Ottocanali DSP Series

8-Channel High-Performance Power Amplifier Platform with DSP and Dante™
For Lo-Z & Hi-Z Installations

☐ Touring
☑ Installation

8 lo-Z hi-Z channels | SRM | PFC | DSP onboard | channel routing | Armonía Pro Audio Suite™ | Dante™

Even more flexible and reliable, the new Ottocanali DSP+DANTE Series offers a wide range of system control and monitoring functions as well as sound shaping options, a total of up to 12,000 W output power over 8 channels for lo-Z or distributed line systems all neatly packed into a double rack unit. As 'stand-alone' unit the Ottocanali DSP+DANTE Series fits any venue.

Excellent sound quality and ample output power stem from Powersoft's unique approach to Class D amplification and DSP technology, making the Ottocanali DSP+DANTE Series the ideal main system in any venue where performance is priority.

The in-built AC Protection intervenes when the AC Mains voltage is outside operating ranges by switching off the amplifier.

Further level of redundancy is guaranteed by the implementation of remotely switchable double inputs on each channel.

Powersoft's legendary efficiency saves valuable energy, keeping both operational cost and 'carbon footprint' at a minimum: the Ottocanali 12K4 shines with outstandingly low power consumption and heat dissipation; this dramatically reduces costs from the AC mains supply and air conditioning/cooling systems – not to mention the benefits to the environment for a greener planet.

- Multi-zone venues
- Themed entertainment, amusement parks, shopping malls
- Cruise ships
- Stadiums, arenas, convention centers
- Houses of worship
- Theaters, auditoriums, concert halls
- Main systems, central or distributed, lo-Z/hi-Z

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Channel Handling

Number of output channels	8 Hi-Z or Lo-Z (bridgeable per ch. pair)	2x 8 Pin Phoenix DFK-PC 4/8-G-7.62
Number of input channels		
Analog	8 Main Line	12 Pin Phoenix MC 1.5/12-ST-3.81
	8 AUX	12 Pin Phoenix MC 1.5/12-ST-3.81
Digital	16 Dante™*	2x RJ45

Audio

Gain	32 dB
Input sensitivity @ 8 Ω	1.94 V/ +8 dB
Max input level	6V / +17.8 dBu
Frequency Response (±0.5 dB , 1 W @ 8 Ω)	20 Hz - 20 kHz
Crosstalk (1 kHz)	-65 dB
S/N (20 Hz - 20 kHz A-Weighted @ 8 Ω)	>106 dB
Input impedance	20 kΩ Balanced
THD+N (from 0.1 W to Full Power)	< 0.08% (typical < 0.05%)
DIM (from 0.1 W to Full Power)	< 0.8%
Slew Rate (input filter bypassed @ 8 Ω)	> 50 V/µs
Damping Factor @ 8 Ω, 20 Hz - 100 Hz	> 10000

DSP

AD converters	24 Bit Tandem™ @ 96 kHz 129 dB-A Dynamic Range - 0.00056 % THD+N
DA converters	24 Bit Tandem™ @ 96 kHz 121 dB-A Dynamic Range - 0.00084 % THD+N
Sample rate converter	24 Bit @ 44.1 kHz to 192 kHz 140 dB Dynamic Range - 0.0001 % THD+N
Internal precision	40 bit floating point
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), hybrid (FIR-IIR), Butterworth, Linkwitz-Riley, Bessel: 6 dB/oct to 48 dB/oct (IIR)
Limiters	TruePower™, RMS voltage, RMS current, Peak limiter
Damping control	Active DampingControl™

Networking

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

Construction

Dimensions	483 x 89 x 360 mm 19.0 x 3.5 x 14.2 in
Weight	14 Kg (30.8 lb)

Output Stage

	4K4	8K4	12K4
Maximum output power per channel @ 8 Ω	250 W	600 W	850 W
Maximum output power per channel @ 4 Ω	500 W	1000 W	1500 W
Maximum output power per channel @ 2 Ω	450 W	850 W	1000 W
Maximum output power @ 8 Ω Bridged (Channel Pair)	1000 W	2000 W	3000 W
Maximum output power @ 4 Ω Bridged (Channel Pair)	900 W	1700 W	2000 W
Maximum output power @ Hi-Z distributed line 100 V	500 W	1000 W	1500 W
Maximum output power @ Hi-Z distributed line 70 V	500 W	1000 W	1500 W
Maximum unclipped output voltage @ 8 Ω	65 V_{peak}	90 V_{peak}	116.6 V_{peak}
Maximum output current	15 A_{peak}	23 A_{peak}	45 A_{peak}

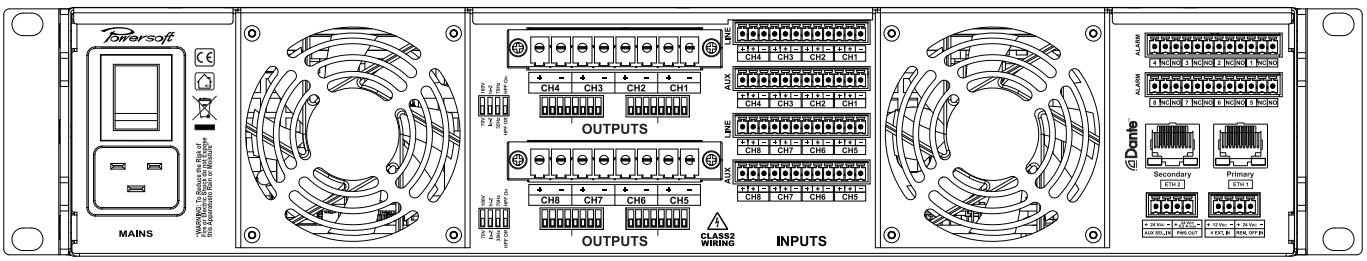
The power figure is calculated by driving and loading symmetrically all the channels: uneven loads allow to achieve higher performances.

AC Mains Power

Power supply	Redundant Universal, regulated switch mode with PFC (Power Factor Correction)			
Nominal voltage (±10%)	100-240 V @ 50-60Hz			
Power factor (> 500 W ouput)	> 0.95			
Consumption/current draw	@ 115 V		@ 230 V	
Idle	74 W	0.85 A	77 W	0.75 A
1/8 Max Output Power @ 4 Ω	740 W	6.6 A	750 W	3.9 A
1/4 Max Output Power @ 4 Ω	1400 W	12.4 A	1405 W	6.9 A
Idle	74 W	0.85 A	77 W	0.75 A
1/8 Max Output Power @ 4 Ω	1425 W	12.6 A	1425 W	6.6 A
1/4 Max Output Power @ 4 Ω	2800 W	24.5 A	2760 W	12.3 A
Idle	74 W	0.85 A	77 W	0.75 A
1/8 Max Output Power @ 4 Ω	2075 W	18.5 A	2115 W	9.7 A
1/4 Max Output Power @ 4 Ω	4150 W	36 A	4230 W	18.6 A
AC Mains connector	IEC C20 inlet (20 A max) region-specific power cord provided			

Thermal

Operating temperature	0° - 35° C / 32° - 95° F			
Cooling	Fan, variable speed, temperature controlled, front to rear airflow			
Thermal dissipation	@ 115 V		@ 230 V	
Idle	253 BTU/h	64 kcal/h	263 BTU/h	66 kcal/h
1/8 Max Output Power @ 4 Ω	801 BTU/h	202 kcal/h	839 BTU/h	211 kcal/h
1/4 Max Output Power @ 4 Ω	1340 BTU/h	338 kcal/h	1340 BTU/h	338 kcal/h
Idle	253 BTU/h	64 kcal/h	263 BTU/h	66 kcal/h
1/8 Max Output Power @ 4 Ω	1480 BTU/h	373 kcal/h	1504 BTU/h	379 kcal/h
1/4 Max Output Power @ 4 Ω	2792 BTU/h	704 kcal/h	2722 BTU/h	686 kcal/h
Idle	253 BTU/h	64 kcal/h	263 BTU/h	66 kcal/h
1/8 Max Output Power @ 4 Ω	2141 BTU/h	540 kcal/h	1937 BTU/h	488 kcal/h
1/4 Max Output Power @ 4 Ω	4283 BTU/h	1080 kcal/h	3874 BTU/h	977 kcal/h



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