

Main Specifications

Power Amplifier Performance and Physical - Delta 80 DSP/Delta 100 DSP

Parameter (Units)	Delta 80 DSP	Delta 100 DSP
Output Power per channel [Crest Factor = 4.8] (Watts)		
8 Ohms	1000	1400
4 Ohms	2000	2700
2.7 Ohms	2200	3700
2 Ohms	2000	3500
Output Power per channel bridged [Crest Factor = 4.8] (Watts)		
8 Ohms	4000	5600
4 Ohms	4000	7000
THD+N, 4 Ohms (%)		
@1kHz, 1dB below max output power <	0.18	0.08
@20Hz - 20kHz, 1dB below max output power <	0.2	0.1
Gain Options (dB)	32	32
Sensitivity Options for max power (dBu)	8.3	10.7
Sensitivity Options for max power (Volts)	2.0	2.66
Frequency Response, +0/0.5dB (Hz)	20 – 20000	20 – 20000
Power Consumption, Nominal @ 240V, 4 Ohms (A)	5.0	7.5
Power Consumption, Nominal @ 120V, 4 Ohms (A)	10.4	15.5
Dimensions H x W x D (mm)		
Amplifier	88 x 482 x 428	88 x 482 x 428
Boxed	230 x 580 x 560	230 x 580 x 560
Boxed Shipping – all except UK	250 x 610 x 600	250 x 610 x 600
Weight (kgs)		
Amplifier	10.3	10.9
Boxed – shipping	11.8	12.4

Additional Specifications

Parameter (Units)	Delta 80 DSP	Delta 100 DSP
Input Impedance – Active Balanced (Ohms)	20k	20k
Input CMRR (dB)	> 60	> 60
Damping Factor, 1kHz, 8 ohms	> 400	> 400
Signal Limiters Present	Yes	Yes
Protection Present – Short Circuit / DC Output / Temperature	Yes	Yes
Mains In-rush Control Present	Yes	Yes
Output Power per channel, 8 Ohms (Watts)		
Continuous music [Crest Factor of 2.8 or 9dB]	975	1360
Continuous music [Crest Factor of 4.8 or 14dB]	1000	1400
Continuous music [Crest Factor of 7.8 or 18dB]	1025	1440
Output Power per channel, 4 Ohms (Watts)		
Continuous music [Crest Factor of 2.8 or 9dB]	1950	2620
Continuous music [Crest Factor of 4.8 or 14dB]	2000	2700
Continuous music [Crest Factor of 7.8 or 18dB]	2050	2780
Output Power per channel, 2.7 Ohms (Watts)		
Continuous music with Crest Factor of 2.8 [9dB]	1960	3600
Continuous music with Crest Factor of 4.8 [14dB]	2010	3700
Continuous music with Crest Factor of 7.8 [18dB]	2060	3880

Due to continuing product improvement, the above specifications are subject to change.

Thermal Specifications

Power Consumption and Thermal Emissions – Delta 80DSP

Mains (V)	Load (R)	Current Draw (A)				Thermal Emissions (W)			
		No Sig'l	Light	Average	Heavy	No Sig'l	Light	Average	Heavy
240	8	1.5	2.2	3.4	6.3	360	378	410	486
240	4	1.5	2.8	5.0	10.3	360	394	453	593
240	2	1.5	3.1	5.8	12.4	360	402	474	647
120	8	3.3	4.7	7.1	12.9	400	418	450	526
120	4	3.3	5.9	10.4	21.0	400	434	493	633
120	2	3.3	6.5	12.0	25.1	400	442	514	687

Power Consumption and Thermal Emissions – Delta 100DSP

Mains (V)	Load (R)	Current Draw (A)				Thermal Emissions (W)			
		No Sig'l	Light	Average	Heavy	No Sig'l	Light	Average	Heavy
240	8	2.1	3.2	5.1	9.6	504	533	582	701
240	4	2.1	4.1	7.5	15.7	504	557	647	863
240	2	2.1	4.6	8.9	19.1	504	570	682	953
120	8	4.7	6.9	10.6	19.6	560	589	638	757
120	4	4.7	8.7	15.5	31.9	560	613	703	919
120	2	4.7	9.7	18.2	38.7	560	626	738	1009

No Sig'l = Quiescent, Light = Crest Factor of 7.8(18dB),
 Average = Crest Factor of 4.8(14dB), Heavy = Crest Factor of 2.8(9dB)
 For details of measurement methods please refer to the Technical Support area of our website.

Processing Specifications

Auxiliary Outputs and DSP Performance- Delta 80 DSP/Delta 100 DSP

Parameter (Units)	Delta 80 DSP / 100 DSP
Source Impedance – Active Balanced (Ohms)	< 60
Minimum Load (Ohms)	600
Maximum Output Level (dBu)	+18
ADC, DAC and DSP sample rate (kHz)	96
AES accepted sample rates (kHz)	32-192
Dynamic Range (20Hz-20kHz Unwtd, dB)	>114
Distortion (@1kHz, +10dBm, %)	<0.001
Signal Processing	
Delay up to 650mS (inputs), 650ms(outputs) - independant	
Filters Parametrics – 8 Per input / 9 per output Each parametric can be switched to Bandpass, Allpass, Notch, VariQ, Shelf and Elliptical response Phase filtering – 2 degree steps on each input and output	
FIR Filtering – available on all outputs – total maximum taps available: 4000*	
Crossover Filters (per output) Bessel / Butterworth 6/12/18/24/48dB per octave and Linkwitz-Riley 12/24/48dB per octave	
Dynamic EQ** 3 bands (per input) Parametric behaviour – 19.7Hz – 32kHz 'Q' 0.4 – 128, Max gain automatic gain adjustment 18dB Max ratio (cut above mode) 4:1 Max ratio (all other modes) 2:1 Attack 70uS – 2.0 Seconds Release 11mS – 3.4 Seconds	
Mix matrix mode (auxes and amplifier outputs) Input sends to each output continuously variable from -40.0dB to -15.0dB in 0.1dB steps plus mute	
Limiter Threshold +18dBu to -12dBu (auxiliary outputs); +42dBu to +20dBu (amplifier outputs) Attack time 0.1 to 91 milliseconds Release time 2, 4, 8, 16 or 32 times the attack time	
Clip/D-max Limiter Look-ahead attack time, Fast, Medium or Slow release times	
*FIR Filtering enabled in later firmware release – 4000 taps with DEQ globally disabled	
** DEQ enabled in later firmware release	