Bias Q2+

Product Overview:

4800W/4-channel Flexible Amplifier with DSP and AES67. 4 x 1200 W at 8Ω

Bias Q2+ offers the amazing sound quality and reliability you would expect from all Void products.

Offering a full suite of DSP tools via ArmoníaPlus control software. Delay, E.Q, Input trim, Gain and Polarity, on top of our product presets with FIR filters and Limiters.

The patented SRM (Smart Rails Management) technology allows to maximize the efficiency of the system and drastically reduces power consumption in any load and usage condition. Bias amplifiers feature extremely low thermal dissipation, reducing the need for external cooling devices.

Bias Q2+ is designed to operate with Lo-Z (from 2 Ω) and 70V/100V distributed lines or any mix of the two.

DSP+ versions extend signal routing capabilities with the integration of AES67 digital audio networking architecture.

The amplifier platform that can be trusted in mission-critical applications, such as fire alarm systems, thanks to the cleverly engineered power supply that allows reliable operation even when connected to a UPS.

Install amplifier featuring standard Phoenix connectors.

Bias Q2+ is rated IP-20.

Applications

- Medium to large scale venues
- Bar, club, lounge
- Indoor and outdoor dance events
- Gyms and fitness
- Houses of worship
- Live music venue
- Hotels and resorts
- Corporate and AV
- Amusement parks
- Cruise ships

TD10806 V1.0

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Channel Handling

Number of output channels	4 Hi-Z or Lo-Z (bridgeable per ch. pair)	Phoenix PC 5/8-STF1-7,62
Number of input channels		
Analog	4	Phoenix MC 1,5/12-ST-3,81
AES67	4	1 x RJ45

Audio

Gain	26 dB	29 dB	32 dB	35 dB
Input sensitivity @ 8 Ω	4.9 Vrms	3.47 Vrms	2.45 Vrms	1.73 Vrms
Max input level	20 dBu			
Frequency Response (±0.5 dB , 1 W @ 8 Ω)	20 Hz - 20 kHz			
Crosstalk (1 kHz)	typical -70 dB			
S/N (32 dB gain, analog input 20 Hz - 20 kHz @ 8 Ω)	> 110 dB(A)			
Input impedance	20 kΩ balanced			
THD+N (from 0.1 W to Full Power)	< 0.1% (typical < 0.05%)			
DIM (from 0.1 W to Full Power)	< 0.05%			
Slew Rate (input filter bypassed @ 8 Ω)	> 50 V/µs			

DSP

AD converters	24 Bit Tandem™ @ 48 kHz 125 dB-A Dynamic Range - 0.005 % THD+N
DA converters	24 Bit Tandem™ @ 48 kHz 117 dB-A Dynamic Range - 0.003 % THD+N
Sample rate converter	24 Bit @ 44.1 kHz to 192 kHz 140 dB Dynamic Range - 0.0001 % THD+N
Internal precision	32 bit floating point
Latency	2.5 ms fixed latency architecture
Memory/Presets	128 MB (RAM) plus 512 MB flash for presets
Delay	2 s (input) + 100 ms (output) for time alignment
Equalizer	Raised-cosine, custom FIR, parametric IIR: peaking, hi/lo-shelving, all-pass, band-pass, band-stop, hi/lo-pass
Crossover	linear phase (FIR), Butterworth, Linkwitz-Riley, Bessel: 6 dB/oct to 48 dB/oct (IIR)
Limiters	TruePower™, RMS voltage, RMS current, Peak limiter
Damping control	Active DampingControl™ and LiveImpedance™ measurement

Output Stage

Maximum output power per channel @ 8 Ω	1200 W
Maximum output power per channel @ 4 Ω	1200 W
Maximum output power per channel @ 2 Ω	1500 W
Maximum output power @ 4 Ω Bridged	3000 W
Maximum output power @ 8 Ω Bridged	2400 W
Maximum output power @ Hi-Z distributed line 100 V	1200 W
Maximum output power @ Hi-Z distributed line 70 V	1200 W
Maximum unclipped output voltage @ 8 Ω	139 V_{peak}
Maximum output current	45 A_{peak}

The power figure is calculated by driving and loading symmetrically all the channels: uneven loads allow to achieve higher performances.

AC Mains Power

Power supply	Universal regulated switch mode with PFC, SRM			
Nominal voltage (±10%)	100-240 V @ 50-60Hz			
Power factor (> 500 W ouput)	> 0.95			
Consumption/current draw	@ 115 V		@ 230 V	
Idle (DSP+D)	33.6 W	0.5 A	33.7 W	0.35 A
1/8 Max Output Power @ 4 Ω	850 W	9.16 A	826.8 W	5.02 A
1/4 Max Output Power @ 4 Ω	1718 W	15.96 A	1651 W	9.41 A
AC Mains connector	IEC C20 inlet (20 A max) region-specific power cord provided			

Thermal

Operating temperature	-10° - 35° C / 14° - 95° F			
Cooling	Fan, continuously variable speed, temperature controlled, front to rear airflow			
Thermal dissipation	@ 115 V		@ 230 V	
Idle	110.3 BTU/h	27.8 kcal/h	110.6 BTU/h	27.9 kcal/h
Idle (DSP+)	114.7 BTU/h	28.92 kcal/h	115.1 BTU/h	29.02 kcal/h
1/8 Max Output Power @ 4 Ω	853.5 BTU/h	215.2 kcal/h	768.1 BTU/h	193.7 kcal/h
1/4 Max Output Power @ 4 Ω	1768.5 BTU/h	445.9 kcal/h	1539.8 BTU/h	388.3 kcal/h

Construction

Dimensions	483 x 44.5 x 358 mm 19.0 x 1.75 x 14.1 in
Weight	7.0 Kg (15.4 lb)