SLS AUDIO

SUPERIOR LISTENING SYSTEMS
A U D I O   C L A R I T Y   R E D E F I N E D

Processor Settings
Model LS6500

Crossover

	Frequency	Slope
LF w/o subwoofer - HPF	80Hz	24dB Oct. Butterworth
LF w/remote sub - HPF	80Hz	24dB Oct. Butterworth
LF w/ adjacent sub - HPF	160Hz	24dB Oct. Butterworth
LF - LPF	1,500Hz	48dB Oct. Linkwitz/Riley
HF - HPF	1,500Hz	24dB Oct. Linkwitz/Riley

Equalization

	Frequency	BW*	Q	Level
LF	120Hz	.333	4.32	+4dB
LF	350Hz	1	1.41	-4dB
LF	750Hz	.25	5.76	-2dB
HF	8,000Hz	.71	2	+4.5dB
HF	16,000Hz	.5	2.87	+4dB

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

	RMS Voltage	
LF	**28 Volts,**	16 msec attack, 256 msec release, 100:1 ratio (recommended predictive peak stop @ 56 Volts or amp clipping)
HF	**15.6 Volts,**	30 msec attack, 480 msec release, 100:1 ratio (recommended predictive peak stop @ 32 Volts or amp clipping)

See Application Note "Setting System Limiters"

With Ribbon TPAC installed————NO RMS LIMITING REQUIRED (Transparent Protection Audio Circuit)
(for very high SPL applications, a predictive peak stop limiter @ 32 Volts is recommended)

Gain

LF	0
HF	-9dB

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.)