Bias Q1.5



Achieve unbeatable sound quality with the compact Bias Q1.5. The four channel amplifier embraces intelligent technology with a highly efficient microprocessor-controlled power supply including built in PFC (Power Factor Correction) for flawless operation, alongside Powersofts' patented SRM (Smart Rails Management) technology.

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

Applications

- Beach Bars & Poolside
- Gyms & Fitness
- Hotels & Resorts
- Marine
- Live Music Venues
- Nightclubs & Bars
- Restaurants & Cafes
- Retail



Bias Q1.5

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	
Audio				
Gain	26 dB	29 dB	32 dB	35 dB
Input sensitivity @ 8 Ω	3.54 Vrms	2.51 Vrms	1.78 Vrms	1.26 Vrms
Max input level 20 dBu				
Frequency Response ($\pm 0.5~\text{dB}$, 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)			> 108 dB(A)	
Input impedance		20 k Ω 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			> 5	000

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			0 W	
Maximum output power per channel @ 4 Ω			60	0 W
Maximum output power per channel @ 2 Ω			80	0 W
Maximum output power @ 4 Ω Bridged			1600 W	
Maximum output power @ 8 Ω Bridged			120	00 W
Maximum output power @ Hi-Z distributed line 100 V			60	0 W
Maximum output power @ Hi-Z distributed line 70 V			60	0 W
Maximum unclipped output voltage @ 8 Ω			100 V _{peak}	
Maximum output current			$45~{\rm A}_{\rm peak}$	
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		30 V	
Idle (DSP+D)	31.1 W	0.45 A	31.5 W	0.25 A

AC Mains connector		regic	IEC C20 inle on-specific po	et (20 A max) wer cord pro	vided
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	360 BTU/h	90.8 kcal/h	360 BTU/h	90.8 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)				

1/8 Max Output Power @ 4 Ω 405 W 3.7 A 405 W 2.1 A

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



