

VTC Digital Signal Processor Settings - C4

The gain and limiter threshold values in the table are for power amplifiers with a gain of 32dB. The gain and limiter threshold values in the table must change if amplifiers with a different gain are used. If an amplifier's gain is 28dB, there is a $32 - 28 = 4\text{dB}$ difference in gain. Therefore the DLMS4080 limiter setting would INCREASE by 4dB.

Note: If the amplifiers used are in bridge mode, the amplifier gain increases by 6dB. A 32dB gain amplifier when in bridge mode will have a gain of 38dB, therefore a 6dB DECREASE in limiter setting is required.

Processor Model	DLMS4080
Speaker Model	C4
Revision Date	October 6, 2009

Bi-Amp Full Range	C4 using 32dB gain amplifiers	
Output	Low	Hi
Output Gain	Plus 5.5 dB	Plus 1 dB
Delay and Polarity		
Output Delay	0.604ms	0ms
Polarity	Normal	Normal
Crossover		
HP Resp. Shape	LR 24	LR 36
HP Frequency	40 Hz	980 Hz
LP Resp. Shape	LR 24	BUT 6
LP Frequency	1400 Hz	15000 Hz
EQ		
Output EQ1 Type	PEQ	Lo Shelf
Output EQ1 Frequency	60 Hz	7172 Hz
Output EQ1 +/-	Plus 6 dB	Minus 7 dB
Output EQ1 Bandwidth	0.20 oct/Q=7.2	1.12 oct/Q=1.25
Output EQ2 Type	PEQ	PEQ
Output EQ2 Frequency	90 Hz	1580 Hz
Output EQ2 +/-	Plus 2 dB	Minus 3 dB
Output EQ2 Bandwidth	0.15 oct/Q=9.6	0.15 oct/Q=9.6
Output EQ3 Type	PEQ	PEQ
Output EQ3 Frequency	740 Hz	2600 Hz
Output EQ3 +/-	Minus 3 dB	Plus 3 dB
Output EQ3 Bandwidth	0.35 oct/Q=4.1	0.1 oct/Q=14.4
Output EQ4 Type	PEQ	PEQ
Output EQ4 Frequency	0	4500 Hz
Output EQ4 +/-	0	Plus 3 dB
Output EQ4 Bandwidth	0	0.2 oct/Q=7.2
Output EQ5 Type	PEQ	PEQ
Output EQ5 Frequency	0	0
Output EQ5 +/-	0	0
Output EQ5 Bandwidth	0	0
Output Limiter		
Threshold	Plus 12dBu	Minus 11dBu
Attack	4.0ms	.3ms
Release	8X	16X