

X8

8-Channel High Performance Amplifier Platform



- ✓ Touring
- ✓ Installation

8 lo-Z
hi-Z
channels

THREE PHASE
LOAD BALANCING

SRM

PFC

routing
channel

Armonía
Pro Audio Suite™

Dante™

- ▶ Full-range loudspeakers
- ▶ Subwoofers
- ▶ Medium to large-scale touring systems
- ▶ Arenas & concert halls
- ▶ Stadiums & open-air events
- ▶ Multi-zone venues & live clubs

Powersoft X8 has been designed to be versatile and easy to use in any operation condition. Equally useful for most subwoofers as well as high-power fullrange systems, Powersoft X8 suites any configuration and purpose.

Ultimately flexible and safe, Powersoft's legendary power supply is now suitable to Single Phase, Bi-Phase or Three Phase operation from 85 V_{AC} up to 460 V_{AC} without need of selection. True Three Phase load balancing is directly achievable by the unit without any complex load assignment in the power distribution system.

Powersoft X8 provides eight fully processable channels and selectable inputs from analog sources as well as digital AES3 and two redundant Dante™* streams. Channel mixing and routing can be easily performed thanks to the integrated revolutionary low latency DSP, providing the highest degree of freedom in sound shaping and speaker management.

Full support to 100Mbps and Gigabit Ethernet makes it easy to integrate Powersoft X8 into any existing infrastructure.

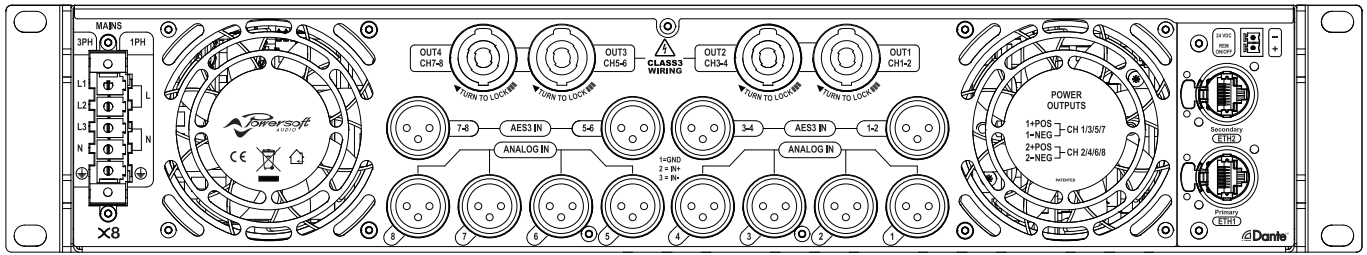
Completely integrated into Armonía Pro Audio Suite™, the new Powersoft X8 interface is also available for smartphone and tablet, providing a new experience in power management.

- ▶ Innovative power supply design
 - ✓ Suitable for Single-Phase, Bi-Phase or Three-Phase operation from 85 V_{AC} up to 460 V_{AC}, the X8 power supply provides maximum flexibility and versatility in any power distribution design.
 - ✓ Power Load Balancing with Power Factor Correction enhances efficiency in power distribution.
 - ✓ Smart Rails Management increases efficiency by means of the dynamic rails modulation.
 - ✓ The legendary Powersoft Green Audio Power® technologies improves efficiency and minimizes the 'carbon footprint' and the operational costs.
- ▶ New standard of quality and usability
 - ✓ Flexible routing/mixing provided by the internal 8x8 input/output matrix, allows the user to mix and route analog and digital I/O.
 - ✓ Easy plug-and-play Dante™* networking allows easy routing of the signal from any node within the network to Powersoft X8.
 - ✓ 8 input channels with physical analog and digital AES3 connectors and 2 redundant Dante™* connection provide maximum flexibility.
 - ✓ Improved reliability thanks to the customizable input backup policy that allows to automatically switch input source in case of signal failure.
 - ✓ Complete user interface integrated into Armonía Pro Audio Suite™.
 - ✓ WiFi remote monitoring through smartphone and tablet.
- ▶ Highly integrated
 - ✓ Top-grade DSP with high dynamic range and extensive feature set.
 - ✓ Multi-stage signal processing: innovative solutions for modeling speakers behaviour and power handling.
 - ✓ Input and output IIR, FIR, IIR+FIR equalizers and raised-cosine filters.
 - ✓ Complete sets of limiters: peak, RMS voltage, RMS current, and TruePower™.
 - ✓ Compensation of the speaker cable losses with Active DampingControl™.
- ▶ Even more reliable
 - ✓ Full protection circuitry: over/under AC voltage; troublesome signals (clipping, VHF, long-term RMS); DC; thermal; short circuit; mute at power on/off.

* DANTE version only

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Specifications

Channel Handling		Output Stage	
Number of output channels	8 mono, bridgeable per ch. pair	Maximum output power per channel @ 8 Ω	1600 W
Number of input channels:		Maximum output power per channel @ 4 Ω	3000 W
Analog	8 (8x XLR)	Maximum output power per channel @ 2.7 Ω	4000 W
AES3	8 (4x XLR)	Maximum output power per channel @ 2 Ω	5200 W
Dante™*	16 (2x RJ45)	Maximum output power @ 8 Ω Bridged	6000 W
* DANTE version only		Maximum output power @ 4 Ω Bridged	10400 W
Audio		Peak total output, all channels driven	40000 W
Gain	17 dB - 47 dB (0.1 dB increments)	Maximum unclipped output voltage	175 V _{peak}
Default Gain	32 dB	Maximum output current	130 A _{peak}
Output Noise A-Weighted @ 8 Ω - Analog to Analog / Digital to Analog	< -70.0 dBV	The power figure is calculated by driving and loading symmetrically all the channels: uneven loads allow to achieve highest performance.	
Dynamic Range A-Weighted @ 8 Ω - Analog to Analog / Digital to Analog	114,3 dB	AC Mains Power	
Damping Factor @ 8 Ω, 20Hz - 500Hz	> 5000	Single Phase	
Slew Rate (input filter bypassed)	> 50 V/μs	Nominal Voltage	100 - 240 V @ 50/60Hz
Frequency Response (-3 dB, 1 W @ 8 Ω)	5 Hz - 30 kHz	Operating Range	90 - 264 V from DC to 200 Hz
Crosstalk (1 kHz)	-70 dB	Power Factor	> 0.9
THD+N (from 0.1 W to Full Power)	< 0.5% (typical < 0.01%)	1/8 Maximum Output Power @ 4 Ω	
DIM (from 0.1 W to Full Power)	< 0.5% (typical < 0.01%)	Current Draw	32 A _{rms} @100V 18 A _{rms} @240V
Input Impedance	20 kΩ Balanced	1/8 Maximum Output Power @ 4 Ω	
Input Acceptance	+27 dBu	Suggested circuit breaker	C32
DSP		Three Phase	
AD converters	24 Bit Tandem™ @ 48 kHz 129 dB Dynamic Range - 0.00056 % THD+N	Nominal Voltage	173Y / 100 - 416Y / 240 V
DA converters	24 Bit Tandem™ @ 48 kHz 121 dB Dynamic Range - 0.00084 % THD+N		3~, 3W+N+PE / 3W+PE
Sample rate converter	24 Bit @ 44.1 kHz to 192 kHz 140 dB Dynamic Range - 0.0001 % THD+N	Power Factor	> 0.9
Internal precision	40 bit floating point	1/8 Maximum Output Power @ 4 Ω	
Delay	2 s + 100 ms for time alignment	Current Drawn from Each Single Phase	12 A _{rms} @ 173Y 6 A _{rms} @ 416Y
Equalizer	Raised-cosine, custom FIR, parametric IIR: peaking, hi/lo-shelving, all-pass, band-pass, band-stop, hi/lo-pass	1/8 Maximum Output Power @ 4 Ω	
Crossover	linear phase (FIR), hybrid (FIR-IIR), Butterworth, Linkwitz-Riley, Bessel: 6 dB/oct to 48 dB/oct (IIR)	Suggested circuit breaker (per phase)	C16
Limiters	TruePower™, RMS voltage, RMS current, Peak limiter	Idle Consumption (all AC MAINS cases)	
Damping control	Active DampingControl™	< 200 W	
Construction		Max consumption (all AC MAINS cases)	
Dimensions	483 mm x 89 mm x 495 mm (19.0 in x 3.5 in x 19.5 in)	< 5000 W	
Weight	24 kg (52.9 lb)	Note: 173Y/100 V = 173 V phase-to-phase, 100 V phase-to-neutral	
		Thermal	
		Operating temperature	0° - 35°C / 32° - 95°F
		Cooling	Fan, continuously variable speed, temperature controlled
		Fan Noise - 1/8 Maximum Output Power @ 8 Ω (1m)	40 dBA SPL
		Thermal dissipation	
		Single phase	115V 230V
		1/8 Maximum Output Power @ 8 Ω	2117 BTU/h 1946 BTU/h
		1/4 Maximum Output Power @ 8 Ω	3892 BTU/h 2875 BTU/h