



Processor Settings
Cinema System 4

Crossover

	Frequency	Slope
CSB215 (x2) - HPF	40Hz	12dB Oct. Butterworth
CSB215 (x2) - LPF	250Hz	24dB Oct. Linkwitz/Riley
CS-MH2806 MF - HPF	250Hz	24dB Oct. Linkwitz/Riley
CS-MH2806 MF - LPF	1,414Hz	24dB Oct. Linkwitz/Riley
CS-MH2806 HF - HPF	1,414Hz	24dB Oct. Linkwitz/Riley

Equalization

	Frequency	BW*	Q	Level
LF	None Required			
MF	353Hz	.333	4.32	-3dB
HF	2,520Hz	.333	4.32	-2.5dB
HF	7,336Hz	.333	4.32	-5dB

Equalization Settings were developed in an anechoic environment

Delay

	Time	Polarity
LF	none	positive
MF	none	positive
HF	.35 msec	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	49 Volts, 16 msec attack, 256 msec release, 100:1 ratio (recommended predictive peak stop @ 97 Volts or amp clipping)
MF	64 Volts, 2 msec attack, 32 msec release, 100:1 ratio (recommended predictive peak stop @ 126 Volts or amp clipping)
HF	20 Volts, 30 msec attack, 480 msec release, 100:1 ratio (recommended predictive peak stop @ 50 Volts or amp clipping)

With Ribbon TPAC installed — **NO RMS LIMITING REQUIRED (Transparent Protection Audio Circuit)**
(for very high SPL applications, a predictive peak stop limiter @ 50 Volts is recommended)

See Application Note "Setting System Limiters"

Gain

LF	-3dB
MF	0dB
HF	-3.5dB

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.)