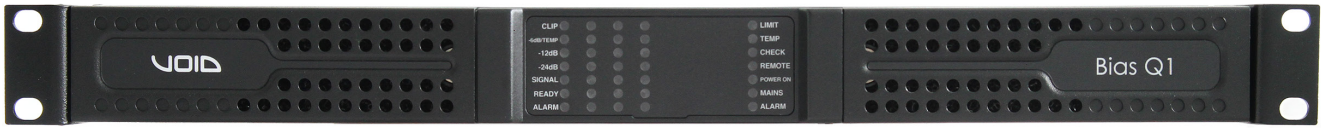


Bias Q1



For reliable premier-grade power and headroom in the lightest possible package size, look no further than this four channel Bias Q1 DSP+D amplifier. With smaller dimensions and a lighter weight than the Bias Q5, it is still durable and maintains an impressive sound quality.

Key features

- Smaller dimensions and lighter weight, taking up one rack unit only
- Impressive sound quality and reliability
- Highly efficient, microprocessor-controlled power supply with built in PFC (Power Factor Correction) for flawless worldwide operation with any AC mains voltage in the range 85-275 VAC tolerant to peak up to 400 V
- Patented SRM (Smart Rails Management) technology
- Responsive at any operating condition
- Works with lo-Z (from 2 Ω) and with 70V/100V distributed lines so any mixed configuration of low and high impedance output loads can be attained
- DSP+D versions extend system performance, with the support of Dante™ digital audio networking architecture and the on-board, high-end signal processing

Applications

- Bar, club, lounge
- Corporate and AV
- Indoor and outdoor dance events
- Large-scale touring
- Live music venues.

Bias Q1

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	
Dante™	4		1 x RJ45	
Audio				
Gain	26 dB		29 dB	
	32 dB		35 dB	
Input sensitivity @ 8 Ω	2.48 V _{rms}		1.76 V _{rms}	
	1.24 V _{rms}		0.88 V _{rms}	
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)	> 104 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			
Damping Factor @ 8 Ω, 20 Hz - 100 Hz	> 500			
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	300 W
Maximum output power per channel @ 4 Ω	300 W
Maximum output power per channel @ 2 Ω	400 W
Maximum output power @ 4 Ω Bridged	800 W
Maximum output power @ 8 Ω Bridged	600 W
Maximum output power @ Hi-Z distributed line 100 V	300 W
Maximum output power @ Hi-Z distributed line 70 V	300 W
Maximum unclipped output voltage @ 8 Ω	70 V _{peak}
Maximum output current	33 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 output)	> 0.95			
Consumption/current draw	@ 115 V		@ 230 V	
Idle (DSP+D)	31.1 W	0.45 A	31.5 W	0.25 A
1/8 Max Output Power @ 4 Ω	227 W	2.1 A	251 W	1.4 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	106 BTU/h	26.7 kcal/h	107 BTU/h	27 kcal/h
1/8 Max Output Power @ 4 Ω	261 BTU/h	65.8 kcal/h	344 BTU/h	86.7 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)

Networking	
Standards compliance	auto-sensing Fast Ethernet (IEEE 802.3u, 100 Mbit/s)
Supported topologies	Star
Remote interface	Armonia Pro Audio Suite™

