



Processor Settings  
Model LS6593v2 (Passive Mode)

**Crossover**

	Frequency	Slope
LF w/o subwoofer - HPF	35Hz	24dB Oct. (4th order) Butterworth
LF w/subwoofer - HPF	80Hz	24dB Oct. (4th order) Butterworth

**Equalization**

Frequency	BW*	Q	Level
1,000Hz	1	1.414	-4.5dB
1,890Hz	.333	4.323	-5dB

**HF Equalization Note:**

Precise speaker equalization above 5000Hz based on room measurements is not recommended due to the nature of measuring straight line arrays. If HF room correction is needed, use of a HF shelving filter is recommended.

**Limiting**

RMS Voltage

See Application Note  
"Setting System Limiters"

60 Volts, 16 msec attack, 256 msec release, 100:1 ratio (recommended predictive peak stop @ 120 Volts or amp clipping)

**\* 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.)



Processor Settings  
**Model LS6593v2 (Bi-amp Mode)**

**Crossover**

	Frequency	Slope
LF w/o subwoofer - HPF	35Hz	24dB Oct. (4th order) Butterworth
LF w/subwoofer - HPF	80Hz	24dB Oct. (4th order) Butterworth
LF - LPF	1,500Hz	12dB Oct. (2nd order) Linkwitz/Riley
HF - HPF	1,500Hz	12dB Oct. (2nd order) Linkwitz/Riley

**Equalization**

	Frequency	BW*	Q	Level
LF	820Hz	1	1.414	-4dB
LF	2,245Hz	.125	11.54	-6dB
HF (shelving filter)	4,850Hz	12db/Oct	.707	+6dB

**HF Equalization Note:**  
  
Precise speaker equalization above 5000Hz based on room measurements is not recommended due to the nature of measuring straight line arrays. If HF room correction is needed, modification of the HF shelving filter is recommended.

**Delay**

	Time	Polarity
LF	none	positive
HF	none	negative

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

**Limiting**

	RMS Voltage
LF	60 Volts, 16 msec attack, 256 msec release, 100:1 ratio (recommended predictive peak stop @ 120 Volts or amp clipping)
HF	70 Volts, .5 msec attack, 8 msec release, 100:1 ratio (recommended predictive peak stop @ 120 Volts or amp clipping)

See Application Note "Setting System Limiters"

**Gain**

LF	0
HF	-9dB

Assumes amplifiers have equal voltage gain

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