120Hz	.33	4.32	-3dB
HF	1,890Hz	.33	4.32	-3dB
HF	8,000Hz	.5	2.87	+5dB
HF	12,500Hz	.33	4.32	+6dB

Equalization Settings were developed in an anechoic environment

Delay

	Time	Polarity
LF	none	positive
HF	none	positive

Some DSP units will change the propagation delay for each output depending on how much processing is on that channel

Limiting

See Application Note "Setting System Limiters"

	RMS Voltage
LF	56 Volts, 8 msec attack, 128 msec release, 100:1 ratio (recommended predictive peak stop @ 113 Volts or amp clipping)
HF	47 Volts, .5 msec attack, 8 msec release, 100:1 ratio (recommended predictive peak stop @ 95 Volts or amp clipping)

Gain

LF	0
HF	-5dB

Assumes amplifiers have equal voltage gain

* BW Disclaimer

Different DSP processor manufactures are not consistent in their implementation of digital parametric EQs. The SLS recommended filters will not be replicated by all DSP devices. If the DSP device that is used continuously varies the Q value of the filter depending on the +/- dB level, the DSP will not match our settings. (Most of these devices do not allow filter Q to be shown at all.)

1650 W. Jackson Ozark, MO 65721 (417) 883-4549