

## VTC Digital Signal Processor Settings - N4

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.

<b>Processor Model</b>	<b>DLMS4080</b>
<b>Speaker Model</b>	<b>N4</b>
<b>Revision Date</b>	<b>October 6, 2009</b>

Bi-Amp Full Range	N4 using 32dB gain amplifiers	
Output	Low	Hi
Output Gain	Plus 8.5 dB	Minus 3.75 dB
Delay and Polarity		
Output Delay	0.270ms	0ms
Polarity	Normal	Normal
Crossover		
HP Resp. Shape	LR 24	But 24
HP Frequency	35 Hz	1060 Hz
LP Resp. Shape	But 24	
LP Frequency	720 Hz	
EQ		
Output EQ1 Type	PEQ	Lo Shelf
Output EQ1 Frequency	55 Hz	4500 Hz
Output EQ1 +/-	Plus 4 dB	Minus 3 dB
Output EQ1 Bandwidth	0.25 oct/Q=5.7	1.36 oct/Q=1.02
Output EQ2 Type	PEQ	PEQ
Output EQ2 Frequency	80 Hz	1400 Hz
Output EQ2 +/-	Plus 3.5 dB	Minus 2.5 dB
Output EQ2 Bandwidth	0.15 oct/Q=9.6	0.13 oct/Q=11.09
Output EQ3 Type	PEQ	PEQ
Output EQ3 Frequency	285 Hz	2200 Hz
Output EQ3 +/-	Minus 7 dB	Minus 2 dB
Output EQ3 Bandwidth	0.30 oct/Q=4.8	0.1 oct/Q=14.4
Output EQ4 Type	PEQ	PEQ
Output EQ4 Frequency	565	7800 Hz
Output EQ4 +/-	Minus 7 dB	Minus 2 dB
Output EQ4 Bandwidth	0.17 oct/Q=8.4	0.13 oct/Q=11.09
Output EQ5 Type	PEQ	PEQ
Output EQ5 Frequency	0	0
Output EQ5 +/-	0	0
Output EQ5 Bandwidth	0	0
Output Limiter		
Threshold	Plus 10dBu	Minus 1dBu
Attack	4.0ms	.3ms
Release	8X	16X